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NATIONAL CENTER FOR EDUCATION STATISTICS

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# NAEP 1996 MATHEMATICS

## Cross-State Data Compendium for the Grade 4 and Grade 8 Assessment



*Findings from the State Assessment in Mathematics of the  
National Assessment of Educational Progress*



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U.S. Department of Education  
Office of Educational Research and Improvement

NCES 98-481

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THE NATION'S REPORT CARD, the National Assessment of Educational Progress (NAEP), is the only nationally representative and continuing assessment of what America's students know and can do in various subject areas. Since 1969, assessments have been conducted periodically in reading, mathematics, science, writing, history/geography, and other fields. By making objective information on student performance available to policymakers at the national, state, and local levels, NAEP is an integral part of our nation's evaluation of the condition and progress of education. Only information related to academic achievement is collected under this program. NAEP guarantees the privacy of individual students and their families.

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**Catherine A. Shaughnessy  
Jennifer E. Nelson  
Norma A. Norris**

**December 1997**

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**U.S. Department of Education  
Office of Educational Research and Improvement**

**Prepared by Educational Testing Service under a cooperative  
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**December 1997**

**SUGGESTED CITATION**

Shaughnessy, C.A., Nelson, J.E., & Norris, N.A. *NAEP 1996 mathematics cross-state data compendium for the grade 4 and grade 8 assessment.*

Washington, DC: National Center for Education Statistics, 1997.

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This report also is available on the World Wide Web: <http://nces.ed.gov/naep>.

The work upon which this publication is based was performed for the National Center for Education Statistics, Office of Educational Research and Improvement, by Educational Testing Service.

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# Table of Contents

<b>Introduction</b> .....	1
<b>CHAPTER 1: Scale Score for the Nation and the States</b>	
Overview .....	7
<b>Grade 4</b>	
Table 1.1 Average Mathematics Composite Scale Score and Selected Percentiles: Grade 4, Public School Students, 1992 and 1996 .....	8
Table 1.2 Average Mathematics Scale Scores by Mathematics Content Strands: Grade 4, Public School Students, 1992 and 1996 .....	10
Table 1.3 Percentage of Students and Average Mathematics Scale Score by Type of School: Grade 4, Combined Public and Nonpublic School Students, 1996 .....	12
<b>Grade 8</b>	
Table 1.4 Average Mathematics Composite Scale Score and Selected Percentiles: Grade 8, Public School Students, 1990, 1992, and 1996 .....	13
Table 1.5 Average Mathematics Scale Scores by Mathematics Content Strands: Grade 8, Public School Students, 1990, 1992, and 1996 .....	16
Table 1.6 Percentage of Students and Average Mathematics Scale Score by Type of School: Grade 8, Combined Public and Nonpublic School Students, 1996 .....	19
<b>CHAPTER 2: Scale Score by Population Subgroups</b>	
Overview .....	21
<b>Grade 4</b>	
Table 2.1 Percentage of Students and Average Mathematics Scale Score by Gender: Grade 4, Public School Students, 1992 and 1996 .....	22
Table 2.2 Percentage of Students and Average Mathematics Scale Score by Race/Ethnicity: Grade 4, Public School Students, 1992 and 1996 .....	23
Table 2.3 Percentage of Students and Average Mathematics Scale Score by Parents' Education Level: Grade 4, Public School Students, 1992 and 1996 .....	25
Table 2.4 Percentage of Students and Average Mathematics Scale Score by Title I Participation: Grade 4, Public School Students, 1996 .....	27
Table 2.5 Percentage of Students and Average Mathematics Scale Score by Free/Reduced-Price Lunch Program Eligibility: Grade 4, Public School Students, 1996 .....	28
Table 2.6 Percentage of Students and Average Mathematics Scale Score by Type of Location: Grade 4, Public School Students, 1992 and 1996 .....	29

**Grade 8**

Table 2.7 Percentage of Students and Average Mathematics Scale Score by Gender: Grade 8, Public School Students, 1990, 1992, and 1996 . . . . . 31

Table 2.8 Percentage of Students and Average Mathematics Scale Score by Race/Ethnicity: Grade 8, Public School Students, 1990, 1992, and 1996 . . . 34

Table 2.9 Percentage of Students and Average Mathematics Scale Score by Parents' Education Level: Grade 8, Public School Students, 1990, 1992, and 1996 . 37

Table 2.10 Percentage of Students and Average Mathematics Scale Score by Title I Participation: Grade 8, Public School Students, 1996 . . . . . 40

Table 2.11 Percentage of Students and Average Mathematics Scale Score by Free/Reduced-Price Lunch Program Eligibility: Grade 8, Public School Students, 1996 . . . . . 41

Table 2.12 Percentage of Students and Average Mathematics Scale Score by Type of Location: Grade 8, Public School Students, 1992 and 1996 . . . 42

**CHAPTER 3: Achievement Level Results for the Nation and the States**

Overview . . . . . 45

**Grade 4**

Table 3.1 Percentage of Students by Achievement Levels: Grade 4, Public School Students, 1992 and 1996 . . . . . 46

Table 3.2 Percentage of Students by Achievement Levels by Type of School: Grade 4, Combined Public and Nonpublic School Students, 1996 . . . . . 47

**Grade 8**

Table 3.3 Percentage of Students by Achievement Levels: Grade 8, Public School Students, 1990, 1992, and 1996 . . . . . 48

Table 3.4 Percentage of Students by Achievement Levels by Type of School: Grade 8, Combined Public and Nonpublic School Students, 1996 . . . . . 51

## CHAPTER 4: Achievement Level Results by Population Subgroups

Overview .....	53
----------------	----

### *Grade 4*

Table 4.1	Percentage of Students by Achievement Levels by Gender: Grade 4, Public School Students, 1992 and 1996 .....	54
Table 4.2	Percentage of Students by Achievement Levels by Race/Ethnicity: Grade 4, Public School Students, 1992 and 1996 .....	56
Table 4.3	Percentage of Students by Achievement Levels by Parents' Education Level: Grade 4, Public School Students, 1992 and 1996 .....	64
Table 4.4	Percentage of Students by Achievement Levels by Title I Participation: Grade 4, Public School Students, 1996 .....	72
Table 4.5	Percentage of Students by Achievement Levels by Free/Reduced-Price Lunch Program Eligibility: Grade 4, Public School Students, 1996 .....	73
Table 4.6	Percentage of Students by Achievement Levels by Type of Location: Grade 4, Public School Students, 1992 and 1996 .....	75

### *Grade 8*

Table 4.7	Percentage of Students by Achievement Levels by Gender: Grade 8, Public School Students, 1990, 1992, and 1996 .....	79
Table 4.8	Percentage of Students by Achievement Levels by Race/Ethnicity: Grade 8, Public School Students, 1990, 1992, and 1996 .....	82
Table 4.9	Percentage of Students by Achievement Levels by Parents' Education Level: Grade 8, Public School Students, 1990, 1992, and 1996 .....	94
Table 4.10	Percentage of Students by Achievement Levels by Title I Participation: Grade 8, Public School Students, 1996 .....	106
Table 4.11	Percentage of Students by Achievement Levels by Free/Reduced-Price Lunch Program Eligibility: Grade 8, Public School Students, 1996 .....	107
Table 4.12	Percentage of Students by Achievement Levels by Type of Location: Grade 8, Public School Students, 1992 and 1996 .....	109

## **CHAPTER 5: School Characteristics Related to Mathematics Instruction**

Overview .....	113
----------------	-----

### ***Grade 4***

Table 5.1 Public Schools' Reports on Mathematics as a Priority: Grade 4, 1996 .....	114
Table 5.2 Public School Teachers' Reports on Resource Availability: Grade 4, 1992 and 1996 .....	115
Table 5.3 Public School Teachers' Reports on Curriculum Specialists: Grade 4, 1992 and 1996 .....	117
Table 5.4 Public School Teachers' Reports on Preparation Time: Grade 4, 1996 .....	118
Table 5.5 Public Schools' Reports on Parents as Aides in Classrooms: Grade 4, 1992 and 1996 .....	119
Table 5.6 Public Schools' Reports on Student Absenteeism: Grade 4, 1992 and 1996 .....	121

### ***Grade 8***

Table 5.7 Public Schools' Reports on Mathematics as a Priority: Grade 8, 1996 .....	123
Table 5.8 Public School Teachers' Reports on Resource Availability: Grade 8, 1990, 1992, and 1996 .....	124
Table 5.9 Public School Teachers' Reports on Curriculum Specialists: Grade 8, 1996 .....	127
Table 5.10 Public School Teachers' Reports on Preparation Time: Grade 8, 1996 .....	128
Table 5.11 Public Schools' Reports on Parents as Aides in Classrooms: Grade 8, 1992 and 1996 .....	129
Table 5.12 Public Schools' Reports on Student Absenteeism: Grade 8, 1990, 1992, and 1996 .....	131



## CHAPTER 6: Classroom Practices Related to Mathematics Instruction

Overview .....	135
<b>Grade 4</b>	
Table 6.1 Public School Teachers' Reports on Knowledge of the NCTM Standards: Grade 4, 1996 .....	136
Table 6.2 Public School Teachers' Reports' on Professional Development for Implementing the NCTM Standards: Grade 4, 1996 .....	137
Table 6.3 Public School Teachers' Reports on Time Spent on Mathematics Instruction: Grade 4, 1992 and 1996 .....	138
Table 6.4 Public School Teachers' Reports on Skills Addressed — Learning Mathematics Facts and Concepts: Grade 4, 1996 .....	140
Table 6.5 Public School Teachers' Reports on Skills Addressed — Learning Skills and Procedures Needed to Solve Routine Problems: Grade 4, 1996 .....	141
Table 6.6 Public School Teachers' Reports on Skills Addressed — Developing Reasoning and Analytical Ability to Solve Unique Problems: Grade 4, 1996 .....	142
Table 6.7 Public School Teachers' Reports on Skills Addressed — Learning How to Communicate Ideas in Mathematics Effectively: Grade 4, 1996 .....	143
Table 6.8 Public School Teachers' Reports on Writing About and Discussing Mathematics Problems — Writing a Few Sentences About How to Solve a Mathematics Problem: Grade 4, 1996 .....	144
Table 6.9 Public School Students' Reports on Writing About and Discussing Mathematics Problems — Writing a Few Sentences About How to Solve a Mathematics Problem: Grade 4, 1996 .....	145
Table 6.10 Public School Teachers' Reports on Writing About and Discussing Mathematics Problems — Discussing Solutions to Mathematics Problems with Other Students: Grade 4, 1996 .....	146
Table 6.11 Public School Students' Reports on Writing About and Discussing Mathematics Problems — Discussing Solutions to Mathematics Problems with Other Students: Grade 4, 1996 .....	147
Table 6.12 Public School Teachers' Reports on Solving Mathematics Problems in Small Groups or with a Partner: Grade 4, 1996 .....	148
Table 6.13 Public School Students' Reports on Solving Mathematics Problems in Small Groups or with a Partner: Grade 4, 1996 .....	149
Table 6.14 Public School Teachers' Reports on Homework: Grade 4, 1992 and 1996 .....	150

Table 6.15	Public School Students' Reports on Homework: Grade 4, 1992 and 1996	152
Table 6.16	Public School Students' Reports on Using Computers at Home: Grade 4, 1996	156
Table 6.17	Public School Teachers' Reports on the Frequency of Calculator Use: Grade 4, 1996	157
Table 6.18	Public School Students' Reports on the Frequency of Calculator Use: Grade 4, 1996	158
Table 6.19	Public School Teachers' Reports on the Use of Calculators for Tests: Grade 4, 1992 and 1996	159
Table 6.20	Public School Teachers' Reports on the Availability of Computers: Grade 4, 1996	160
Table 6.21	Public School Teachers' Reports on the Primary Use of Computers — If You Do Use Computers, What is the Primary Use of These Computers for Mathematics Instruction?: Grade 4, 1996	162
Table 6.22	Public School Teachers' Reports on the Frequency of Use of Computers — How Often Do the Students in this Class Use a Computer?: Grade 4, 1996	163
Table 6.23	Public School Students' Reports on the Frequency of Computer Use: Grade 4, 1996	164

### ***Grade 8***

Table 6.24	Public School Teachers' Reports on Knowledge of the NCTM Standards: Grade 8, 1996	165
Table 6.25	Public School Teachers' Reports' on Professional Development for Implementing the NCTM Standards: Grade 8, 1996	166
Table 6.26	Public School Students' Reports on Their Mathematics Classes — What Kind of Mathematics Class are You Taking This Year?: Grade 8, 1996	167
Table 6.27	Public School Students' Reports on Their Mathematics Classes — What Kind of Mathematics Class Do You Expect to Take in Ninth Grade?: Grade 8, 1996	169
Table 6.28	Public School Teachers' Reports on Time Spent on Mathematics Instruction: Grade 8, 1992 and 1996	172
Table 6.29	Public School Teachers' Reports on Skills Addressed — Learning Mathematics Facts and Concepts: Grade 8, 1996	174
Table 6.30	Public School Teachers' Reports on Skills Addressed — Learning Skills and Procedures Needed to Solve Routine Problems: Grade 8, 1996	175
Table 6.31	Public School Teachers' Reports on Skills Addressed — Developing Reasoning and Analytical Ability to Solve Unique Problems: Grade 8, 1996	176

Table 6.32	Public School Teachers' Reports on Skills Addressed — Learning How to Communicate Ideas in Mathematics Effectively: Grade 8, 1996	177
Table 6.33	Public School Teachers' Reports on Writing About and Discussing Mathematics Problems — Writing a Few Sentences About How to Solve a Mathematics Problem: Grade 8, 1996	178
Table 6.34	Public School Students' Reports on Writing About and Discussing Mathematics Problems — Writing a Few Sentences About How to Solve a Mathematics Problem: Grade 8, 1996	179
Table 6.35	Public School Teachers' Reports on Writing About and Discussing Mathematics Problems — Discussing Solutions to Mathematics Problems with Other Students: Grade 8, 1996	180
Table 6.36	Public School Students' Reports on Writing About and Discussing Mathematics Problems — Discussing Solutions to Mathematics Problems with Other Students: Grade 8, 1996	181
Table 6.37	Public School Teachers' Reports on Solving Mathematics Problems in Small Groups or with a Partner: Grade 8, 1996	182
Table 6.38	Public School Students' Reports on Solving Mathematics Problems in Small Groups or with a Partner: Grade 8, 1996	183
Table 6.39	Public School Teachers' Reports on Homework: Grade 8, 1992 and 1996	184
Table 6.40	Public School Students' Reports on Homework: Grade 8, 1992 and 1996	186
Table 6.41	Public School Students' Reports on Using Computers at Home: Grade 8, 1996	190
Table 6.42	Public School Teachers' Reports on the Frequency of Calculator Use: Grade 8, 1996	191
Table 6.43	Public School Students' Reports on the Frequency of Calculator Use: Grade 8, 1996	192
Table 6.44	Public School Teachers' Reports on the Use of Calculators for Tests: Grade 8, 1990, 1992, and 1996	193
Table 6.45	Public School Teachers' Reports on the Availability of Computers: Grade 8, 1996	196
Table 6.46	Public School Teachers' Reports on the Primary Use of Computers — If You Do Use Computers, What is the Primary Use of These Computers for Mathematics Instruction?: Grade 8, 1996	198
Table 6.47	Public School Teachers' Reports on the Frequency of Use of Computers — How Often Do the Students in This Class Use a Computer?: Grade 8, 1996	199
Table 6.48	Public School Students' Reports on the Frequency of Computer Use: Grade 8, 1996	200

## **CHAPTER 7: Influences Beyond School That Facilitate Learning Mathematics**

Overview .....	201
----------------	-----

### ***Grade 4***

Table 7.1	Public School Students' Reports on Discussing Studies at Home: Grade 4, 1992 and 1996 .....	202
Table 7.2	Public School Students' Reports on Literacy Materials in the Home: Grade 4, 1992 and 1996 .....	204
Table 7.3	Public School Students' Reports on Television Viewing Habits: Grade 4, 1992 and 1996 .....	206
Table 7.4	Public Schools' Reports on Parental Support: Grade 4, 1992 and 1996 .....	208
Table 7.5	Public School Students' Reports on Mobility: Grade 4, 1992 and 1996 .....	210
Table 7.6	Public School Students' Views on the Usefulness of Mathematics: Grade 4, 1992 and 1996 .....	212
Table 7.7	Public School Students' Views on the Nature of Mathematics — Learning Mathematics is Mostly Memorizing Facts: Grade 4, 1996 .....	214
Table 7.8	Public School Students' Views on the Nature of Mathematics — There is Only One Correct Way to Solve a Mathematics Problem: Grade 4, 1996 .....	215

### ***Grade 8***

Table 7.9	Public School Students' Reports on Discussing Studies at Home: Grade 8, 1992 and 1996 .....	216
Table 7.10	Public School Students' Reports on Literacy Materials in the Home: Grade 8, 1990, 1992, and 1996 .....	218
Table 7.11	Public School Students' Reports on Television Viewing Habits: Grade 8, 1990, 1992, and 1996 .....	221
Table 7.12	Public Schools' Reports on Parental Support: Grade 8, 1992 and 1996 .....	224
Table 7.13	Public School Students' Reports on Mobility: Grade 8, 1992 and 1996 .....	226
Table 7.14	Public School Students' Views on the Usefulness of Mathematics: Grade 8, 1992 and 1996 .....	228
Table 7.15	Public School Students' Views on the Nature of Mathematics — Learning Mathematics is Mostly Memorizing Facts: Grade 8, 1996 .....	230
Table 7.16	Public School Students' Views on the Nature of Mathematics — There is Only One Correct Way to Solve a Mathematics Problem: Grade 8, 1996 .....	231

## CHAPTER 8: Teacher Preparation

Overview .....	233
----------------	-----

### *Grade 4*

Table 8.1 Public School Teachers' Reports on Their Highest Academic Degree: Grade 4, 1992 and 1996 .....	234
Table 8.2 Public School Teachers' Reports on Their Undergraduate Majors: Grade 4, 1996 .....	236
Table 8.3 Public School Teachers' Reports on Their Graduate Majors: Grade 4, 1996 .....	237
Table 8.4 Public School Teachers' Reports on Their Teaching Certification: Grade 4, 1996 .....	239
Table 8.5 Public School Teachers' Reports on Their Years of Teaching Experience: Grade 4, 1992 and 1996 .....	240
Table 8.6 Public School Teachers' Reports on Their Years of Mathematics Teaching Experience: Grade 4, 1996 .....	242
Table 8.7 Public School Teachers' Reports on Courses in Mathematics or Mathematics Education: Grade 4, 1996 .....	243
Table 8.8 Public School Teachers' Reports on Coursework in the Use of Technology: Grade 4, 1996 .....	244
Table 8.9 Public School Teachers' Reports on Studies of Mathematics Instruction Techniques: Grade 4, 1992 and 1996 .....	245
Table 8.10 Public School Teachers' Reports on Studies of Gender and Cultural Issues: Grade 4, 1992 and 1996 .....	247
Table 8.11 Public School Teachers' Reports on Professional Development: Grade 4, 1996 .....	248

### *Grade 8*

Table 8.12 Public School Teachers' Reports on Their Highest Academic Degree: Grade 8, 1990, 1992, and 1996 .....	249
Table 8.13 Public School Teachers' Reports on Their Undergraduate Majors: Grade 8, 1996 .....	252
Table 8.14 Public School Teachers' Reports on Their Graduate Majors: Grade 8, 1996 .....	253
Table 8.15 Public School Teachers' Reports on Their Teaching Certification: Grade 8, 1996 .....	255
Table 8.16 Public School Teachers' Reports on Their Years of Teaching Experience: Grade 8, 1992 and 1996 .....	256
Table 8.17 Public School Teachers' Reports on Their Years of Mathematics Teaching Experience: Grade 8, 1992 and 1996 .....	258

Table 8.18	Public School Teachers' Reports on Courses in Mathematics or Mathematics Education: Grade 8, 1996 .....	260
Table 8.19	Public School Teachers' Reports on Coursework in the Use of Technology: Grade 8, 1996 .....	261
Table 8.20	Public School Teachers' Reports on Studies of Mathematics Instruction Techniques: Grade 8, 1992 and 1996 .....	262
Table 8.21	Public School Teachers' Reports on Studies of Gender and Cultural Issues: Grade 8, 1992 and 1996 .....	264
Table 8.22	Public School Teachers' Reports on Professional Development: Grade 8, 1996 .....	265

**APPENDIX A:**

Technical Appendix .....	267
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**ACKNOWLEDGMENTS**


# Introduction

The National Assessment of Educational Progress (NAEP) is a congressionally mandated project of the National Center for Education Statistics (NCES) that has, for more than a quarter of a century, continually collected and reported information on what American students know and can do. It is the nation's only ongoing, comparable, and representative assessment of student achievement. Its assessments are based on a national probability sample of public and nonpublic school students enrolled in grades 4, 8, or 12. Results are provided only for group performance. NAEP is forbidden by law to report results at an individual or school level. The assessment questions are written around a framework prepared for each content area — reading, writing, mathematics, science and others — that represents the consensus of groups of curriculum experts, educators, and members of the general public on what should be covered in such a test. In addition, students, their teachers, and their schools are asked to fill out questionnaires, to gather information on student demographics, teacher preparation, instructional practices, school policies, and out-of-school activities related to educational achievement.

In response to legislation passed by Congress in 1988, the NAEP program includes voluntary state-by-state assessments. The state assessment program was initiated in 1990 on a trial basis with the assessment of mathematics achievement of eighth-grade students in public schools. The 1992 Trial State Assessment (TSA) assessed public school students in fourth- and eighth-grade mathematics and fourth-grade reading. In 1994, 44 jurisdictions participated in a fourth-grade reading assessment. Because of the positive evaluations of the 1990, 1992, and 1994 TSAs, the “trial” designation has been removed from the 1996 state-level NAEP assessment. The NAEP 1996 Mathematics State Assessment Program was comprised of a state-by-state mathematics assessment of fourth- and eighth-grade students enrolled in both public and nonpublic schools, with 48 jurisdictions participating in this assessment program, for at least one of the grade levels.

Because the NAEP State Assessments are voluntary, the participating jurisdictions have the final authority to release or withhold their results. All jurisdictions gave permission to have their results released. To help ensure valid state-by-state results, the 1996 State Assessment Program continued the use of minimum school and student participation rate standards (see Appendix A for details) for its reporting activities. Results are not reported for jurisdictions that failed to meet these standards. Three states — Nevada, New Hampshire, and New Jersey — did not meet the minimum school participation standards for public schools; therefore, their grade 8 public school results are not presented in this report. Several other states failed to meet more stringent participation rate standards; results for these jurisdictions are included in the report and are noted in the relevant tables in Appendix A.

The participants included:

<b>Figure 1</b>		<b>Participating Jurisdictions in the NAEP 1996 State Assessment Program in Mathematics</b>		
<b>Grade 4</b>				
Alabama	Indiana	Nebraska	Texas	
Alaska <sup>2</sup>	Iowa <sup>2</sup>	Nevada <sup>2</sup>	Utah	
Arizona	Kentucky	New Jersey <sup>2</sup>	Vermont <sup>2</sup>	
Arkansas <sup>2</sup>	Louisiana	New Mexico	Virginia	
California	Maine	New York <sup>2</sup>	Washington	
Colorado	Maryland	North Carolina	West Virginia	
Connecticut	Massachusetts	North Dakota	Wisconsin	
Delaware	Michigan <sup>2</sup>	Oregon	Wyoming	
District of Columbia	Minnesota	Pennsylvania <sup>2</sup>	DDESS	
Florida	Mississippi	Rhode Island	DoDDS	
Georgia	Missouri	South Carolina <sup>2</sup>	Guam	
Hawaii	Montana <sup>2</sup>	Tennessee		
<b>Grade 8</b>				
Alabama	Indiana	Nebraska	Texas	
Alaska <sup>2</sup>	Iowa <sup>2</sup>	Nevada <sup>1</sup>	Utah	
Arizona	Kentucky	New Hampshire <sup>1</sup>	Vermont <sup>2</sup>	
Arkansas <sup>2</sup>	Louisiana	New Jersey <sup>1</sup>	Virginia	
California	Maine	New Mexico	Washington	
Colorado	Maryland <sup>2</sup>	New York <sup>2</sup>	West Virginia	
Connecticut	Massachusetts	North Carolina	Wisconsin <sup>2</sup>	
Delaware	Michigan <sup>2</sup>	North Dakota	Wyoming	
District of Columbia	Minnesota	Oregon	DDESS	
Florida	Mississippi	Rhode Island	DoDDS	
Georgia	Missouri	South Carolina <sup>2</sup>	Guam	
Hawaii	Montana <sup>2</sup>	Tennessee		

<sup>1</sup> Failed to meet the initial school participation rate of 70 percent for public schools; public school results not reported.

<sup>2</sup> Failed to meet one or more participation rate guidelines for public schools; public school results reported with appropriate notation.

For more details on participation rate guidelines and nonpublic school participation rates, see Appendix A.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1996 Mathematics Assessment.



This is the first of two data compendia from the 1996 NAEP State Assessment. Science data will be presented in a separate report. This compendium presents fourth- and eighth-grade cross-state results of the NAEP 1996 State Assessment in mathematics; no interpretations of the data are made in this document. It contains tables of cross-state information for the variables discussed in the *NAEP 1996 Mathematics Report Card for the Nation and States* and the *NAEP 1996 Mathematics State Report* and is intended to be used as a companion document to these reports. The results for the nation and the regions of the country are based on the nationally and regionally representative samples of public and nonpublic school students who were assessed as part of the national NAEP program. Using the regional and national results from the 1996 national NAEP program is necessary because of the voluntary nature of the State Assessment Program. Since not every state participated in the program, the aggregated data across states did not necessarily provide representative national and regional results. General information about the instrumentation, sampling, data collection, and analysis procedures for the State Assessment Program can be found in the NAEP 1996 individual state reports (Appendices A and C), in Appendix A of this report, and in the *Technical Report of the NAEP 1996 State Assessment Program in Mathematics*.<sup>1</sup>

Another significant purpose of this compendium is to make available revised results from comparable assessments conducted in 1990 (grade 8 only) and 1992 (both grades 4 and 8) for the nation and states and territories that participated in the 1996 state assessment and met established participation guidelines. The revisions were required because of two technical problems that were discovered in the procedures that were originally used to develop the NAEP mathematics scale and achievement levels determined for the 1990 and 1992 mathematics assessments. These problems were discovered after the NAEP 1994 assessment had been conducted and subsequent to the publication of the 1990 and 1992 mathematics reports. The first technical problem resulted from an error in the computer program used to compute NAEP scale score results. The second technical problem involved the development of the NAEP mathematics achievement level cut scores. The technical errors are described in further detail in Appendix A and in the *Technical Report of the NAEP 1996 State Assessment Program in Mathematics*.<sup>2</sup> Although the impact on results of those technical errors was small, both have been corrected and the revised national and state scale score results for 1992 and achievement level results for 1990 and 1992 are presented in this data compendium, as well as all other 1996 NAEP mathematics reports. *Note that the corrected 1990 and 1992 data in this compendia supercedes previously released NAEP State Mathematics data for these assessment years.*

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<sup>1</sup> Allen, N.L., Jenkins, F., Kulick, E. & Zelenak, C.A. (1997). *Technical report of the NAEP 1996 state assessment program in mathematics*. Washington, DC: National Center for Education Statistics

<sup>2</sup> Ibid.

Chapter 1 presents the results for the nation, the four regions, and the participating jurisdictions in the context of the overall average mathematics scale scores and scale scores for content strands and type of school. Chapter 2 presents scale score information for selected population subgroups: gender, race/ethnicity, parents' highest education level, Title I participation, free/reduced-price lunch program eligibility, and type of location.

Chapter 3 presents achievement levels for the nation and the states. Chapter 4 presents achievement levels by the same population subgroups given in Chapter 2. Chapters 5 through 8 contain results by background information collected from the student, teacher, and school characteristics and policies questionnaires. In particular, school characteristics related to mathematics instruction are examined in Chapter 5, and Chapter 6 reports on classroom practices related to mathematics instruction. Chapter 7 covers potential influences beyond school that facilitate learning mathematics, and Chapter 8 pertains to teacher preparation.

Each chapter contains a section presenting the grade 4 results, followed by a section presenting the grade 8 results. It is important to note that for a few student, teacher, and school background questions, results from previous assessments cannot be reported due to substantial changes in item format or wording. For example, results cannot be reported separately for the racial/ethnic categories of Asian and Pacific Islander because in 1992, they were combined into a single response option.

### ***How to Read the Tables in This Report***

The title for each table indicates: (1) assessment year, grade, and school-type sample for which results are being presented; (2) the reported statistics (e.g. average scale scores, achievement level percentages, or percentiles); and (3) when appropriate, the variables by which results are broken out. The abbreviation SS found in the column heading of the tables denotes average overall composite mathematics scale score with the exception of Table 1.1, where it denotes the average overall scale score, as well as the scale scores for the indicated percentiles, and Table 1.2, where it denotes the average scale score for the Mathematics content strands. The standard error of the percentages and scale scores appears in parentheses and is abbreviated SE. The participating jurisdictions appear in the left margin, as follows: the nation and four regions of the United States; the participating states listed in alphabetical order; and other jurisdictions, including Department of Defense Domestic Dependent Elementary and Secondary Schools (DDESS), Department of Defense Dependents Schools (DoDDS), and Guam.

The national and regional results presented in this report are based on nationally representative probability samples of fourth- and eighth-grade students. The sample was selected using a complex multistage sampling design involving the sampling of students from selected schools within selected geographic areas across the country. The results of the 1996 State Assessment Program provided in the report are based on state-level samples of fourth- and eighth-grade, public school students. The samples were selected based on a two-stage sample design selection of schools within participating states and selection of students within schools. The first-stage samples of schools were selected with probability proportional to the fourth- and eighth-grade enrollments in the schools. Special procedures were used for states with many small schools, and for jurisdictions having a small number of schools.

### ***Cautions in Interpretations***

The reader is cautioned against making simple or causal inferences related to population subgroup membership, background variables, effectiveness of public and nonpublic schools, and state educational systems. For example, differences observed among racial/ethnic subgroups can almost certainly be associated with a broad range of socioeconomic and educational factors not discussed in this report and possibly not addressed by the NAEP assessment program. Similarly, differences between public and nonpublic schools may be better understood after accounting for factors such as composition of the student body, parents' education levels, and parental interest. Finally, differences in mathematics performance among states most likely reflect an interaction between the effectiveness of the educational programs within the state and the challenges posed by economic constraints and student demographic demands.



# Chapter 1

## *Scale Scores for the Nation and the States*

### *Overview*

Chapter 1 contains the average overall mathematics performance results for the nation, each of the four regions, and each jurisdiction that participated in the 1990 (grade 8 only), 1992, and 1996 State Assessments in mathematics.

Table 1.1 provides average overall mathematics scale scores and selected percentiles for grade 4 public school students. Table 1.4 provides the same data for grade 8 students.

Tables 1.2 and 1.5 represent the results by the mathematics content strands. The five mathematics content strands are: number sense, properties and operations; measurement; geometry and spatial sense; data analysis, statistics and probability; and algebra and functions.

Tables 1.3 and 1.6 present overall mathematics performance results for public school, nonpublic school, and combined public and nonpublic school students.

**TABLE 1.1**

**1992 Mathematics Assessment**



POPULATION:

1992 Grade 4 Public School Students

REPORTED STATISTICS:

Average Mathematics Composite Scale Score and Selected Percentiles

1992 NAEP grade 4 public school student mathematics performance...

	Average Mathematics Scale Score	10th Percentile	25th Percentile	50th Percentile	75th Percentile	90th Percentile
JURISDICTIONS	SS ( SE )	SS ( SE )	SS ( SE )	SS ( SE )	SS ( SE )	SS ( SE )
<b>Nation</b>						
NATION	219 ( 0.8 )	176 ( 1.1 )	197 ( 0.9 )	220 ( 1.0 )	241 ( 1.1 )	259 ( 0.9 )
NORTHEAST	224 ( 2.1 )	180 ( 3.9 )	202 ( 3.1 )	226 ( 3.2 )	247 ( 3.4 )	264 ( 4.3 )
SOUTHEAST	210 ( 1.8 )	168 ( 2.5 )	188 ( 2.7 )	211 ( 2.0 )	232 ( 2.4 )	250 ( 2.2 )
CENTRAL	223 ( 2.1 )	184 ( 3.1 )	204 ( 3.5 )	225 ( 2.6 )	244 ( 2.9 )	260 ( 1.9 )
WEST	218 ( 1.5 )	175 ( 2.7 )	197 ( 2.1 )	221 ( 1.9 )	240 ( 2.3 )	258 ( 2.5 )
<b>States</b>						
ALABAMA	208 ( 1.6 )	168 ( 1.4 )	186 ( 1.8 )	208 ( 2.2 )	231 ( 1.5 )	249 ( 2.4 )
ALASKA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
ARIZONA	215 ( 1.1 )	174 ( 1.8 )	195 ( 2.3 )	217 ( 1.3 )	236 ( 0.9 )	253 ( 1.4 )
ARKANSAS	210 ( 0.9 )	170 ( 1.5 )	190 ( 1.1 )	212 ( 1.2 )	231 ( 1.1 )	249 ( 1.5 )
CALIFORNIA	208 ( 1.6 )	160 ( 1.9 )	185 ( 2.3 )	211 ( 1.5 )	234 ( 1.3 )	253 ( 2.6 )
COLORADO	221 ( 1.0 )	181 ( 1.8 )	201 ( 1.0 )	222 ( 1.0 )	242 ( 1.2 )	259 ( 0.8 )
CONNECTICUT	227 ( 1.1 )	186 ( 2.2 )	206 ( 1.3 )	228 ( 1.5 )	248 ( 0.9 )	265 ( 1.6 )
DELAWARE	218 ( 0.8 )	177 ( 1.4 )	196 ( 1.3 )	218 ( 0.8 )	240 ( 1.4 )	259 ( 1.4 )
DISTRICT OF COLUMBIA	193 ( 0.5 )	153 ( 0.8 )	171 ( 1.1 )	191 ( 0.6 )	212 ( 1.2 )	234 ( 1.4 )
FLORIDA	214 ( 1.5 )	172 ( 2.1 )	193 ( 1.8 )	215 ( 1.5 )	235 ( 1.4 )	254 ( 3.1 )
GEORGIA	216 ( 1.2 )	174 ( 1.7 )	194 ( 1.4 )	217 ( 1.4 )	238 ( 1.4 )	257 ( 1.2 )
HAWAII	214 ( 1.3 )	170 ( 1.5 )	192 ( 2.3 )	216 ( 1.3 )	238 ( 1.1 )	256 ( 1.9 )
INDIANA	221 ( 1.0 )	186 ( 1.3 )	202 ( 1.3 )	221 ( 0.9 )	240 ( 1.2 )	256 ( 1.0 )
IOWA	230 ( 1.0 )	193 ( 2.3 )	212 ( 1.4 )	232 ( 0.9 )	250 ( 0.7 )	265 ( 1.5 )
KENTUCKY	215 ( 1.0 )	178 ( 1.5 )	195 ( 1.0 )	215 ( 1.0 )	235 ( 1.0 )	253 ( 1.3 )
LOUISIANA	204 ( 1.5 )	163 ( 2.5 )	183 ( 2.0 )	205 ( 1.4 )	226 ( 2.4 )	244 ( 1.4 )
MAINE	232 ( 1.0 )	196 ( 1.9 )	214 ( 1.3 )	233 ( 1.3 )	251 ( 1.0 )	265 ( 1.2 )
MARYLAND	217 ( 1.3 )	172 ( 1.7 )	193 ( 2.2 )	219 ( 1.5 )	242 ( 1.7 )	260 ( 1.2 )
MASSACHUSETTS	227 ( 1.2 )	187 ( 1.2 )	207 ( 1.5 )	228 ( 1.4 )	248 ( 1.6 )	264 ( 1.7 )
MICHIGAN	220 ( 1.7 )	177 ( 3.1 )	200 ( 2.8 )	222 ( 1.7 )	242 ( 1.6 )	259 ( 1.6 )
MINNESOTA	228 ( 0.9 )	188 ( 4.1 )	209 ( 1.1 )	231 ( 0.9 )	250 ( 1.1 )	265 ( 1.4 )
MISSISSIPPI	202 ( 1.1 )	162 ( 1.5 )	180 ( 1.4 )	202 ( 1.6 )	224 ( 1.2 )	242 ( 1.2 )
MISSOURI	222 ( 1.2 )	184 ( 1.7 )	203 ( 1.4 )	223 ( 1.4 )	243 ( 1.1 )	259 ( 1.6 )
MONTANA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
NEBRASKA	225 ( 1.2 )	186 ( 1.8 )	206 ( 1.8 )	227 ( 1.3 )	246 ( 1.3 )	262 ( 1.8 )
NEVADA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
NEW JERSEY	227 ( 1.5 )	187 ( 3.1 )	207 ( 1.7 )	229 ( 1.5 )	249 ( 1.0 )	265 ( 1.9 )
NEW MEXICO	213 ( 1.4 )	175 ( 2.9 )	193 ( 2.1 )	214 ( 1.2 )	233 ( 2.1 )	251 ( 1.8 )
NEW YORK	218 ( 1.2 )	176 ( 2.2 )	198 ( 1.0 )	220 ( 1.7 )	241 ( 1.6 )	258 ( 1.0 )
NORTH CAROLINA	213 ( 1.1 )	170 ( 1.1 )	190 ( 1.4 )	214 ( 1.3 )	236 ( 1.6 )	253 ( 1.2 )
NORTH DAKOTA	229 ( 0.8 )	195 ( 2.4 )	212 ( 1.1 )	229 ( 0.8 )	247 ( 0.8 )	261 ( 1.4 )
OREGON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
PENNSYLVANIA	224 ( 1.3 )	183 ( 1.9 )	204 ( 1.5 )	226 ( 1.7 )	246 ( 1.8 )	262 ( 1.8 )
RHODE ISLAND	215 ( 1.5 )	174 ( 2.8 )	195 ( 3.0 )	217 ( 1.9 )	237 ( 1.7 )	254 ( 3.0 )
SOUTH CAROLINA	212 ( 1.1 )	173 ( 1.3 )	191 ( 1.1 )	212 ( 1.2 )	234 ( 1.4 )	253 ( 1.8 )
TENNESSEE	211 ( 1.4 )	172 ( 2.3 )	191 ( 2.1 )	212 ( 1.6 )	232 ( 1.4 )	249 ( 1.4 )
TEXAS	218 ( 1.2 )	179 ( 2.4 )	198 ( 1.4 )	218 ( 1.5 )	239 ( 1.8 )	256 ( 2.3 )
UTAH	224 ( 1.0 )	187 ( 1.6 )	206 ( 1.2 )	225 ( 1.3 )	243 ( 1.0 )	260 ( 1.0 )
VERMONT	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
VIRGINIA	221 ( 1.3 )	180 ( 1.3 )	199 ( 1.5 )	221 ( 1.4 )	243 ( 1.9 )	261 ( 2.2 )
WASHINGTON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
WEST VIRGINIA	215 ( 1.1 )	177 ( 1.4 )	196 ( 1.6 )	216 ( 1.1 )	235 ( 1.4 )	252 ( 1.6 )
WISCONSIN	229 ( 1.1 )	191 ( 1.9 )	210 ( 0.7 )	230 ( 1.3 )	249 ( 1.2 )	264 ( 1.8 )
WYOMING	225 ( 0.9 )	191 ( 1.6 )	209 ( 1.4 )	226 ( 1.2 )	244 ( 0.9 )	258 ( 0.9 )
<b>Other Jurisdictions</b>						
DDESS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
DoDDS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
GUAM	193 ( 0.8 )	150 ( 1.4 )	170 ( 1.2 )	193 ( 1.1 )	215 ( 1.3 )	236 ( 1.7 )

— State or other jurisdiction did not participate in the NAEP assessment year presented in this table.  
 SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 1.1** (continued) **1996 Mathematics Assessment**



POPULATION: **1996 Grade 4 Public School Students**  
 REPORTED STATISTICS: **Average Mathematics Composite Scale Score and Selected Percentiles**

1996 NAEP grade 4 public school student mathematics performance...	Average Mathematics Scale Score	10th Percentile	25th Percentile	50th Percentile	75th Percentile	90th Percentile
JURISDICTIONS	SS ( SE )	SS ( SE )	SS ( SE )	SS ( SE )	SS ( SE )	SS ( SE )
<b>Nation</b>						
NATION	222 ( 1.0)>	180 ( 1.5)	201 ( 1.3)	224 ( 1.3)	244 ( 1.0)	261 ( 1.0)
NORTHEAST	226 ( 2.6)	181 ( 4.4)	206 ( 5.0)	229 ( 2.4)	250 ( 1.6)	266 ( 2.8)
SOUTHEAST	216 ( 2.5)	176 ( 2.9)	195 ( 2.4)	216 ( 2.2)	236 ( 2.2)	255 ( 5.0)
CENTRAL	230 ( 2.0)	193 ( 2.5)	212 ( 3.2)	232 ( 2.2)	249 ( 1.9)	264 ( 2.5)
WEST	219 ( 2.1)	177 ( 4.0)	197 ( 2.0)	220 ( 3.0)	240 ( 2.6)	259 ( 2.1)
<b>States</b>						
ALABAMA	212 ( 1.2)	172 ( 1.6)	190 ( 1.1)	212 ( 1.5)	233 ( 1.4)	250 ( 1.9)
ALASKA†	224 ( 1.3)	184 ( 2.4)	205 ( 1.5)	225 ( 1.5)	245 ( 1.1)	261 ( 1.2)
ARIZONA	218 ( 1.7)	177 ( 1.4)	198 ( 1.3)	219 ( 2.0)	239 ( 1.8)	256 ( 2.8)
ARKANSAS†	216 ( 1.5)>	177 ( 2.0)>	195 ( 1.8)>	217 ( 1.6)>	237 ( 2.0)	254 ( 1.7)
CALIFORNIA	209 ( 1.8)	166 ( 2.3)	186 ( 1.3)	210 ( 2.0)	233 ( 2.0)	250 ( 2.4)
COLORADO	226 ( 1.0)>	187 ( 2.1)	207 ( 1.2)>	227 ( 1.5)>	247 ( 1.3)>	263 ( 1.3)
CONNECTICUT	232 ( 1.1)>	191 ( 1.6)	214 ( 1.6)>	235 ( 1.2)>	253 ( 1.7)	268 ( 1.1)
DELAWARE	215 ( 0.6)<	170 ( 1.9)<	193 ( 1.3)	217 ( 1.1)	239 ( 1.2)	257 ( 1.7)
DISTRICT OF COLUMBIA	187 ( 1.1)<	144 ( 2.3)<	164 ( 1.9)<	186 ( 1.7)<	208 ( 1.1)<	232 ( 1.8)
FLORIDA	216 ( 1.2)	173 ( 2.3)	195 ( 1.6)	218 ( 1.8)	239 ( 1.2)	255 ( 1.2)
GEORGIA	215 ( 1.5)	176 ( 2.0)	195 ( 1.9)	216 ( 1.4)	236 ( 1.8)	254 ( 1.8)
HAWAII	215 ( 1.5)	170 ( 2.6)	193 ( 1.9)	217 ( 1.3)	239 ( 1.3)	258 ( 1.6)
INDIANA	229 ( 1.0)>	194 ( 2.6)>	211 ( 1.1)>	230 ( 1.0)>	248 ( 1.4)>	263 ( 1.6)>
IOWA†	229 ( 1.1)	195 ( 2.4)	213 ( 1.3)	231 ( 1.3)	247 ( 1.5)	261 ( 1.0)<
KENTUCKY	220 ( 1.1)>	180 ( 3.1)	201 ( 2.4)	222 ( 1.2)>	240 ( 1.0)>	257 ( 1.5)
LOUISIANA	209 ( 1.1)>	172 ( 1.5)>	190 ( 1.2)>	209 ( 1.3)	229 ( 1.3)	245 ( 2.2)
MAINE	232 ( 1.0)	197 ( 1.5)	214 ( 1.2)	233 ( 1.2)	251 ( 1.1)	267 ( 1.8)
MARYLAND	221 ( 1.6)	175 ( 1.8)	197 ( 1.7)	222 ( 1.7)	246 ( 2.0)	263 ( 1.7)
MASSACHUSETTS	229 ( 1.4)	193 ( 2.7)	211 ( 1.7)	230 ( 1.4)	248 ( 1.7)	263 ( 1.5)
MICHIGAN†	226 ( 1.3)>	185 ( 2.0)	207 ( 1.5)	228 ( 1.6)	247 ( 1.2)	263 ( 1.5)
MINNESOTA	232 ( 1.1)>	193 ( 1.9)	215 ( 2.2)	234 ( 0.9)>	252 ( 1.2)	268 ( 1.7)
MISSISSIPPI	208 ( 1.2)>	172 ( 1.9)>	188 ( 1.2)>	208 ( 1.3)>	228 ( 1.9)	246 ( 1.6)
MISSOURI	225 ( 1.1)	188 ( 1.8)	206 ( 1.6)	226 ( 1.2)	244 ( 1.5)	260 ( 0.8)
MONTANA†	228 ( 1.2)	192 ( 1.6)	210 ( 2.2)	229 ( 1.3)	247 ( 1.2)	261 ( 1.4)
NEBRASKA	228 ( 1.2)	188 ( 2.0)	209 ( 1.7)	230 ( 1.2)	248 ( 1.1)	263 ( 1.1)
NEVADA†	218 ( 1.3)	179 ( 2.9)	198 ( 2.5)	219 ( 1.0)	239 ( 1.4)	254 ( 1.3)
NEW JERSEY†	227 ( 1.5)	186 ( 2.8)	207 ( 1.3)	229 ( 1.7)	249 ( 1.6)	266 ( 1.4)
NEW MEXICO	214 ( 1.8)	173 ( 3.6)	193 ( 2.7)	215 ( 2.3)	236 ( 1.4)	253 ( 1.6)
NEW YORK†	223 ( 1.2)>	181 ( 2.8)	203 ( 2.0)	225 ( 1.2)>	244 ( 0.9)	260 ( 1.4)
NORTH CAROLINA	224 ( 1.2)>	184 ( 2.1)>	204 ( 1.6)>	225 ( 1.0)>	245 ( 1.3)>	263 ( 1.3)>
NORTH DAKOTA	231 ( 1.2)	197 ( 2.3)	214 ( 1.3)	232 ( 0.7)	248 ( 1.2)	264 ( 1.2)
OREGON	223 ( 1.4)	182 ( 2.2)	204 ( 1.4)	226 ( 1.6)	245 ( 1.5)	261 ( 1.7)
PENNSYLVANIA†	226 ( 1.2)	190 ( 2.6)	209 ( 1.8)	228 ( 1.8)	245 ( 1.3)	261 ( 1.9)
RHODE ISLAND	220 ( 1.4)>	180 ( 3.1)	202 ( 1.4)	222 ( 2.0)	241 ( 1.4)	258 ( 1.5)
SOUTH CAROLINA†	213 ( 1.3)	175 ( 0.9)	193 ( 1.9)	213 ( 1.4)	234 ( 2.7)	252 ( 1.5)
TENNESSEE	219 ( 1.4)>	178 ( 2.2)	199 ( 1.8)>	221 ( 1.6)>	240 ( 1.9)>	258 ( 1.1)>
TEXAS	229 ( 1.4)>	190 ( 2.8)>	209 ( 1.7)>	230 ( 1.7)>	249 ( 1.1)>	266 ( 1.7)>
UTAH	227 ( 1.2)	189 ( 1.8)	208 ( 1.8)	228 ( 1.2)	247 ( 1.0)	262 ( 2.4)
VERMONT†	225 ( 1.2)	182 ( 2.9)	206 ( 1.7)	227 ( 1.0)	247 ( 1.0)	264 ( 2.4)
VIRGINIA	223 ( 1.4)	184 ( 1.4)	202 ( 1.7)	224 ( 1.5)	244 ( 1.2)	260 ( 1.5)
WASHINGTON	225 ( 1.2)	187 ( 2.7)	207 ( 1.6)	226 ( 1.4)	245 ( 0.9)	261 ( 1.3)
WEST VIRGINIA	223 ( 1.0)>	186 ( 1.5)>	204 ( 0.9)>	224 ( 1.1)>	243 ( 1.2)>	259 ( 0.9)>
WISCONSIN	231 ( 1.0)	195 ( 1.5)	213 ( 0.7)>	233 ( 1.1)	251 ( 0.9)	266 ( 1.8)
WYOMING	223 ( 1.4)	186 ( 3.7)	205 ( 1.8)	225 ( 1.3)	243 ( 1.3)	259 ( 0.8)
<b>Other Jurisdictions</b>						
DDESS	224 ( 1.0)	187 ( 1.9)	204 ( 1.6)	225 ( 1.3)	245 ( 1.6)	262 ( 1.3)
DoDDS	223 ( 0.7)	186 ( 1.1)	204 ( 0.8)	224 ( 1.1)	243 ( 0.8)	259 ( 1.4)
GUAM	188 ( 1.3)<	145 ( 2.9)	166 ( 2.1)	189 ( 0.8)<	212 ( 1.8)	231 ( 2.0)

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).  
 > (<) The value for the students was significantly higher (lower) than in the 1992 assessment at about the 95% confidence level using appropriate multiple comparison procedures.  
 SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 1.2**

**1992 Mathematics Assessment**



POPULATION:  
REPORTED STATISTICS:

**1992 Grade 4 Public School Students**  
**Average Mathematics Scale Scores by Mathematics Content Strands**

<i>Mathematics Content Strands...</i>	<b>Number Sense, Properties, and Operations</b>	<b>Measurement</b>	<b>Geometry and Spatial Sense</b>	<b>Data Analysis, Statistics, and Probability</b>	<b>Algebra and Functions</b>
<b>JURISDICTIONS</b>	SS ( SE )	SS ( SE )	SS ( SE )	SS ( SE )	SS ( SE )
<b>Nation</b>					
NATION	216 ( 0.9)	223 ( 0.9)	221 ( 0.7)	219 ( 1.0)	218 ( 0.9)
NORTHEAST	221 ( 2.1)	228 ( 2.2)	225 ( 2.2)	224 ( 2.2)	224 ( 2.2)
SOUTHEAST	207 ( 1.9)	215 ( 2.0)	213 ( 1.6)	212 ( 2.2)	208 ( 2.2)
CENTRAL	220 ( 2.2)	229 ( 2.4)	224 ( 1.9)	224 ( 2.2)	222 ( 2.1)
WEST	215 ( 1.7)	222 ( 1.6)	222 ( 1.3)	218 ( 1.9)	217 ( 1.9)
<b>States</b>					
ALABAMA	205 ( 1.8)	214 ( 1.7)	210 ( 1.4)	210 ( 1.7)	206 ( 1.7)
ALASKA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
ARIZONA	212 ( 1.4)	220 ( 1.2)	220 ( 1.0)	215 ( 1.3)	215 ( 1.6)
ARKANSAS	207 ( 1.1)	216 ( 1.6)	213 ( 1.3)	212 ( 1.3)	208 ( 1.0)
CALIFORNIA	206 ( 1.8)	211 ( 1.8)	214 ( 1.6)	206 ( 1.7)	210 ( 1.9)
COLORADO	217 ( 1.1)	226 ( 1.1)	227 ( 0.9)	221 ( 1.2)	219 ( 1.3)
CONNECTICUT	224 ( 1.3)	231 ( 1.1)	230 ( 1.4)	226 ( 1.7)	226 ( 1.3)
DELAWARE	215 ( 0.9)	221 ( 0.9)	220 ( 0.8)	221 ( 1.4)	216 ( 1.2)
DISTRICT OF COLUMBIA	191 ( 0.7)	194 ( 0.8)	199 ( 0.8)	189 ( 1.0)	193 ( 0.8)
FLORIDA	210 ( 1.6)	220 ( 1.7)	216 ( 1.2)	216 ( 1.5)	213 ( 2.3)
GEORGIA	212 ( 1.3)	220 ( 1.5)	217 ( 1.2)	220 ( 1.3)	215 ( 2.3)
HAWAII	212 ( 1.4)	217 ( 1.6)	218 ( 1.2)	213 ( 1.5)	212 ( 1.7)
INDIANA	217 ( 1.3)	228 ( 1.3)	223 ( 1.2)	224 ( 1.2)	220 ( 1.8)
IOWA	228 ( 1.2)	235 ( 1.3)	230 ( 1.0)	231 ( 0.9)	227 ( 1.3)
KENTUCKY	213 ( 1.2)	220 ( 1.1)	216 ( 1.1)	216 ( 1.4)	214 ( 1.5)
LOUISIANA	201 ( 1.5)	210 ( 1.6)	208 ( 1.7)	204 ( 1.9)	203 ( 2.0)
MAINE	228 ( 1.3)	237 ( 1.4)	236 ( 0.9)	233 ( 1.3)	229 ( 1.8)
MARYLAND	215 ( 1.4)	221 ( 1.7)	220 ( 1.2)	219 ( 1.5)	217 ( 1.4)
MASSACHUSETTS	225 ( 1.2)	230 ( 1.6)	229 ( 1.2)	227 ( 1.4)	224 ( 1.4)
MICHIGAN	216 ( 1.9)	226 ( 1.9)	223 ( 1.6)	220 ( 1.8)	218 ( 2.2)
MINNESOTA	226 ( 1.1)	234 ( 1.2)	230 ( 0.9)	229 ( 1.2)	226 ( 1.1)
MISSISSIPPI	200 ( 1.3)	207 ( 1.5)	203 ( 1.0)	200 ( 1.5)	197 ( 1.3)
MISSOURI	219 ( 1.4)	227 ( 1.6)	225 ( 1.1)	225 ( 1.3)	221 ( 1.3)
MONTANA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
NEBRASKA	222 ( 1.4)	231 ( 1.4)	229 ( 1.2)	226 ( 1.6)	222 ( 1.7)
NEVADA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
NEW JERSEY	226 ( 1.6)	231 ( 1.8)	227 ( 1.3)	226 ( 1.5)	226 ( 1.9)
NEW MEXICO	209 ( 1.7)	218 ( 1.5)	220 ( 1.1)	215 ( 1.5)	212 ( 2.0)
NEW YORK	217 ( 1.3)	222 ( 1.7)	219 ( 1.2)	222 ( 1.6)	217 ( 1.7)
NORTH CAROLINA	210 ( 1.2)	217 ( 1.2)	216 ( 1.5)	215 ( 1.3)	212 ( 1.4)
NORTH DAKOTA	225 ( 0.9)	236 ( 1.2)	230 ( 1.0)	231 ( 1.2)	226 ( 1.2)
OREGON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
PENNSYLVANIA	222 ( 1.5)	230 ( 1.6)	224 ( 1.2)	225 ( 1.5)	223 ( 1.4)
RHODE ISLAND	214 ( 1.6)	219 ( 1.8)	217 ( 1.5)	214 ( 1.6)	214 ( 1.9)
SOUTH CAROLINA	209 ( 1.2)	219 ( 1.5)	216 ( 1.1)	212 ( 1.4)	209 ( 1.4)
TENNESSEE	209 ( 1.5)	214 ( 1.4)	212 ( 1.6)	212 ( 1.6)	211 ( 1.6)
TEXAS	215 ( 1.3)	221 ( 1.6)	221 ( 1.4)	219 ( 1.4)	218 ( 1.4)
UTAH	221 ( 1.2)	230 ( 1.1)	228 ( 0.9)	223 ( 1.3)	223 ( 1.1)
VERMONT	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
VIRGINIA	218 ( 1.6)	225 ( 1.4)	222 ( 1.3)	225 ( 1.3)	219 ( 1.6)
WASHINGTON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
WEST VIRGINIA	211 ( 1.2)	224 ( 1.2)	218 ( 1.0)	216 ( 1.2)	212 ( 1.3)
WISCONSIN	226 ( 1.2)	234 ( 1.2)	229 ( 1.1)	230 ( 1.1)	227 ( 1.4)
WYOMING	222 ( 1.1)	231 ( 1.2)	228 ( 1.1)	226 ( 1.1)	223 ( 1.2)
<b>Other Jurisdictions</b>					
DDESS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
DoDDS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
GUAM	190 ( 1.1)	193 ( 1.1)	203 ( 1.2)	190 ( 0.9)	194 ( 1.0)

— State or other jurisdiction did not participate in the NAEP assessment year presented in this table.  
SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.



**TABLE 1.2** (continued)

**1996 Mathematics Assessment**



POPULATION:

1996 Grade 4 Public School Students

REPORTED STATISTICS:

Average Mathematics Scale Scores by Mathematics Content Strands

Mathematics Content Strands...	Number Sense, Properties, and Operations	Measurement	Geometry and Spatial Sense	Data Analysis, Statistics, and Probability	Algebra and Functions
JURISDICTIONS	SS ( SE )	SS ( SE )	SS ( SE )	SS ( SE )	SS ( SE )
<b>Nation</b>					
NATION	219 ( 1.1)	224 ( 1.2)	224 ( 0.9)	223 ( 1.4)	226 ( 1.2)>
NORTHEAST	224 ( 3.2)	227 ( 2.4)	227 ( 1.8)	228 ( 3.2)	231 ( 2.6)
SOUTHEAST	213 ( 2.5)	218 ( 2.9)	215 ( 2.5)	216 ( 2.6)	220 ( 2.8)
CENTRAL	227 ( 2.4)	232 ( 2.4)	232 ( 1.3)	231 ( 2.7)	232 ( 1.9)>
WEST	215 ( 1.9)	220 ( 2.6)	222 ( 2.1)	219 ( 2.7)	223 ( 2.5)
<b>States</b>					
ALABAMA	208 ( 1.4)	216 ( 1.5)	212 ( 1.2)	213 ( 1.7)	215 ( 1.5)>
ALASKA†	221 ( 1.5)	226 ( 2.6)	227 ( 1.6)	222 ( 2.0)	228 ( 2.8)
ARIZONA	213 ( 2.1)	220 ( 1.8)	222 ( 1.6)	217 ( 2.0)	222 ( 1.8)>
ARKANSAS†	213 ( 1.7)>	218 ( 1.8)	218 ( 1.7)	218 ( 1.9)>	219 ( 1.9)>
CALIFORNIA	206 ( 1.9)	209 ( 1.9)	215 ( 1.9)	206 ( 2.2)	215 ( 1.9)
COLORADO	221 ( 1.4)>	230 ( 1.3)	230 ( 1.3)	225 ( 1.5)	229 ( 1.4)>
CONNECTICUT	229 ( 1.2)>	233 ( 1.8)	232 ( 1.2)	236 ( 1.5)>	235 ( 1.8)>
DELAWARE	212 ( 1.3)	216 ( 1.1)<	216 ( 1.6)	216 ( 1.7)	220 ( 1.4)
DISTRICT OF COLUMBIA	184 ( 1.2)<	191 ( 2.2)	193 ( 2.0)<	179 ( 4.2)	191 ( 2.1)
FLORIDA	213 ( 1.3)	217 ( 1.4)	216 ( 1.2)	219 ( 1.2)	219 ( 1.3)
GEORGIA	213 ( 1.6)	217 ( 1.7)	217 ( 1.5)	216 ( 1.6)	219 ( 1.7)
HAWAII	211 ( 1.9)	217 ( 2.0)	217 ( 1.8)	215 ( 2.2)	220 ( 2.5)>
INDIANA	227 ( 1.3)>	233 ( 1.3)>	229 ( 1.1)>	230 ( 1.4)>	232 ( 1.1)>
IOWA†	227 ( 1.4)	232 ( 1.9)	228 ( 1.3)	230 ( 1.3)	231 ( 1.5)
KENTUCKY	216 ( 1.4)	221 ( 1.4)	222 ( 1.4)>	222 ( 1.7)>	226 ( 1.4)>
LOUISIANA	204 ( 1.4)	213 ( 1.5)	210 ( 1.2)	211 ( 1.3)>	213 ( 1.4)>
MAINE	227 ( 1.5)	235 ( 1.8)	237 ( 1.5)	235 ( 1.6)	235 ( 2.0)
MARYLAND	217 ( 1.8)	222 ( 1.9)	222 ( 1.5)	224 ( 1.7)	225 ( 1.7)>
MASSACHUSETTS	226 ( 1.5)	230 ( 1.6)	230 ( 1.4)	231 ( 1.6)	232 ( 1.6)>
MICHIGAN†	223 ( 1.4)>	227 ( 1.6)	229 ( 1.2)>	229 ( 1.2)>	229 ( 1.4)>
MINNESOTA	229 ( 1.3)	237 ( 1.2)	233 ( 1.3)	234 ( 1.3)>	234 ( 1.2)>
MISSISSIPPI	206 ( 1.4)>	210 ( 1.5)	211 ( 1.2)>	209 ( 1.8)>	210 ( 1.6)>
MISSOURI	221 ( 1.3)	229 ( 1.5)	226 ( 1.3)	226 ( 1.2)	228 ( 1.1)>
MONTANA†	223 ( 1.6)	233 ( 1.6)	229 ( 1.7)	229 ( 1.7)	231 ( 1.3)
NEBRASKA	223 ( 1.5)	232 ( 1.8)	230 ( 1.3)	229 ( 1.5)	230 ( 1.3)>
NEVADA†	213 ( 1.5)	218 ( 2.0)	220 ( 1.5)	220 ( 1.9)	223 ( 2.2)
NEW JERSEY†	226 ( 1.6)	229 ( 1.9)	225 ( 1.6)	229 ( 1.8)	229 ( 1.5)
NEW MEXICO	208 ( 2.0)	219 ( 2.3)	219 ( 2.2)	213 ( 2.2)	218 ( 2.6)
NEW YORK†	220 ( 1.4)	223 ( 1.5)	222 ( 1.2)	227 ( 1.4)	225 ( 1.3)>
NORTH CAROLINA	220 ( 1.4)>	226 ( 1.6)>	227 ( 1.2)>	226 ( 1.4)>	229 ( 1.3)>
NORTH DAKOTA	227 ( 1.6)	236 ( 2.7)	230 ( 2.4)	233 ( 2.0)	234 ( 2.2)>
OREGON	219 ( 1.7)	227 ( 1.4)	228 ( 1.7)	224 ( 1.9)	228 ( 1.7)
PENNSYLVANIA†	223 ( 1.4)	230 ( 1.5)	226 ( 1.2)	228 ( 1.5)	230 ( 1.2)>
RHODE ISLAND	216 ( 1.9)	223 ( 2.2)	224 ( 1.5)>	223 ( 2.7)>	223 ( 2.3)>
SOUTH CAROLINA†	210 ( 1.4)	216 ( 1.5)	217 ( 1.5)	213 ( 1.6)	213 ( 1.6)
TENNESSEE	216 ( 1.6)>	220 ( 1.8)>	220 ( 1.5)>	222 ( 1.4)>	222 ( 1.4)>
TEXAS	228 ( 1.5)>	229 ( 1.7)>	225 ( 1.5)	229 ( 1.4)>	233 ( 1.2)>
UTAH	222 ( 1.4)	231 ( 1.8)	229 ( 1.3)	226 ( 1.7)	230 ( 1.4)>
VERMONT†	220 ( 2.1)	229 ( 2.4)	230 ( 1.9)	224 ( 2.0)	228 ( 2.4)
VIRGINIA	220 ( 1.5)	224 ( 1.6)	225 ( 1.6)	224 ( 1.4)	226 ( 1.8)>
WASHINGTON	221 ( 1.4)	227 ( 1.4)	228 ( 1.4)	226 ( 1.5)	230 ( 1.4)
WEST VIRGINIA	219 ( 1.4)>	227 ( 2.5)	225 ( 1.3)>	224 ( 1.9)>	228 ( 2.2)>
WISCONSIN	228 ( 1.1)	235 ( 1.4)	233 ( 1.1)>	233 ( 1.3)	233 ( 1.0)>
WYOMING	218 ( 1.8)	227 ( 2.7)	227 ( 2.2)	223 ( 1.7)	228 ( 2.4)
<b>Other Jurisdictions</b>					
DDESS	221 ( 1.3)	226 ( 2.2)	226 ( 2.0)	224 ( 3.5)	228 ( 2.9)
DoDDS	220 ( 1.2)	222 ( 2.6)	227 ( 1.3)	223 ( 4.0)	229 ( 1.6)
GUAM	185 ( 2.0)	188 ( 2.1)	197 ( 2.4)	183 ( 4.1)	194 ( 4.0)

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).  
 > (<) The value for the students was significantly higher (lower) than in the 1992 assessment at about the 95% confidence level using appropriate multiple comparison procedures.  
 SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 1.3****1996 Mathematics Assessment**

POPULATION:  
 REPORTED STATISTICS:  
 BREAKDOWNS BY:

**1996 Grade 4 Combined Public and Nonpublic School Students**  
**Percentage of Students and Average Mathematics Scale Score**  
**Type of School**



Type of school...	Public Schools		Nonpublic Schools		All Schools	
JURISDICTIONS	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )
<b>Nation</b>						
NATION	89 ( 1.6)	222 ( 1.0)	11 ( 1.6)	237 ( 1.9)	100 ( ... )	224 ( 0.9)
NORTHEAST	83 ( 4.5)	226 ( 2.6)	17 ( 4.5)	234 ( 3.6)!	100 ( ... )	228 ( 2.2)
SOUTHEAST	91 ( 3.3)	216 ( 2.5)	9 ( 3.3)	239 ( 2.9)!	100 ( ... )	218 ( 2.1)
CENTRAL	86 ( 3.6)	230 ( 2.0)	14 ( 3.6)	239 ( 1.6)!	100 ( ... )	231 ( 1.6)
WEST	94 ( 1.9)	219 ( 2.1)	6 ( 1.9)	236 ( 8.2)!	100 ( ... )	220 ( 2.0)
<b>States</b>						
ALABAMA†	90 ( 1.1)	212 ( 1.2)	10 ( 1.1)	235 ( 7.1)	100 ( ... )	214 ( 1.4)
ARIZONA†	94 ( 1.3)	218 ( 1.7)	6 ( 1.3)	239 ( 4.5)!	100 ( ... )	218 ( 2.1)
ARKANSAS†	94 ( 1.2)	216 ( 1.5)	6 ( 1.2)	236 ( 3.0)	100 ( ... )	217 ( 1.4)
CALIFORNIA†	89 ( 1.3)	209 ( 1.8)	11 ( 1.3)	236 ( 5.0)	100 ( ... )	212 ( 1.8)
COLORADO†	93 ( 1.0)	226 ( 1.0)	7 ( 1.0)	223 ( 5.8)	100 ( ... )	226 ( 1.0)
CONNECTICUT†	89 ( 1.1)	232 ( 1.1)	11 ( 1.1)	227 ( 2.5)	100 ( ... )	231 ( 1.0)
GEORGIA	93 ( 1.4)	215 ( 1.5)	7 ( 1.4)	233 ( 5.6)!	100 ( ... )	217 ( 1.5)
INDIANA†	89 ( 1.6)	229 ( 1.0)	11 ( 1.6)	241 ( 2.6)	100 ( ... )	231 ( 1.0)
IOWA†	90 ( 1.1)	229 ( 1.1)	10 ( 1.1)	239 ( 2.2)	100 ( ... )	230 ( 1.0)
KENTUCKY	90 ( 1.2)	220 ( 1.1)	10 ( 1.2)	234 ( 3.0)	100 ( ... )	221 ( 1.0)
LOUISIANA	85 ( 1.1)	209 ( 1.1)	15 ( 1.1)	223 ( 3.4)	100 ( ... )	211 ( 1.1)
MAINE†	95 ( 0.9)	232 ( 1.0)	5 ( 0.9)	237 ( 4.6)	100 ( ... )	232 ( 1.0)
MASSACHUSETTS†	89 ( 1.2)	229 ( 1.4)	11 ( 1.2)	232 ( 3.0)	100 ( ... )	229 ( 1.2)
MICHIGAN†	88 ( 1.2)	226 ( 1.3)	12 ( 1.2)	224 ( 4.2)	100 ( ... )	226 ( 1.1)
MINNESOTA†	88 ( 1.4)	232 ( 1.1)	12 ( 1.4)	236 ( 2.1)	100 ( ... )	233 ( 1.0)
MISSISSIPPI†	90 ( 1.5)	208 ( 1.2)	10 ( 1.5)	230 ( 3.9)	100 ( ... )	210 ( 1.3)
MISSOURI	87 ( 0.8)	225 ( 1.1)	13 ( 0.8)	239 ( 2.6)	100 ( ... )	227 ( 1.0)
MONTANA†	95 ( 1.3)	228 ( 1.2)	5 ( 1.3)	236 ( 3.0)!	100 ( ... )	228 ( 1.2)
NEBRASKA	86 ( 1.3)	228 ( 1.2)	14 ( 1.3)	235 ( 2.7)	100 ( ... )	229 ( 1.1)
NEVADA†	96 ( 0.7)	218 ( 1.3)	4 ( 0.7)	231 ( 4.3)	100 ( ... )	218 ( 1.3)
NEW MEXICO	93 ( 1.4)	214 ( 1.8)	7 ( 1.4)	216 ( 8.8)!	100 ( ... )	213 ( 1.7)
NEW YORK†	84 ( 2.3)	223 ( 1.2)	16 ( 2.3)	225 ( 5.3)	100 ( ... )	223 ( 1.3)
UTAH†	98 ( 0.4)	227 ( 1.2)	2 ( 0.4)	241 ( 5.9)	100 ( ... )	227 ( 1.1)
VERMONT†	94 ( 0.9)	225 ( 1.2)	6 ( 0.9)	234 ( 5.6)	100 ( ... )	225 ( 1.2)
WYOMING	97 ( 0.6)	223 ( 1.4)	3 ( 0.6)	230 ( 3.9)!	100 ( ... )	223 ( 1.4)
<b>Other Jurisdictions</b>						
GUAM†	84 ( 0.2)	188 ( 1.3)	16 ( 0.2)	219 ( 3.3)	100 ( ... )	193 ( 1.2)

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).

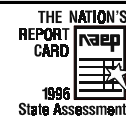
... Characteristics of the sample do not permit a reliable estimate.

! Interpret with caution — the nature of the sample does not allow accurate determination of the variability of this statistic.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 1.4**

**1990 Mathematics Assessment**



POPULATION:  
REPORTED STATISTICS:

1990 Grade 8 Public School Students  
Average Mathematics Composite Scale Score and Selected Percentiles

1990 grade 8 public school student mathematics performance...

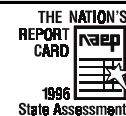
Average Mathematics Scale Score	10th Percentile	25th Percentile	50th Percentile	75th Percentile	90th Percentile
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JURISDICTIONS	SS ( SE )	SS ( SE )	SS ( SE )	SS ( SE )	SS ( SE )	SS ( SE )
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Nation	SS ( SE )	SS ( SE )	SS ( SE )	SS ( SE )	SS ( SE )	SS ( SE )
NATION	262 ( 1.4)	214 ( 1.8)	237 ( 1.7)	263 ( 1.4)	288 ( 1.7)	307 ( 1.9)
NORTHEAST	270 ( 3.3)	226 ( 4.2)	247 ( 2.9)	271 ( 4.9)	295 ( 4.6)	311 ( 3.4)
SOUTHEAST	254 ( 2.6)	206 ( 5.5)	228 ( 3.8)	255 ( 3.3)	281 ( 2.0)	302 ( 3.2)
CENTRAL	265 ( 2.3)	219 ( 7.7)	242 ( 3.4)	266 ( 3.0)	289 ( 3.0)	306 ( 1.2)
WEST	261 ( 2.6)	211 ( 3.0)	235 ( 3.2)	262 ( 1.6)	286 ( 2.6)	309 ( 4.1)
<b>States</b>						
ALABAMA	253 ( 1.1)	209 ( 2.0)	229 ( 1.7)	253 ( 1.3)	276 ( 1.3)	297 ( 1.4)
ALASKA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
ARIZONA	260 ( 1.3)	215 ( 2.1)	236 ( 2.2)	260 ( 1.5)	283 ( 1.1)	304 ( 2.2)
ARKANSAS	256 ( 0.9)	214 ( 1.0)	234 ( 1.6)	257 ( 1.0)	279 ( 0.9)	298 ( 1.8)
CALIFORNIA	256 ( 1.3)	207 ( 1.5)	231 ( 1.6)	257 ( 1.3)	282 ( 1.8)	304 ( 2.1)
COLORADO	267 ( 0.9)	224 ( 1.5)	246 ( 1.1)	268 ( 1.2)	290 ( 1.0)	309 ( 1.0)
CONNECTICUT	270 ( 1.0)	223 ( 1.7)	246 ( 1.5)	271 ( 1.2)	295 ( 1.3)	315 ( 1.1)
DELAWARE	261 ( 0.9)	216 ( 2.7)	237 ( 1.0)	260 ( 1.1)	286 ( 1.4)	307 ( 1.6)
DISTRICT OF COLUMBIA	231 ( 0.9)	190 ( 1.7)	209 ( 1.1)	230 ( 0.9)	252 ( 1.3)	274 ( 2.5)
FLORIDA	255 ( 1.2)	209 ( 1.6)	231 ( 1.9)	255 ( 1.0)	280 ( 1.7)	303 ( 2.0)
GEORGIA	259 ( 1.3)	211 ( 1.3)	233 ( 1.8)	259 ( 1.3)	284 ( 2.1)	306 ( 2.6)
HAWAII	251 ( 0.8)	200 ( 1.4)	224 ( 1.1)	251 ( 1.1)	279 ( 1.3)	302 ( 1.2)
INDIANA	267 ( 1.2)	225 ( 1.8)	245 ( 1.2)	267 ( 1.9)	289 ( 1.5)	309 ( 1.7)
IOWA	278 ( 1.1)	238 ( 1.1)	257 ( 1.1)	279 ( 1.4)	299 ( 2.1)	317 ( 1.4)
KENTUCKY	257 ( 1.2)	216 ( 2.2)	235 ( 2.1)	256 ( 1.8)	279 ( 1.1)	300 ( 1.9)
LOUISIANA	246 ( 1.2)	204 ( 1.7)	224 ( 1.7)	246 ( 1.7)	269 ( 1.5)	289 ( 2.1)
MAINE	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
MARYLAND	261 ( 1.4)	211 ( 2.3)	234 ( 1.8)	262 ( 1.1)	288 ( 1.3)	310 ( 1.8)
MASSACHUSETTS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
MICHIGAN	264 ( 1.2)	220 ( 1.8)	241 ( 1.4)	265 ( 1.5)	288 ( 1.6)	308 ( 2.1)
MINNESOTA	275 ( 0.9)	233 ( 1.9)	255 ( 1.5)	277 ( 0.9)	297 ( 1.0)	316 ( 1.0)
MISSISSIPPI	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
MISSOURI	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
MONTANA	280 ( 0.9)	243 ( 1.4)	262 ( 1.4)	281 ( 1.3)	300 ( 1.0)	317 ( 2.0)
NEBRASKA	276 ( 1.0)	233 ( 1.8)	255 ( 2.1)	277 ( 1.3)	298 ( 0.9)	316 ( 1.7)
NEW MEXICO	256 ( 0.7)	214 ( 1.1)	234 ( 1.1)	257 ( 1.2)	279 ( 1.3)	300 ( 1.9)
NEW YORK	261 ( 1.4)	212 ( 3.4)	236 ( 2.3)	262 ( 1.3)	286 ( 1.1)	308 ( 2.0)
NORTH CAROLINA	250 ( 1.1)	204 ( 1.5)	225 ( 1.2)	251 ( 1.4)	275 ( 1.0)	296 ( 1.4)
NORTH DAKOTA	281 ( 1.2)	243 ( 2.7)	262 ( 1.8)	282 ( 1.0)	301 ( 1.3)	317 ( 0.9)
OREGON	271 ( 1.0)	228 ( 1.3)	249 ( 0.8)	272 ( 1.0)	294 ( 1.5)	314 ( 1.3)
RHODE ISLAND	260 ( 0.6)	213 ( 0.8)	235 ( 0.8)	261 ( 0.8)	286 ( 0.8)	306 ( 1.1)
SOUTH CAROLINA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
TENNESSEE	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
TEXAS	258 ( 1.4)	213 ( 1.9)	234 ( 1.5)	258 ( 1.5)	283 ( 1.4)	303 ( 2.2)
UTAH	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
VERMONT	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
VIRGINIA	264 ( 1.5)	218 ( 1.8)	238 ( 1.8)	264 ( 1.6)	289 ( 2.3)	312 ( 3.4)
WASHINGTON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
WEST VIRGINIA	256 ( 1.0)	215 ( 1.7)	234 ( 1.5)	255 ( 0.7)	277 ( 1.0)	298 ( 1.1)
WISCONSIN	274 ( 1.3)	231 ( 1.8)	253 ( 2.2)	276 ( 1.3)	297 ( 1.4)	315 ( 2.4)
WYOMING	272 ( 0.7)	235 ( 1.6)	253 ( 0.9)	272 ( 0.9)	293 ( 0.8)	309 ( 1.0)
<b>Other Jurisdictions</b>						
DDESS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
DoDDS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
GUAM	232 ( 0.7)	182 ( 1.7)	205 ( 1.7)	231 ( 1.7)	258 ( 1.9)	282 ( 2.0)

— State or other jurisdiction did not participate in the NAEP assessment year presented in this table.  
SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 1.4** (continued) **1992 Mathematics Assessment**



POPULATION: **1992 Grade 8 Public School Students**  
 REPORTED STATISTICS: **Average Mathematics Composite Scale Score and Selected Percentiles**

1992 NAEP grade 8 public school student mathematics performance....

Average Mathematics Scale Score	10th Percentile	25th Percentile	50th Percentile	75th Percentile	90th Percentile
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**JURISDICTIONS**      SS ( SE )      SS ( SE )      SS ( SE )      SS ( SE )      SS ( SE )      SS ( SE )

<b>Nation</b>						
NATION	267 ( 1.0)»	219 ( 1.5)	242 ( 1.4)	268 ( 1.2)»	293 ( 1.5)	314 ( 1.4)»
NORTHEAST	268 ( 3.0)	218 ( 4.1)	241 ( 2.7)	266 ( 4.6)	295 ( 4.5)	318 ( 4.4)
SOUTHEAST	259 ( 1.2)	213 ( 3.0)	234 ( 1.5)	259 ( 1.8)	284 ( 1.5)	304 ( 2.4)
CENTRAL	274 ( 2.2)»	228 ( 2.2)	251 ( 3.0)	276 ( 2.3)	298 ( 2.7)	316 ( 2.9)
WEST	268 ( 2.1)	219 ( 2.6)	243 ( 3.1)	269 ( 2.7)	294 ( 1.9)	314 ( 3.5)
<b>States</b>						
ALABAMA	252 ( 1.7)	207 ( 1.8)	228 ( 1.9)	252 ( 1.7)	276 ( 1.7)	299 ( 2.3)
ALASKA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
ARIZONA	265 ( 1.3)»	223 ( 2.3)»	244 ( 1.4)»	266 ( 1.8)	288 ( 1.1)»	307 ( 1.2)
ARKANSAS	256 ( 1.2)	212 ( 1.7)	234 ( 1.4)	257 ( 1.2)	280 ( 1.4)	299 ( 1.2)
CALIFORNIA	261 ( 1.7)	210 ( 1.8)	235 ( 2.8)	262 ( 1.4)»	289 ( 2.2)	309 ( 2.2)
COLORADO	272 ( 1.0)»	229 ( 1.8)	251 ( 1.1)»	274 ( 1.2)»	295 ( 1.1)»	313 ( 1.1)»
CONNECTICUT	274 ( 1.1)»	225 ( 2.6)	250 ( 1.4)	276 ( 0.9)»	300 ( 0.8)	318 ( 1.3)
DELAWARE	263 ( 1.0)	218 ( 2.4)	240 ( 1.2)	263 ( 1.2)	287 ( 1.7)	307 ( 1.5)
DISTRICT OF COLUMBIA	235 ( 0.9)»	190 ( 1.1)	210 ( 1.2)	234 ( 1.9)	258 ( 2.1)	281 ( 1.6)
FLORIDA	260 ( 1.5)»	212 ( 2.9)	235 ( 1.7)	261 ( 1.9)»	285 ( 1.5)	307 ( 1.8)
GEORGIA	259 ( 1.2)	215 ( 1.4)	236 ( 1.2)	260 ( 1.3)	284 ( 2.1)	303 ( 1.3)
HAWAII	257 ( 0.9)»	209 ( 2.5)»	232 ( 0.9)»	258 ( 1.4)»	283 ( 1.0)»	305 ( 1.6)
INDIANA	270 ( 1.1)	226 ( 1.4)	248 ( 1.5)	271 ( 1.5)	293 ( 1.5)	313 ( 3.2)
IOWA	283 ( 1.0)»	245 ( 2.6)»	263 ( 1.2)»	284 ( 1.3)»	304 ( 1.8)	321 ( 1.3)
KENTUCKY	262 ( 1.1)»	218 ( 1.8)	239 ( 1.6)	263 ( 1.1)»	285 ( 1.4)»	306 ( 2.3)
LOUISIANA	250 ( 1.7)	206 ( 2.7)	227 ( 1.9)	251 ( 1.8)	273 ( 1.8)	294 ( 1.5)
MAINE	279 ( 1.0)	240 ( 2.0)	259 ( 1.1)	279 ( 1.3)	299 ( 1.5)	316 ( 1.7)
MARYLAND	265 ( 1.3)	214 ( 2.6)	238 ( 2.1)	266 ( 0.9)»	293 ( 1.2)»	314 ( 1.9)
MASSACHUSETTS	273 ( 1.0)	230 ( 1.4)	250 ( 2.2)	274 ( 1.3)	297 ( 1.6)	316 ( 1.5)
MICHIGAN	267 ( 1.4)	221 ( 1.1)	244 ( 2.1)	269 ( 1.4)	292 ( 2.3)	311 ( 2.2)
MINNESOTA	282 ( 1.0)»	241 ( 1.7)»	261 ( 1.2)»	284 ( 1.4)»	304 ( 1.3)»	322 ( 1.6)»
MISSISSIPPI	246 ( 1.2)	202 ( 1.1)	222 ( 1.1)	246 ( 1.3)	271 ( 1.5)	291 ( 1.3)
MISSOURI	271 ( 1.2)	229 ( 2.3)	250 ( 1.9)	273 ( 1.3)	293 ( 1.7)	312 ( 1.4)
MONTANA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
NEBRASKA	278 ( 1.1)	235 ( 1.8)	257 ( 1.2)	280 ( 1.5)	300 ( 1.3)	317 ( 1.2)
NEW MEXICO	260 ( 0.9)»	218 ( 2.7)	238 ( 1.1)»	260 ( 0.9)	282 ( 1.1)	301 ( 1.0)
NEW YORK	266 ( 2.1)	215 ( 3.3)	242 ( 2.5)	269 ( 1.9)»	293 ( 1.5)»	315 ( 2.0)
NORTH CAROLINA	258 ( 1.2)»	213 ( 2.1)»	235 ( 1.8)»	259 ( 0.9)»	283 ( 1.2)»	303 ( 2.0)»
NORTH DAKOTA	283 ( 1.1)	246 ( 1.3)	265 ( 1.3)	285 ( 1.0)	302 ( 1.5)	318 ( 1.6)
OREGON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
RHODE ISLAND	266 ( 0.7)»	222 ( 0.9)»	244 ( 1.2)»	268 ( 1.1)»	289 ( 1.5)	307 ( 1.1)
SOUTH CAROLINA	261 ( 1.0)	216 ( 1.6)	236 ( 1.2)	260 ( 1.3)	285 ( 1.7)	307 ( 1.7)
TENNESSEE	259 ( 1.4)	215 ( 2.2)	236 ( 1.5)	259 ( 1.6)	283 ( 1.8)	302 ( 1.7)
TEXAS	265 ( 1.3)»	217 ( 2.0)	239 ( 1.3)	265 ( 1.6)»	290 ( 1.9)»	312 ( 2.1)»
UTAH	274 ( 0.7)	233 ( 1.3)	254 ( 1.3)	276 ( 0.9)	297 ( 1.2)	314 ( 1.2)
VERMONT	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
VIRGINIA	268 ( 1.2)	222 ( 1.7)	244 ( 1.7)	268 ( 1.7)	292 ( 1.6)	314 ( 1.8)
WASHINGTON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
WEST VIRGINIA	259 ( 1.0)»	219 ( 1.8)	238 ( 1.1)	259 ( 1.4)»	281 ( 0.9)»	299 ( 1.5)
WISCONSIN	278 ( 1.5)	234 ( 2.3)	258 ( 2.1)	280 ( 1.3)	301 ( 1.4)	318 ( 1.2)
WYOMING	275 ( 0.9)»	238 ( 1.1)	255 ( 1.1)	276 ( 1.2)	295 ( 1.0)	312 ( 1.3)
<b>Other Jurisdictions</b>						
DDESS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
DoDDS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
GUAM	235 ( 1.0)»	185 ( 1.9)	208 ( 3.3)	234 ( 1.9)	262 ( 1.7)	287 ( 1.8)

— State or other jurisdiction did not participate in the NAEP assessment year presented in this table.  
 » (») The value for the students was significantly higher (lower) than in the 1990 assessment at about the 95% confidence level using appropriate multiple comparison procedures.  
 SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 1.4** (continued) **1996 Mathematics Assessment**



POPULATION: **1996 Grade 8 Public School Students**  
 REPORTED STATISTICS: **Average Mathematics Composite Scale Score and Selected Percentiles**

1996 NAEP grade 8 public school student mathematics performance....

Average Mathematics Scale Score	10th Percentile	25th Percentile	50th Percentile	75th Percentile	90th Percentile
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**JURISDICTIONS**      SS ( SE )      SS ( SE )      SS ( SE )      SS ( SE )      SS ( SE )      SS ( SE )

<b>Nation</b>	271 ( 1.2)»	222 ( 2.0)»	247 ( 1.2)»»	272 ( 1.1)»»	296 ( 1.4)»	316 ( 2.0)»
NATION	276 ( 3.6)	229 ( 4.8)	253 ( 4.7)	276 ( 5.2)	301 ( 5.1)	322 ( 6.3)
NORTHEAST	264 ( 3.0)	216 ( 5.1)	240 ( 4.0)	265 ( 3.3)	289 ( 1.6)	309 ( 3.3)
SOUTHEAST	276 ( 3.3)»	226 ( 8.6)	254 ( 4.7)	279 ( 3.0)	302 ( 2.5)	321 ( 2.4)»
CENTRAL	268 ( 2.4)	219 ( 4.8)	244 ( 3.0)	269 ( 1.7)	294 ( 3.4)	314 ( 3.0)
WEST						
<b>States</b>						
ALABAMA	257 ( 2.1)	209 ( 1.9)	233 ( 2.4)	258 ( 2.4)	282 ( 2.2)	303 ( 3.7)
ALASKA†	278 ( 1.8)	228 ( 3.9)	253 ( 3.2)	280 ( 1.2)	304 ( 2.1)	325 ( 4.1)
ARIZONA	268 ( 1.6)»	225 ( 3.4)»	246 ( 1.4)»	268 ( 3.0)»	290 ( 1.3)»	311 ( 2.1)»
ARKANSAS†	262 ( 1.5)»»	217 ( 3.8)	239 ( 1.8)	264 ( 1.3)»»	285 ( 1.2)»»	304 ( 1.5)»
CALIFORNIA	263 ( 1.9)»	214 ( 2.6)»	237 ( 2.3)	263 ( 2.0)»	288 ( 1.5)»	311 ( 2.7)
COLORADO	276 ( 1.1)»	232 ( 2.9)»	254 ( 1.3)»	277 ( 1.3)»	299 ( 1.4)»	317 ( 1.3)»
CONNECTICUT	280 ( 1.1)»»	234 ( 2.2)»	257 ( 1.2)»»	281 ( 1.7)»»	305 ( 1.6)»»	323 ( 1.7)»
DELAWARE	267 ( 0.9)»»	222 ( 1.6)	243 ( 1.8)»	266 ( 1.3)»	291 ( 1.8)»	313 ( 1.3)»»
DISTRICT OF COLUMBIA	233 ( 1.3)	187 ( 2.4)	207 ( 1.6)	232 ( 1.5)	255 ( 2.0)	281 ( 2.1)
FLORIDA	264 ( 1.8)»	216 ( 3.0)»	240 ( 2.0)»	265 ( 1.9)»	289 ( 1.7)»	310 ( 1.9)»
GEORGIA	262 ( 1.6)	215 ( 1.7)	238 ( 3.1)	263 ( 1.8)	288 ( 1.6)	308 ( 1.7)
HAWAII	262 ( 1.0)»»	214 ( 2.0)»	238 ( 1.0)»»	263 ( 1.2)»	287 ( 1.6)»	310 ( 2.2)»
INDIANA	276 ( 1.4)»»	234 ( 2.4)»»	255 ( 2.1)»»	276 ( 1.4)»»	298 ( 1.3)»	316 ( 1.3)»
IOWA†	284 ( 1.3)»	246 ( 1.6)»	264 ( 1.1)»	285 ( 1.1)»	304 ( 1.4)	320 ( 2.0)
KENTUCKY	267 ( 1.1)»»	226 ( 1.3)»»	246 ( 1.4)»»	266 ( 1.3)»	288 ( 1.6)»	308 ( 2.0)»
LOUISIANA	252 ( 1.6)»	211 ( 2.2)»	232 ( 1.8)»	253 ( 2.1)»	275 ( 1.5)»	293 ( 2.3)
MAINE	284 ( 1.3)»	245 ( 1.7)	265 ( 1.2)»	284 ( 1.6)	304 ( 1.5)	323 ( 1.6)»
MARYLAND†	270 ( 2.1)»	217 ( 1.9)	242 ( 2.1)»	270 ( 2.2)»	298 ( 4.0)»	322 ( 2.7)»
MASSACHUSETTS	278 ( 1.7)	233 ( 3.1)	255 ( 2.5)	279 ( 1.6)	301 ( 1.4)	320 ( 1.7)
MICHIGAN†	277 ( 1.8)»»	230 ( 2.5)»»	253 ( 2.2)»»	279 ( 2.1)»»	302 ( 1.2)»»	321 ( 2.0)»»
MINNESOTA	284 ( 1.3)»	240 ( 2.8)	262 ( 1.6)»	285 ( 2.4)»	308 ( 1.3)»	326 ( 1.3)»
MISSISSIPPI	250 ( 1.2)	208 ( 1.1)»	228 ( 1.5)»	250 ( 1.3)	273 ( 1.7)	293 ( 2.2)
MISSOURI	273 ( 1.4)	233 ( 2.8)	252 ( 1.9)	274 ( 1.9)	295 ( 1.7)	313 ( 1.5)
MONTANA†	283 ( 1.3)	242 ( 2.7)	262 ( 1.5)	285 ( 1.7)	306 ( 0.8)»	324 ( 1.8)»
NEBRASKA	283 ( 1.0)»»	243 ( 1.4)»»	263 ( 1.4)»»	283 ( 1.0)»	304 ( 1.4)»	323 ( 1.5)»»
NEW MEXICO	262 ( 1.2)»	218 ( 2.2)	240 ( 1.6)»	263 ( 1.2)»	285 ( 1.7)»	306 ( 1.3)»»
NEW YORK†	270 ( 1.7)»	221 ( 4.2)	247 ( 2.7)»	272 ( 1.9)»	296 ( 1.3)»	315 ( 2.8)
NORTH CAROLINA	268 ( 1.4)»»	221 ( 2.6)»	244 ( 1.4)»»	268 ( 1.6)»»	293 ( 1.1)»»	315 ( 1.7)»»
NORTH DAKOTA	284 ( 0.9)	244 ( 2.2)	265 ( 1.1)	286 ( 0.9)»	306 ( 1.3)»	323 ( 1.5)»
OREGON	276 ( 1.5)»	232 ( 1.8)	254 ( 2.1)	277 ( 2.0)»	300 ( 1.6)»	320 ( 1.3)»
RHODE ISLAND	269 ( 0.9)»»	222 ( 1.9)»	246 ( 1.4)»	271 ( 1.2)»	294 ( 1.1)»	314 ( 1.3)»»
SOUTH CAROLINA†	261 ( 1.5)	217 ( 1.9)	238 ( 1.9)	261 ( 1.2)	284 ( 3.0)	306 ( 2.3)
TENNESSEE	263 ( 1.4)	218 ( 2.5)	241 ( 1.7)	265 ( 1.2)»	288 ( 1.9)	306 ( 2.5)
TEXAS	270 ( 1.4)»»	225 ( 2.2)»»	247 ( 2.0)»»	271 ( 1.7)»	295 ( 1.6)»	314 ( 1.6)»
UTAH	277 ( 1.0)	237 ( 2.6)	257 ( 1.4)	278 ( 1.2)	298 ( 1.2)	315 ( 1.0)
VERMONT†	279 ( 1.0)	238 ( 1.7)	259 ( 1.3)	280 ( 1.0)	301 ( 1.3)	319 ( 1.4)
VIRGINIA	270 ( 1.6)»	225 ( 2.7)	246 ( 1.1)»	270 ( 1.6)»	294 ( 1.4)	314 ( 1.4)
WASHINGTON	276 ( 1.3)	232 ( 2.1)	253 ( 1.7)	278 ( 1.4)	300 ( 1.1)	320 ( 1.7)
WEST VIRGINIA	265 ( 1.0)»»	226 ( 1.5)»»	244 ( 1.2)»»	265 ( 1.4)»»	286 ( 0.9)»»	305 ( 1.6)»»
WISCONSIN†	283 ( 1.5)»	241 ( 3.9)»	262 ( 2.1)»	284 ( 1.8)»	305 ( 1.5)»	323 ( 1.8)»
WYOMING	275 ( 0.9)»	234 ( 1.6)	256 ( 1.1)	276 ( 1.1)»	296 ( 0.8)»	313 ( 1.0)»
<b>Other Jurisdictions</b>						
DDESS	269 ( 2.3)	222 ( 3.6)	244 ( 3.6)	268 ( 3.4)	294 ( 1.8)	318 ( 2.4)
DoDDS	275 ( 0.9)	235 ( 1.4)	253 ( 1.1)	275 ( 1.0)	296 ( 2.3)	317 ( 3.2)
GUAM	239 ( 1.7)»	187 ( 2.1)	213 ( 5.4)	240 ( 2.3)»	267 ( 2.4)»	290 ( 3.8)

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).  
 » (») The value for the students was significantly higher (lower) than in the 1990 assessment at about the 95% confidence level using appropriate multiple comparison procedures.  
 > (<) The value for the students was significantly higher (lower) than in the 1992 assessment at about the 95% confidence level using appropriate multiple comparison procedures.  
 SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 1.5**

**1990 Mathematics Assessment**



POPULATION:  
REPORTED STATISTICS:

1990 Grade 8 Public School Students  
Average Mathematics Scale Scores by Mathematics Content Strands

Mathematics Content Strands...	Number Sense, Properties, and Operations	Measurement	Geometry and Spatial Sense	Data Analysis, Statistics, and Probability	Algebra and Functions
JURISDICTIONS	SS ( SE )	SS ( SE )	SS ( SE )	SS ( SE )	SS ( SE )
<b>Nation</b>					
NATION	266 ( 1.3)	258 ( 1.6)	259 ( 1.4)	262 ( 1.6)	260 ( 1.3)
NORTHEAST	272 ( 2.9)	267 ( 4.2)	268 ( 3.3)	273 ( 3.9)	268 ( 3.3)
SOUTHEAST	260 ( 2.8)	248 ( 2.9)	251 ( 2.8)	253 ( 3.2)	256 ( 2.4)
CENTRAL	270 ( 2.0)	262 ( 3.0)	261 ( 2.7)	265 ( 2.6)	262 ( 2.4)
WEST	263 ( 2.5)	257 ( 3.2)	260 ( 2.6)	261 ( 3.2)	259 ( 2.6)
<b>States</b>					
ALABAMA	259 ( 1.1)	248 ( 1.4)	249 ( 1.3)	251 ( 1.5)	252 ( 1.3)
ALASKA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
ARIZONA	265 ( 1.3)	257 ( 1.6)	256 ( 1.3)	259 ( 1.9)	258 ( 1.5)
ARKANSAS	262 ( 0.8)	254 ( 1.3)	253 ( 0.9)	255 ( 1.1)	253 ( 1.1)
CALIFORNIA	260 ( 1.3)	252 ( 1.4)	256 ( 1.3)	255 ( 1.6)	256 ( 1.3)
COLORADO	269 ( 1.0)	265 ( 1.2)	266 ( 1.1)	270 ( 1.1)	266 ( 1.0)
CONNECTICUT	274 ( 1.0)	268 ( 1.6)	266 ( 1.1)	271 ( 1.5)	268 ( 1.5)
DELAWARE	265 ( 0.9)	259 ( 1.2)	256 ( 1.1)	262 ( 1.5)	259 ( 1.0)
DISTRICT OF COLUMBIA	239 ( 0.9)	222 ( 1.4)	229 ( 1.1)	223 ( 1.4)	235 ( 1.1)
FLORIDA	260 ( 1.2)	252 ( 1.5)	251 ( 1.3)	255 ( 1.7)	255 ( 1.5)
GEORGIA	263 ( 1.3)	253 ( 1.5)	257 ( 1.4)	260 ( 1.6)	257 ( 1.5)
HAWAII	257 ( 0.7)	249 ( 0.9)	252 ( 0.7)	243 ( 1.1)	249 ( 1.0)
INDIANA	271 ( 1.1)	265 ( 2.0)	264 ( 1.2)	269 ( 1.3)	265 ( 1.2)
IOWA	282 ( 1.0)	276 ( 1.6)	274 ( 1.3)	280 ( 1.2)	275 ( 1.2)
KENTUCKY	261 ( 1.2)	254 ( 1.2)	253 ( 1.3)	258 ( 1.3)	257 ( 1.3)
LOUISIANA	253 ( 1.2)	241 ( 1.4)	243 ( 1.3)	243 ( 1.6)	246 ( 1.5)
MAINE	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
MARYLAND	264 ( 1.3)	256 ( 1.7)	257 ( 1.5)	261 ( 1.7)	262 ( 1.6)
MASSACHUSETTS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
MICHIGAN	269 ( 1.2)	261 ( 1.5)	261 ( 1.2)	265 ( 1.7)	264 ( 1.3)
MINNESOTA	279 ( 1.1)	272 ( 1.2)	272 ( 1.0)	279 ( 1.1)	274 ( 1.1)
MISSISSIPPI	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
MISSOURI	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
MONTANA	283 ( 1.0)	280 ( 1.3)	279 ( 1.1)	282 ( 1.0)	278 ( 1.1)
NEBRASKA	279 ( 1.0)	273 ( 1.6)	273 ( 1.2)	278 ( 1.1)	273 ( 1.0)
NEW MEXICO	259 ( 0.8)	254 ( 1.0)	257 ( 0.7)	253 ( 1.3)	257 ( 0.9)
NEW YORK	264 ( 1.3)	255 ( 2.1)	260 ( 1.5)	263 ( 1.7)	260 ( 1.4)
NORTH CAROLINA	256 ( 1.1)	242 ( 1.3)	249 ( 1.1)	248 ( 1.6)	251 ( 1.2)
NORTH DAKOTA	286 ( 1.3)	279 ( 1.6)	278 ( 1.3)	285 ( 1.6)	275 ( 1.2)
OREGON	273 ( 1.0)	269 ( 1.3)	270 ( 0.9)	274 ( 1.2)	270 ( 1.1)
RHODE ISLAND	264 ( 0.6)	257 ( 0.7)	256 ( 0.9)	259 ( 0.7)	261 ( 0.9)
SOUTH CAROLINA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
TENNESSEE	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
TEXAS	262 ( 1.3)	254 ( 1.5)	258 ( 1.4)	257 ( 1.8)	256 ( 1.6)
UTAH	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
VERMONT	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
VIRGINIA	268 ( 1.4)	260 ( 1.8)	261 ( 1.6)	264 ( 1.9)	265 ( 1.6)
WASHINGTON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
WEST VIRGINIA	260 ( 1.0)	253 ( 1.2)	254 ( 1.0)	256 ( 1.6)	254 ( 1.1)
WISCONSIN	278 ( 1.4)	273 ( 1.6)	272 ( 1.5)	277 ( 1.4)	271 ( 1.2)
WYOMING	275 ( 0.7)	270 ( 0.8)	270 ( 0.7)	273 ( 1.0)	270 ( 0.8)
<b>Other Jurisdictions</b>					
DDESS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
DoDDS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
GUAM	240 ( 0.7)	229 ( 1.3)	236 ( 1.1)	214 ( 1.2)	230 ( 1.0)

— State or other jurisdiction did not participate in the NAEP assessment year presented in this table.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.



**TABLE 1.5** (continued)

**1992 Mathematics Assessment**



POPULATION:

1992 Grade 8 Public School Students

REPORTED STATISTICS:

Average Mathematics Scale Scores by Mathematics Content Strands

Mathematics Content Strands...	Number Sense, Properties, and Operations	Measurement	Geometry and Spatial Sense	Data Analysis, Statistics, and Probability	Algebra and Functions
JURISDICTIONS	SS ( SE )	SS ( SE )	SS ( SE )	SS ( SE )	SS ( SE )
<b>Nation</b>					
NATION	271 ( 0.9)»	265 ( 1.3)»	262 ( 1.0)	267 ( 1.1)	266 ( 1.1)»
NORTHEAST	271 ( 2.7)	266 ( 3.9)	263 ( 3.0)	269 ( 3.4)	267 ( 2.7)
SOUTHEAST	264 ( 1.2)	254 ( 1.6)	254 ( 1.3)	258 ( 1.7)	260 ( 1.3)
CENTRAL	277 ( 2.1)	273 ( 2.7)	269 ( 2.0)	274 ( 2.5)	273 ( 2.4)
WEST	271 ( 1.8)	267 ( 2.8)	263 ( 2.1)	268 ( 2.4)	266 ( 2.5)
<b>States</b>					
ALABAMA	259 ( 1.4)	246 ( 2.3)	246 ( 1.9)	251 ( 2.1)	254 ( 1.9)
ALASKA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
ARIZONA	270 ( 1.2)»	265 ( 2.3)»	260 ( 1.0)»	265 ( 1.7)»	264 ( 1.4)»
ARKANSAS	263 ( 1.3)	252 ( 1.3)	251 ( 1.5)	255 ( 1.5)	256 ( 1.5)
CALIFORNIA	264 ( 1.6)	259 ( 2.1)»	260 ( 1.9)	259 ( 2.2)	259 ( 2.1)
COLORADO	274 ( 1.1)»	274 ( 1.5)»	269 ( 1.1)	274 ( 1.3)»	271 ( 1.1)»
CONNECTICUT	278 ( 1.3)»	275 ( 1.6)»	269 ( 1.0)	274 ( 1.5)	271 ( 1.3)
DELAWARE	268 ( 1.0)	259 ( 1.5)	258 ( 1.1)	263 ( 1.2)	263 ( 1.2)»
DISTRICT OF COLUMBIA	244 ( 0.8)»	222 ( 1.6)	232 ( 1.3)	230 ( 1.2)»	238 ( 1.1)
FLORIDA	265 ( 1.4)»	255 ( 2.1)	256 ( 1.3)»	259 ( 1.8)	261 ( 1.6)»
GEORGIA	265 ( 1.1)	254 ( 2.1)	254 ( 1.4)	259 ( 1.5)	260 ( 1.3)
HAWAII	262 ( 0.9)»	255 ( 1.0)»	258 ( 1.2)»	250 ( 1.5)»	257 ( 1.1)»
INDIANA	273 ( 1.3)	270 ( 1.7)	267 ( 1.1)	273 ( 1.5)	268 ( 1.3)
IOWA	286 ( 1.0)»	288 ( 1.6)»	278 ( 1.2)	285 ( 1.4)»	280 ( 1.2)»
KENTUCKY	267 ( 1.1)»	260 ( 1.3)»	257 ( 1.1)	263 ( 1.8)	261 ( 1.4)»
LOUISIANA	257 ( 1.6)	243 ( 2.0)	245 ( 1.7)	248 ( 1.9)	250 ( 1.9)
MAINE	280 ( 1.1)	282 ( 1.5)	274 ( 0.9)	283 ( 1.4)	274 ( 1.2)
MARYLAND	269 ( 1.3)»	261 ( 1.7)	259 ( 1.3)	267 ( 1.4)»	265 ( 1.6)
MASSACHUSETTS	277 ( 1.0)	271 ( 1.5)	267 ( 1.1)	274 ( 1.5)	272 ( 1.3)
MICHIGAN	271 ( 1.3)	267 ( 2.0)»	262 ( 1.5)	268 ( 1.4)	267 ( 1.6)
MINNESOTA	283 ( 1.1)»	286 ( 1.5)»	278 ( 1.1)»	284 ( 1.4)»	282 ( 1.1)»
MISSISSIPPI	257 ( 1.2)	237 ( 2.1)	240 ( 1.2)	244 ( 1.7)	246 ( 1.6)
MISSOURI	273 ( 1.3)	272 ( 1.7)	267 ( 1.3)	272 ( 1.6)	271 ( 1.4)
MONTANA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
NEBRASKA	280 ( 1.1)	279 ( 1.7)»	274 ( 1.2)	278 ( 1.7)	276 ( 1.5)
NEW MEXICO	264 ( 1.0)»	258 ( 1.5)»	257 ( 0.9)	258 ( 1.4)»	258 ( 1.1)
NEW YORK	271 ( 1.9)»	263 ( 2.4)»	261 ( 2.3)	268 ( 2.9)	265 ( 2.3)
NORTH CAROLINA	262 ( 1.3)»	254 ( 1.8)»	255 ( 1.4)»	258 ( 1.4)»	260 ( 1.4)»
NORTH DAKOTA	287 ( 1.2)	286 ( 1.9)»	277 ( 1.3)	286 ( 1.3)	280 ( 1.2)»
OREGON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
RHODE ISLAND	270 ( 0.7)»	264 ( 1.1)»	260 ( 0.8)»	266 ( 1.2)»	267 ( 1.3)»
SOUTH CAROLINA	266 ( 0.9)	258 ( 1.6)	257 ( 1.2)	259 ( 1.4)	260 ( 1.3)
TENNESSEE	265 ( 1.3)	254 ( 2.0)	253 ( 1.5)	260 ( 1.6)	258 ( 1.6)
TEXAS	267 ( 1.4)»	261 ( 1.7)»	262 ( 1.5)	264 ( 1.6)»	266 ( 1.4)»
UTAH	277 ( 0.8)	275 ( 1.3)	270 ( 1.2)	276 ( 1.1)	273 ( 1.0)
VERMONT	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
VIRGINIA	273 ( 1.1)»	266 ( 1.7)»	262 ( 1.2)	268 ( 1.4)	268 ( 1.4)
WASHINGTON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
WEST VIRGINIA	263 ( 1.0)»	257 ( 1.6)	255 ( 1.1)	260 ( 1.2)	258 ( 1.3)
WISCONSIN	280 ( 1.5)	280 ( 2.0)»	273 ( 1.6)	280 ( 2.1)	276 ( 1.5)»
WYOMING	277 ( 0.8)	279 ( 1.2)»	272 ( 0.7)	275 ( 1.2)	272 ( 1.2)
<b>Other Jurisdictions</b>					
DDESS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
DoDDS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
GUAM	241 ( 1.3)	229 ( 1.6)	240 ( 1.5)	222 ( 1.9)»	236 ( 1.2)»

— State or other jurisdiction did not participate in the NAEP assessment year presented in this table.

» (\*) The value for the students was significantly higher (lower) than in the 1990 assessment at about the 95% confidence level using appropriate multiple comparison procedures.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 1.5** (continued)

**1996 Mathematics Assessment**



POPULATION:

1996 Grade 8 Public School Students

REPORTED STATISTICS:

Average Mathematics Scale Scores by Mathematics Content Strands

Mathematics Content Strands...	Number Sense, Properties, and Operations	Measurement	Geometry and Spatial Sense	Data Analysis, Statistics, and Probability	Algebra and Functions
JURISDICTIONS	SS ( SE )	SS ( SE )	SS ( SE )	SS ( SE )	SS ( SE )
<b>Nation</b>					
NATION	272 ( 1.2)»	268 ( 1.6)»	268 ( 1.3)»»	270 ( 1.7)»	272 ( 1.2)»»
NORTHEAST	279 ( 3.5)	275 ( 4.1)	272 ( 3.0)	276 ( 5.4)	277 ( 3.6)
SOUTHEAST	266 ( 2.6)	257 ( 4.2)	262 ( 3.0)	265 ( 3.9)	266 ( 2.9)
CENTRAL	276 ( 3.4)	278 ( 4.7)	273 ( 3.3)	277 ( 3.8)	276 ( 3.1)»
WEST	270 ( 2.3)	265 ( 3.2)	267 ( 2.5)	266 ( 3.3)	270 ( 2.2)
<b>States</b>					
ALABAMA	262 ( 2.1)	245 ( 3.1)	255 ( 2.2)»»	255 ( 2.6)	260 ( 2.2)»
ALASKA†	278 ( 1.9)	282 ( 3.6)	276 ( 1.7)	277 ( 2.9)	277 ( 2.1)
ARIZONA	271 ( 1.4)»	266 ( 2.5)»	264 ( 1.5)»	269 ( 2.0)»	268 ( 2.2)»
ARKANSAS†	267 ( 1.6)»	254 ( 2.3)	260 ( 1.7)»»	261 ( 2.6)»	262 ( 2.3)»
CALIFORNIA	265 ( 1.7)»	260 ( 2.4)»	264 ( 1.8)»	259 ( 2.2)	264 ( 1.7)»
COLORADO	276 ( 1.3)»	276 ( 2.1)»	275 ( 1.0)»»	276 ( 1.6)»	275 ( 1.3)»
CONNECTICUT	281 ( 1.2)»	282 ( 2.2)»	275 ( 1.6)»»	282 ( 1.9)»»	279 ( 1.5)»»
DELAWARE	267 ( 2.1)	260 ( 2.4)	266 ( 1.4)»»	269 ( 2.6)»	270 ( 1.2)»»
DISTRICT OF COLUMBIA	238 ( 1.9)<	215 ( 1.6)«<	235 ( 2.2)»	226 ( 3.8)	241 ( 3.4)
FLORIDA	266 ( 1.7)»	258 ( 2.8)	261 ( 1.7)»	261 ( 2.2)»	268 ( 1.7)»»
GEORGIA	266 ( 1.6)	256 ( 2.2)	260 ( 1.5)»	261 ( 2.1)	265 ( 1.9)»
HAWAII	267 ( 1.2)»»	257 ( 2.4)»	264 ( 1.1)»»	256 ( 2.0)»	263 ( 1.7)»»
INDIANA	277 ( 1.6)»	275 ( 2.0)»	272 ( 1.5)»»	276 ( 1.9)»	277 ( 1.5)»»
IOWA†	285 ( 1.5)	288 ( 1.9)»	279 ( 1.5)»	285 ( 2.0)»	283 ( 1.4)»
KENTUCKY	268 ( 1.2)»	265 ( 1.9)»	264 ( 1.2)»»	268 ( 1.6)»	267 ( 1.4)»»
LOUISIANA	258 ( 1.7)»	244 ( 2.4)	251 ( 1.9)»	248 ( 2.1)	256 ( 1.6)»
MAINE	285 ( 1.6)	288 ( 2.8)	280 ( 1.8)»	287 ( 2.0)	283 ( 1.7)»
MARYLAND†	271 ( 2.1)»	267 ( 2.8)»	264 ( 2.1)»	270 ( 2.8)»	274 ( 2.3)»»
MASSACHUSETTS	280 ( 1.7)	277 ( 2.4)	272 ( 2.1)	279 ( 2.1)	279 ( 1.9)»
MICHIGAN†	277 ( 1.7)»»	278 ( 2.5)»»	274 ( 1.9)»»	276 ( 2.4)»»	279 ( 1.6)»»
MINNESOTA	284 ( 1.5)»	288 ( 1.7)»	280 ( 1.4)»	285 ( 1.9)»	284 ( 1.4)»
MISSISSIPPI	258 ( 1.4)	239 ( 2.1)	247 ( 1.3)»	247 ( 1.9)	254 ( 1.4)»
MISSOURI	275 ( 1.4)	273 ( 2.2)	271 ( 1.5)	273 ( 2.0)	274 ( 1.6)
MONTANA†	283 ( 1.5)	287 ( 1.7)»	279 ( 1.9)	284 ( 2.7)	284 ( 1.7)»
NEBRASKA	284 ( 1.2)»	284 ( 2.7)»	278 ( 1.3)»	283 ( 1.6)»	284 ( 1.2)»»
NEW MEXICO	265 ( 1.8)»	261 ( 2.8)»	261 ( 1.3)»»	259 ( 1.8)»	262 ( 1.5)»
NEW YORK†	273 ( 1.7)»	264 ( 2.2)»	268 ( 1.5)»	273 ( 2.4)»	271 ( 1.7)»
NORTH CAROLINA	269 ( 1.4)»»	261 ( 1.9)»»	267 ( 1.3)»»	269 ( 1.9)»»	271 ( 1.6)»»
NORTH DAKOTA	286 ( 1.2)	288 ( 2.8)»	280 ( 1.6)	282 ( 3.5)	285 ( 1.8)»
OREGON	278 ( 1.9)»	278 ( 2.5)»	274 ( 1.8)	277 ( 2.3)	276 ( 1.7)»
RHODE ISLAND	269 ( 2.1)»	267 ( 2.3)»	266 ( 1.1)»»	272 ( 2.2)»	271 ( 1.7)»
SOUTH CAROLINA†	264 ( 1.7)	252 ( 2.9)	261 ( 1.6)	259 ( 1.6)	264 ( 1.8)
TENNESSEE	267 ( 1.6)	255 ( 2.2)	260 ( 1.6)»	265 ( 1.6)	266 ( 1.5)»
TEXAS	273 ( 1.5)»»	268 ( 2.0)»»	268 ( 1.2)»»	270 ( 1.9)»	271 ( 1.4)»
UTAH	279 ( 1.1)	276 ( 2.3)	273 ( 1.3)	277 ( 1.8)	277 ( 1.3)
VERMONT†	278 ( 1.7)	283 ( 1.7)	278 ( 2.0)	278 ( 2.3)	280 ( 1.2)
VIRGINIA	272 ( 1.5)	266 ( 2.3)	267 ( 1.7)»	271 ( 1.8)»	271 ( 1.6)»
WASHINGTON	277 ( 1.3)	277 ( 1.9)	273 ( 1.4)	277 ( 2.1)	276 ( 1.3)
WEST VIRGINIA	268 ( 1.3)»»	261 ( 2.1)»	262 ( 1.4)»»	265 ( 1.8)»	266 ( 1.3)»»
WISCONSIN†	284 ( 1.4)»	286 ( 2.2)»	278 ( 1.6)»	287 ( 2.1)»	282 ( 1.6)»»
WYOMING	276 ( 1.1)	278 ( 1.5)»	273 ( 1.4)	273 ( 2.7)	274 ( 1.1)»
<b>Other Jurisdictions</b>					
DDESS	271 ( 5.2)	264 ( 3.5)	264 ( 5.9)	271 ( 5.9)	274 ( 2.8)
DoDDS	276 ( 2.8)	275 ( 2.9)	276 ( 1.5)	273 ( 2.2)	274 ( 1.3)
GUAM	243 ( 2.6)	225 ( 6.1)	245 ( 2.2)»	222 ( 2.7)»	247 ( 3.7)»»

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).

» (») The value for the students was significantly higher (lower) than in the 1990 assessment at about the 95% confidence level using appropriate multiple comparison procedures.

> (<) The value for the students was significantly higher (lower) than in the 1992 assessment at about the 95% confidence level using appropriate multiple comparison procedures.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.



**TABLE 1.6****1996 Mathematics Assessment**

POPULATION:  
 REPORTED STATISTICS:  
 BREAKDOWNS BY:

**1996 Grade 8 Combined Public and Nonpublic School Students**  
**Percentage of Students and Average Mathematics Scale Score**  
**Type of School**



Type of school...	Public Schools		Nonpublic Schools		All Schools	
JURISDICTIONS	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )
<b>Nation</b>						
NATION	89 ( 1.1)	271 ( 1.2)	11 ( 1.1)	284 ( 2.4)	100 ( ... )	272 ( 1.1)
NORTHEAST	86 ( 3.5)	276 ( 3.6)	14 ( 3.5)	281 ( 5.1)!	100 ( ... )	277 ( 3.1)
SOUTHEAST	89 ( 2.5)	264 ( 3.0)	11 ( 2.5)	285 ( 4.8)!	100 ( ... )	266 ( 2.6)
CENTRAL	88 ( 2.7)	276 ( 3.3)	12 ( 2.7)	286 ( 4.1)!	100 ( ... )	277 ( 3.1)
WEST	93 ( 2.0)	268 ( 2.4)	7 ( 2.0)	284 ( 5.4)!	100 ( ... )	269 ( 2.2)
<b>States</b>						
CALIFORNIA†	90 ( 1.1)	263 ( 1.9)	10 ( 1.1)	284 ( 3.3)	100 ( ... )	265 ( 1.7)
GEORGIA	94 ( 1.2)	262 ( 1.6)	6 ( 1.2)	292 ( 6.9)!	100 ( ... )	264 ( 1.6)
IOWA†	88 ( 2.5)	284 ( 1.3)	12 ( 2.5)	295 ( 2.2)!	100 ( ... )	285 ( 1.2)
LOUISIANA†	83 ( 1.2)	252 ( 1.6)	17 ( 1.2)	276 ( 3.4)	100 ( ... )	256 ( 1.5)
MASSACHUSETTS†	87 ( 1.8)	278 ( 1.7)	13 ( 1.8)	281 ( 5.0)	100 ( ... )	278 ( 1.6)
MICHIGAN†	89 ( 1.3)	277 ( 1.8)	11 ( 1.3)	287 ( 3.9)	100 ( ... )	278 ( 1.7)
MINNESOTA†	91 ( 1.1)	284 ( 1.3)	9 ( 1.1)	293 ( 3.5)	100 ( ... )	285 ( 1.3)
MISSOURI	89 ( 1.7)	273 ( 1.4)	11 ( 1.7)	292 ( 5.7)	100 ( ... )	275 ( 1.6)
MONTANA†	95 ( 0.9)	283 ( 1.3)	5 ( 0.9)	288 ( 8.0)!	100 ( ... )	283 ( 1.3)
NEBRASKA†	87 ( 1.5)	283 ( 1.0)	13 ( 1.5)	287 ( 3.6)	100 ( ... )	283 ( 1.0)
NEVADA†	— ( — )□	— ( — )□	4 ( 0.6)	284 ( 5.4)	— ( — )□	— ( — )□
NEW HAMPSHIRE†	— ( — )□	— ( — )□	7 ( 1.2)	293 ( 4.3)	— ( — )□	— ( — )□
NEW MEXICO†	92 ( 1.5)	262 ( 1.2)	8 ( 1.5)	282 ( 4.0)!	100 ( ... )	263 ( 1.5)
NEW YORK†	84 ( 1.6)	270 ( 1.7)	16 ( 1.6)	276 ( 3.8)	100 ( ... )	271 ( 1.4)
NORTH DAKOTA	94 ( 0.8)	284 ( 0.9)	6 ( 0.8)	296 ( 3.6)	100 ( ... )	285 ( 0.9)
RHODE ISLAND†	85 ( 1.0)	269 ( 0.9)	15 ( 1.0)	275 ( 3.5)	100 ( ... )	270 ( 0.9)
SOUTH CAROLINA†	93 ( 1.1)	261 ( 1.5)	7 ( 1.1)	283 ( 5.0)	100 ( ... )	262 ( 1.5)
TEXAS	93 ( 1.0)	270 ( 1.4)	7 ( 1.0)	301 ( 5.3)	100 ( ... )	272 ( 1.3)
VERMONT†	95 ( 0.8)	279 ( 1.0)	5 ( 0.8)	287 ( 3.8)	100 ( ... )	280 ( 0.9)
WASHINGTON	94 ( 1.4)	276 ( 1.3)	6 ( 1.4)	299 ( 4.1)!	100 ( ... )	277 ( 1.2)
<b>Other Jurisdictions</b>						
GUAM†	80 ( 0.9)	239 ( 1.7)	20 ( 0.9)	275 ( 1.9)	100 ( ... )	246 ( 1.4)

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).

... Characteristics of the sample do not permit a reliable estimate.

! Interpret with caution — the nature of the sample does not allow accurate determination of the variability of this statistic.

□ Nevada and New Hampshire did not satisfy the 1996 public school participation rates necessary for reporting results (see Appendix A).

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.



## Chapter 2

# *Scale Scores for Population Subgroups*

### *Overview*

Results for the nation and participating jurisdictions are provided in Chapter 2 for various demographic population subgroups. This includes classifications by gender, race/ethnicity, parents' education level, Title I participation, eligibility for the free/reduced-price lunch component of the National School Lunch Program (NSLP), and type of location. There is one table for each of these demographic categories, presented in the order listed above.

The Title I legislation provides funds to state and local educational agencies to support projects aimed at assisting economically disadvantaged students attending public and nonpublic schools.<sup>3</sup> This information was first collected at the student level for a NAEP mathematics assessment in 1996. In previous mathematics assessments, principals and other school administrators were asked to report the percentage of students in their school who received Title I services. Therefore, results are not available from previous assessments.

The free/reduced-price lunch component of the NSLP is offered through the United States Department of Agriculture (USDA). Eligibility for this program is determined through the USDA's Income Eligibility Guidelines. NAEP first collected information on student-level eligibility for this federally funded program in 1996. Therefore, results are not available from previous assessments.

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<sup>3</sup> As a result of the Elementary and Secondary Education Act reauthorized by Congress in 1994, the federal program formerly referred to as Chapter 1 was renamed Title I.

**TABLE 2.1**

**1992 and 1996 Mathematics Assessment**



POPULATION:  
REPORTED STATISTICS:  
BREAKDOWNS BY:

1992 and 1996 Grade 4 Public School Students  
Percentage of Students and Average Mathematics Scale Score  
Gender

NAEP assessment year...	1992				1996			
	Male		Female		Male		Female	
What is your gender?	Male		Female		Male		Female	
JURISDICTIONS	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )
<b>Nation</b>								
NATION	50 ( 0.7)	220 ( 0.9)	50 ( 0.7)	218 ( 1.1)	51 ( 0.7)	224 ( 1.2)>	49 ( 0.7)	221 ( 1.1)
NORTHEAST	50 ( 1.2)	226 ( 2.2)	50 ( 1.2)	221 ( 2.8)	51 ( 1.4)	229 ( 2.9)	49 ( 1.4)	224 ( 2.8)
SOUTHEAST	49 ( 1.3)	210 ( 1.6)	51 ( 1.3)	210 ( 2.6)	50 ( 1.3)	216 ( 3.1)	50 ( 1.3)	215 ( 2.3)
CENTRAL	50 ( 1.3)	225 ( 2.6)	50 ( 1.3)	221 ( 2.4)	51 ( 1.2)	231 ( 2.2)	49 ( 1.2)	229 ( 2.4)
WEST	52 ( 1.5)	218 ( 1.6)	48 ( 1.5)	218 ( 1.8)	50 ( 1.6)	220 ( 2.3)	50 ( 1.6)	217 ( 2.1)
<b>States</b>								
ALABAMA	51 ( 1.0)	208 ( 1.8)	49 ( 1.0)	208 ( 1.6)	50 ( 1.2)	212 ( 1.4)	50 ( 1.2)	212 ( 1.3)
ALASKA†	— ( — )	— ( — )	— ( — )	— ( — )	50 ( 1.0)	224 ( 1.5)	50 ( 1.0)	224 ( 1.4)
ARIZONA	51 ( 1.1)	215 ( 1.3)	49 ( 1.1)	216 ( 1.1)	51 ( 1.0)	218 ( 2.1)	49 ( 1.0)	217 ( 1.6)
ARKANSAS†	53 ( 1.0)	211 ( 1.0)	47 ( 1.0)	210 ( 1.1)	50 ( 1.2)	216 ( 1.5)>	50 ( 1.2)	216 ( 1.7)>
CALIFORNIA	52 ( 1.0)	209 ( 1.9)	48 ( 1.0)	208 ( 1.6)	51 ( 1.1)	211 ( 2.2)	49 ( 1.1)	207 ( 1.7)
COLORADO	50 ( 1.0)	222 ( 1.2)	50 ( 1.0)	220 ( 1.2)	51 ( 0.8)	227 ( 1.2)>	49 ( 0.8)	224 ( 1.4)>
CONNECTICUT	49 ( 1.1)	228 ( 1.3)	51 ( 1.1)	225 ( 1.3)	50 ( 0.9)	234 ( 1.2)>	50 ( 0.9)	230 ( 1.3)
DELAWARE	51 ( 1.2)	219 ( 1.2)	49 ( 1.2)	217 ( 1.2)	50 ( 1.2)	216 ( 1.4)	50 ( 1.2)	215 ( 1.1)
DISTRICT OF COLUMBIA	48 ( 0.9)	193 ( 1.0)	52 ( 0.9)	192 ( 0.9)	49 ( 1.2)	187 ( 1.5)<	51 ( 1.2)	187 ( 1.4)<
FLORIDA	48 ( 1.0)	215 ( 1.7)	52 ( 1.0)	212 ( 1.6)	52 ( 1.0)	215 ( 1.3)	48 ( 1.0)	217 ( 1.3)
GEORGIA	51 ( 1.0)	215 ( 1.6)	49 ( 1.0)	216 ( 1.3)	50 ( 1.0)	216 ( 1.7)	50 ( 1.0)	215 ( 1.5)
HAWAII	49 ( 1.0)	213 ( 1.7)	51 ( 1.0)	215 ( 1.2)	53 ( 1.2)	215 ( 1.4)	47 ( 1.2)	215 ( 2.0)
INDIANA	50 ( 1.0)	222 ( 1.4)	50 ( 1.0)	220 ( 1.1)	49 ( 1.0)	231 ( 1.3)>	51 ( 1.0)	228 ( 1.2)>
IOWA†	51 ( 0.9)	230 ( 1.1)	49 ( 0.9)	229 ( 1.2)	51 ( 1.0)	230 ( 1.2)	49 ( 1.0)	228 ( 1.3)
KENTUCKY	49 ( 0.9)	215 ( 1.3)	51 ( 0.9)	215 ( 1.1)	52 ( 1.1)	220 ( 1.5)>	48 ( 1.1)	220 ( 1.1)>
LOUISIANA	52 ( 1.0)	205 ( 1.7)	48 ( 1.0)	204 ( 1.6)	50 ( 1.0)	209 ( 1.6)	50 ( 1.0)	210 ( 1.0)>
MAINE	49 ( 1.1)	232 ( 1.2)	51 ( 1.1)	231 ( 1.3)	50 ( 1.1)	234 ( 1.3)	50 ( 1.1)	231 ( 1.2)
MARYLAND	50 ( 1.1)	219 ( 1.5)	50 ( 1.1)	216 ( 1.6)	50 ( 0.9)	222 ( 1.6)	50 ( 0.9)	220 ( 1.7)
MASSACHUSETTS	51 ( 1.0)	228 ( 1.3)	49 ( 1.0)	225 ( 1.3)	52 ( 1.1)	230 ( 1.5)	48 ( 1.1)	228 ( 1.4)
MICHIGAN†	52 ( 1.0)	222 ( 1.8)	48 ( 1.0)	217 ( 1.9)	51 ( 0.8)	227 ( 1.5)	49 ( 0.8)	225 ( 1.4)>
MINNESOTA	50 ( 0.9)	229 ( 1.1)	50 ( 0.9)	228 ( 1.1)	51 ( 1.1)	234 ( 1.3)>	49 ( 1.1)	231 ( 1.3)
MISSISSIPPI	52 ( 0.7)	201 ( 1.3)	48 ( 0.7)	203 ( 1.3)	50 ( 1.1)	208 ( 1.5)>	50 ( 1.1)	209 ( 1.4)>
MISSOURI	52 ( 0.9)	222 ( 1.4)	48 ( 0.9)	223 ( 1.2)	50 ( 1.0)	225 ( 1.3)	50 ( 1.0)	224 ( 1.2)
MONTANA†	— ( — )	— ( — )	— ( — )	— ( — )	53 ( 1.0)	229 ( 1.4)	47 ( 1.0)	226 ( 1.5)
NEBRASKA	51 ( 0.9)	227 ( 1.3)	49 ( 0.9)	224 ( 1.5)	52 ( 0.9)	228 ( 1.5)	48 ( 0.9)	227 ( 1.2)
NEVADA†	— ( — )	— ( — )	— ( — )	— ( — )	50 ( 1.1)	220 ( 1.6)	50 ( 1.1)	216 ( 1.6)
NEW JERSEY†	51 ( 1.0)	228 ( 1.7)	49 ( 1.0)	226 ( 1.6)	49 ( 1.4)	231 ( 1.7)	51 ( 1.4)	223 ( 1.7)
NEW MEXICO	47 ( 1.0)	213 ( 1.7)	53 ( 1.0)	213 ( 1.5)	48 ( 1.0)	215 ( 2.0)	52 ( 1.0)	213 ( 2.0)
NEW YORK†	52 ( 1.1)	222 ( 1.3)	48 ( 1.1)	215 ( 1.5)	50 ( 0.9)	224 ( 1.4)	50 ( 0.9)	222 ( 1.4)>
NORTH CAROLINA	51 ( 0.9)	213 ( 1.2)	49 ( 0.9)	213 ( 1.3)	50 ( 0.8)	224 ( 1.3)>	50 ( 0.8)	224 ( 1.3)>
NORTH DAKOTA	53 ( 1.1)	230 ( 1.0)	47 ( 1.1)	227 ( 0.9)	50 ( 1.0)	232 ( 1.5)	50 ( 1.0)	230 ( 1.3)
OREGON	— ( — )	— ( — )	— ( — )	— ( — )	50 ( 1.0)	224 ( 1.6)	50 ( 1.0)	223 ( 1.5)
PENNSYLVANIA†	53 ( 1.0)	225 ( 1.6)	47 ( 1.0)	223 ( 1.5)	51 ( 1.0)	227 ( 1.5)	49 ( 1.0)	226 ( 1.4)
RHODE ISLAND	51 ( 1.1)	216 ( 1.8)	49 ( 1.1)	215 ( 1.6)	52 ( 1.1)	223 ( 1.7)>	48 ( 1.1)	218 ( 1.6)
SOUTH CAROLINA†	50 ( 1.1)	213 ( 1.4)	50 ( 1.1)	212 ( 1.1)	50 ( 1.0)	214 ( 1.3)	50 ( 1.0)	213 ( 1.6)
TENNESSEE	52 ( 0.8)	211 ( 1.5)	48 ( 0.8)	211 ( 1.5)	51 ( 1.1)	220 ( 1.6)>	49 ( 1.1)	218 ( 1.5)>
TEXAS	49 ( 0.9)	219 ( 1.4)	51 ( 0.9)	217 ( 1.3)	51 ( 1.1)	229 ( 1.4)>	49 ( 1.1)	228 ( 1.6)>
UTAH	51 ( 1.0)	224 ( 1.1)	49 ( 1.0)	224 ( 1.2)	50 ( 0.9)	228 ( 1.3)	50 ( 0.9)	225 ( 1.4)
VERMONT†	— ( — )	— ( — )	— ( — )	— ( — )	51 ( 1.0)	226 ( 1.5)	49 ( 1.0)	224 ( 1.4)
VIRGINIA	51 ( 1.0)	222 ( 1.6)	49 ( 1.0)	219 ( 1.4)	50 ( 0.9)	224 ( 1.6)	50 ( 0.9)	221 ( 1.4)
WASHINGTON	— ( — )	— ( — )	— ( — )	— ( — )	52 ( 0.9)	226 ( 1.4)	48 ( 0.9)	224 ( 1.4)
WEST VIRGINIA	49 ( 0.9)	216 ( 1.4)	51 ( 0.9)	214 ( 1.0)	52 ( 1.1)	224 ( 1.3)>	48 ( 1.1)	223 ( 1.1)>
WISCONSIN	51 ( 1.2)	230 ( 1.3)	49 ( 1.2)	227 ( 1.1)	51 ( 1.1)	233 ( 1.2)	49 ( 1.1)	230 ( 1.2)
WYOMING	50 ( 1.0)	227 ( 1.2)	50 ( 1.0)	224 ( 1.0)	50 ( 1.3)	224 ( 1.6)	50 ( 1.3)	223 ( 1.4)
<b>Other Jurisdictions</b>								
DDESS	— ( — )	— ( — )	— ( — )	— ( — )	50 ( 1.8)	226 ( 1.3)	50 ( 1.8)	222 ( 1.2)
DoDDS	— ( — )	— ( — )	— ( — )	— ( — )	50 ( 1.0)	224 ( 1.0)	50 ( 1.0)	222 ( 0.9)
GUAM	52 ( 1.2)	190 ( 1.2)	48 ( 1.2)	195 ( 1.0)	52 ( 1.3)	187 ( 1.5)	48 ( 1.3)	189 ( 1.8)<

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).

— State or other jurisdiction did not participate in the NAEP assessment year presented in this table.

> (<) The value for the students was significantly higher (lower) than in the 1992 assessment at about the 95% confidence level using appropriate multiple comparison procedures.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 2.2**

**1992 Mathematics Assessment**



POPULATION:  
REPORTED STATISTICS:  
BREAKDOWNS BY:

1992 Grade 4 Public School Students  
Percentage of Students and Average Mathematics Scale Score  
Race/Ethnicity

Which best describes your race or your ethnic background?	White		Black		Hispanic		Asian/Pacific Islander		American Indian	
	PCT ( SE)	SS ( SE)	PCT ( SE)	SS ( SE)	PCT ( SE)	SS ( SE)	PCT ( SE)	SS ( SE)	PCT ( SE)	SS ( SE)
<b>JURISDICTIONS</b>										
<b>Nation</b>										
NATION	69 ( 0.4)	227 ( 1.0)	17 ( 0.4)	192 ( 1.4)	10 ( 0.2)	201 ( 1.5)	3 ( 0.3)	233 ( 2.5)	2 ( 0.2)	210 ( 3.5)
NORTHEAST	71 ( 2.9)	233 ( 2.3)	17 ( 2.7)	195 ( 3.1)	8 ( 1.2)	201 ( 3.1)	2 ( 0.7)	... ( ...)	1 ( 0.3)	... ( ...)
SOUTHEAST	61 ( 2.5)	220 ( 2.2)	30 ( 2.6)	191 ( 2.0)	6 ( 1.0)	200 ( 3.3)	1 ( 0.3)	... ( ...)	1 ( 0.3)	... ( ...)
CENTRAL	80 ( 1.8)	229 ( 1.7)	12 ( 1.7)	194 ( 4.2)	6 ( 0.8)	199 ( 3.3)	1 ( 0.2)	... ( ...)	1 ( 0.3)	... ( ...)
WEST	64 ( 1.7)	226 ( 1.8)	10 ( 1.7)	189 ( 2.7)	17 ( 1.6)	201 ( 2.0)	5 ( 1.0)	232 ( 3.1)	2 ( 0.3)	... ( ...)
<b>States</b>										
ALABAMA	61 ( 2.5)	219 ( 1.5)	32 ( 2.3)	189 ( 1.1)	4 ( 0.6)	193 ( 3.9)	1 ( 0.2)	... ( ...)	2 ( 1.0)	... ( ...)
ALASKA	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)
ARIZONA	56 ( 2.1)	226 ( 0.8)	4 ( 0.7)	199 ( 3.6)	29 ( 1.5)	203 ( 1.2)	1 ( 0.2)	... ( ...)	10 ( 1.7)	193 ( 3.4)
ARKANSAS	69 ( 1.5)	218 ( 0.9)	21 ( 1.4)	189 ( 1.7)	6 ( 0.6)	195 ( 2.9)	1 ( 0.2)	... ( ...)	3 ( 0.4)	211 ( 3.7)
CALIFORNIA	45 ( 2.0)	221 ( 1.7)	6 ( 0.7)	184 ( 3.3)	35 ( 1.7)	192 ( 1.6)	11 ( 1.1)	224 ( 2.7)	3 ( 0.5)	208 ( 6.6)
COLORADO	68 ( 1.5)	228 ( 1.0)	5 ( 1.0)	200 ( 2.8)	22 ( 1.3)	206 ( 1.4)	3 ( 0.3)	223 ( 4.3)	3 ( 0.3)	215 ( 4.4)
CONNECTICUT	73 ( 1.4)	235 ( 0.9)	10 ( 1.1)	195 ( 2.6)	13 ( 1.1)	206 ( 2.7)	2 ( 0.4)	... ( ...)	1 ( 0.2)	... ( ...)
DELAWARE	66 ( 1.1)	227 ( 0.8)	23 ( 0.9)	198 ( 1.4)	8 ( 0.4)	199 ( 2.5)	1 ( 0.2)	... ( ...)	2 ( 0.4)	... ( ...)
DISTRICT OF COLUMBIA	5 ( 0.4)	242 ( 4.2)	82 ( 0.6)	190 ( 0.7)	10 ( 0.4)	182 ( 2.1)	1 ( 0.2)	... ( ...)	2 ( 0.3)	... ( ...)
FLORIDA	58 ( 2.2)	224 ( 1.3)	21 ( 2.0)	191 ( 2.0)	17 ( 1.3)	207 ( 2.5)	2 ( 0.4)	... ( ...)	2 ( 0.3)	... ( ...)
GEORGIA	56 ( 2.2)	229 ( 1.2)	35 ( 2.1)	197 ( 1.4)	6 ( 0.6)	198 ( 2.6)	1 ( 0.2)	... ( ...)	1 ( 0.3)	... ( ...)
HAWAII	21 ( 1.6)	219 ( 1.7)	4 ( 0.6)	200 ( 3.2)	11 ( 0.7)	199 ( 2.6)	61 ( 2.1)	216 ( 1.6)	2 ( 0.3)	... ( ...)
INDIANA	82 ( 1.5)	225 ( 0.9)	10 ( 1.3)	196 ( 2.3)	5 ( 0.6)	210 ( 1.9)	1 ( 0.2)	... ( ...)	1 ( 0.3)	... ( ...)
IOWA	90 ( 0.9)	232 ( 0.9)	2 ( 0.5)	194 ( 3.8)!	5 ( 0.5)	219 ( 2.5)	1 ( 0.3)	... ( ...)	2 ( 0.3)	... ( ...)
KENTUCKY	85 ( 1.6)	217 ( 1.0)	9 ( 1.3)	201 ( 2.5)	4 ( 0.6)	199 ( 2.9)	1 ( 0.2)	... ( ...)	2 ( 0.3)	... ( ...)
LOUISIANA	50 ( 2.0)	218 ( 1.5)	43 ( 2.0)	187 ( 1.7)	5 ( 0.6)	200 ( 4.3)	2 ( 0.7)	... ( ...)	1 ( 0.3)	... ( ...)
MAINE	91 ( 0.7)	233 ( 1.0)	1 ( 0.1)	... ( ...)	5 ( 0.6)	219 ( 3.5)	1 ( 0.2)	... ( ...)	3 ( 0.5)	... ( ...)
MARYLAND	59 ( 1.7)	229 ( 1.1)	30 ( 1.4)	195 ( 1.8)	6 ( 0.6)	207 ( 3.4)	4 ( 0.5)	235 ( 3.7)	2 ( 0.2)	... ( ...)
MASSACHUSETTS	79 ( 1.6)	232 ( 1.0)	7 ( 0.8)	194 ( 3.0)	8 ( 0.8)	207 ( 2.6)	4 ( 0.7)	229 ( 7.7)	2 ( 0.2)	... ( ...)
MICHIGAN	73 ( 1.8)	228 ( 1.5)	13 ( 1.7)	186 ( 3.8)	9 ( 0.9)	206 ( 2.6)	2 ( 0.3)	... ( ...)	3 ( 0.4)	212 ( 3.8)
MINNESOTA	85 ( 1.3)	232 ( 0.8)	3 ( 0.5)	194 ( 3.0)	7 ( 0.8)	208 ( 2.9)	2 ( 0.4)	... ( ...)	2 ( 0.3)	... ( ...)
MISSISSIPPI	40 ( 2.0)	219 ( 1.2)	52 ( 2.1)	190 ( 1.3)	6 ( 0.9)	186 ( 2.8)	1 ( 0.2)	... ( ...)	1 ( 0.2)	... ( ...)
MISSOURI	77 ( 1.7)	228 ( 1.0)	14 ( 1.7)	196 ( 2.2)	6 ( 0.5)	208 ( 3.1)	1 ( 0.2)	... ( ...)	2 ( 0.4)	... ( ...)
MONTANA	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)
NEBRASKA	84 ( 1.3)	229 ( 1.2)	6 ( 0.7)	191 ( 2.4)	7 ( 0.9)	210 ( 3.1)	1 ( 0.2)	... ( ...)	2 ( 0.3)	... ( ...)
NEVADA	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)
NEW JERSEY	66 ( 2.2)	237 ( 1.2)	14 ( 1.2)	199 ( 2.5)	14 ( 1.5)	206 ( 2.6)	5 ( 0.8)	241 ( 2.9)	1 ( 0.3)	... ( ...)
NEW MEXICO	44 ( 2.4)	225 ( 1.4)	4 ( 0.5)	203 ( 3.8)	47 ( 2.0)	203 ( 1.4)	1 ( 0.3)	... ( ...)	4 ( 1.3)	208 ( 2.9)!
NEW YORK	59 ( 2.2)	229 ( 1.3)	13 ( 1.6)	199 ( 2.7)	22 ( 1.7)	199 ( 2.3)	4 ( 0.8)	236 ( 4.2)!	2 ( 0.4)	... ( ...)
NORTH CAROLINA	62 ( 1.7)	223 ( 1.1)	29 ( 1.3)	193 ( 1.3)	6 ( 0.7)	200 ( 4.1)	1 ( 0.2)	... ( ...)	3 ( 0.9)	204 ( 4.7)!
NORTH DAKOTA	91 ( 1.0)	230 ( 0.7)	0 ( 0.2)	... ( ...)	4 ( 0.6)	215 ( 3.5)	1 ( 0.2)	... ( ...)	4 ( 0.8)	213 ( 3.1)!
OREGON	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)
PENNSYLVANIA	77 ( 1.6)	231 ( 1.2)	12 ( 1.6)	194 ( 2.4)	7 ( 0.8)	204 ( 2.2)	2 ( 0.4)	... ( ...)	1 ( 0.3)	... ( ...)
RHODE ISLAND	78 ( 2.1)	222 ( 1.3)	6 ( 1.0)	191 ( 3.3)	11 ( 1.1)	190 ( 2.7)	3 ( 0.4)	193 ( 4.2)	2 ( 0.3)	... ( ...)
SOUTH CAROLINA	55 ( 1.7)	226 ( 1.2)	37 ( 1.8)	195 ( 1.1)	6 ( 0.8)	200 ( 2.6)	1 ( 0.2)	... ( ...)	1 ( 0.3)	... ( ...)
TENNESSEE	69 ( 2.1)	218 ( 1.1)	23 ( 1.9)	193 ( 1.9)	5 ( 0.8)	193 ( 4.1)	1 ( 0.4)	... ( ...)	1 ( 0.2)	... ( ...)
TEXAS	49 ( 1.8)	229 ( 1.6)	14 ( 1.8)	199 ( 1.9)	34 ( 2.3)	209 ( 1.9)	2 ( 0.4)	235 ( 4.3)	1 ( 0.2)	... ( ...)
UTAH	86 ( 1.0)	226 ( 0.9)	1 ( 0.2)	... ( ...)	10 ( 0.8)	209 ( 2.1)	2 ( 0.3)	... ( ...)	2 ( 0.3)	... ( ...)
VERMONT	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)
VIRGINIA	67 ( 1.4)	229 ( 1.5)	23 ( 1.3)	198 ( 1.5)	5 ( 0.6)	212 ( 3.3)	3 ( 0.4)	237 ( 4.5)	1 ( 0.3)	... ( ...)
WASHINGTON	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)
WEST VIRGINIA	90 ( 0.9)	216 ( 1.0)	3 ( 0.4)	204 ( 4.3)	5 ( 0.8)	204 ( 3.0)	1 ( 0.2)	... ( ...)	2 ( 0.2)	... ( ...)
WISCONSIN	81 ( 1.4)	234 ( 0.9)	6 ( 1.0)	196 ( 2.8)	7 ( 0.7)	213 ( 2.9)	2 ( 0.5)	... ( ...)	3 ( 1.1)	207 ( 7.7)!
WYOMING	82 ( 1.4)	228 ( 0.9)	1 ( 0.2)	... ( ...)	11 ( 0.9)	215 ( 1.7)	1 ( 0.2)	... ( ...)	5 ( 1.2)	213 ( 3.8)!
<b>Other Jurisdictions</b>										
DDESS	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)
DoDDS	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)
GUAM	12 ( 0.7)	206 ( 2.0)	4 ( 0.4)	185 ( 5.3)	20 ( 0.8)	181 ( 2.1)	62 ( 1.0)	195 ( 1.1)	2 ( 0.4)	... ( ...)

— State or other jurisdiction did not participate in the NAEP assessment year presented in this table.  
 ... Characteristics of the sample do not permit a reliable estimate.  
 ! Interpret with caution — the nature of the sample does not allow accurate determination of the variability of this statistic.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 2.2** (continued)

**1996 Mathematics Assessment**



POPULATION:

1996 Grade 4 Public School Students

REPORTED STATISTICS:

Percentage of Students and Average Mathematics Scale Score

BREAKDOWNS BY:

Race/Ethnicity

Which best describes your race or your ethnic background?	White		Black		Hispanic		Asian/ Pacific Islander		American Indian	
	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )
<b>JURISDICTIONS</b>										
<b>Nation</b>										
NATION	66 ( 0.6)<	231 ( 1.1)>	15 ( 0.4)	200 ( 2.4)	14 ( 0.5)>	205 ( 2.2)	3 ( 0.2)	231 ( 4.6)	2 ( 0.2)	216 ( 2.5)
NORTHEAST	67 ( 2.6)	237 ( 1.9)	16 ( 2.5)	193 ( 9.1)!	12 ( 2.1)	212 ( 4.8)	2 ( 0.7)	... ( ... )	2 ( 0.4)	... ( ... )
SOUTHEAST	59 ( 4.1)	226 ( 2.8)	31 ( 3.2)	202 ( 2.2)>	8 ( 1.3)	194 ( 3.1)	1 ( 0.3)	... ( ... )	2 ( 0.4)	... ( ... )
CENTRAL	80 ( 2.3)	235 ( 1.7)	9 ( 1.4)	205 ( 3.6)	8 ( 1.6)	212 ( 3.7)!	1 ( 0.3)	... ( ... )	1 ( 0.3)	... ( ... )
WEST	61 ( 2.4)	227 ( 2.2)	10 ( 1.7)	200 ( 5.3)	22 ( 1.8)	203 ( 3.4)	5 ( 0.7)	226 ( 6.5)	2 ( 0.4)	217 ( 2.8)
<b>States</b>										
ALABAMA	60 ( 2.1)	223 ( 1.3)	31 ( 2.0)	194 ( 1.5)>	6 ( 0.6)	196 ( 3.1)	1 ( 0.2)	... ( ... )	2 ( 0.4)	... ( ... )
ALASKA†	57 ( 1.6)	232 ( 1.3)	4 ( 0.4)	205 ( 4.3)	11 ( 0.8)	217 ( 2.6)	4 ( 0.5)	223 ( 4.0)	23 ( 1.3)	210 ( 3.0)
ARIZONA	56 ( 2.5)	228 ( 1.6)	4 ( 0.6)	200 ( 3.7)	29 ( 1.6)	203 ( 2.1)	2 ( 0.4)	... ( ... )	9 ( 2.3)	201 ( 2.9)!
ARKANSAS†	69 ( 2.2)	224 ( 1.4)>	20 ( 2.1)	193 ( 2.2)	6 ( 0.7)	203 ( 2.6)	1 ( 0.3)	... ( ... )	4 ( 0.5)	210 ( 3.9)
CALIFORNIA	41 ( 2.3)	223 ( 1.7)	8 ( 1.0)	188 ( 3.0)	38 ( 2.2)	197 ( 2.5)	10 ( 1.4)	218 ( 5.0)	2 ( 0.5)	... ( ... )
COLORADO	69 ( 1.6)	233 ( 1.0)>	4 ( 0.8)	196 ( 3.9)!	21 ( 1.3)	210 ( 1.5)	4 ( 0.5)	226 ( 4.0)	3 ( 0.4)	219 ( 2.9)
CONNECTICUT	72 ( 1.5)	241 ( 1.0)>	11 ( 1.5)	206 ( 2.8)>	13 ( 1.1)	207 ( 3.1)	2 ( 0.3)	... ( ... )	1 ( 0.3)	... ( ... )
DELAWARE	61 ( 0.8)	226 ( 0.9)	25 ( 1.0)	195 ( 2.1)	9 ( 0.6)	194 ( 3.3)	2 ( 0.3)	... ( ... )	2 ( 0.3)	... ( ... )
DISTRICT OF COLUMBIA	6 ( 0.4)	240 ( 3.9)	82 ( 0.7)	184 ( 1.1)<	10 ( 0.7)	182 ( 4.5)	1 ( 0.2)	... ( ... )	1 ( 0.2)	... ( ... )
FLORIDA	55 ( 1.4)	227 ( 1.1)	21 ( 1.5)	195 ( 1.7)	21 ( 1.9)	207 ( 2.5)	2 ( 0.3)	... ( ... )	2 ( 0.3)	... ( ... )
GEORGIA	57 ( 2.2)	225 ( 1.6)	31 ( 1.9)	201 ( 1.5)	8 ( 1.0)	202 ( 3.4)	2 ( 0.4)	... ( ... )	2 ( 0.3)	... ( ... )
HAWAII	18 ( 1.1)	225 ( 1.8)	4 ( 0.4)	204 ( 3.9)	21 ( 1.2)>	202 ( 1.9)	53 ( 1.7)	218 ( 2.2)	2 ( 0.3)	213 ( 5.6)
INDIANA	82 ( 1.3)	233 ( 1.0)>	9 ( 1.0)	206 ( 2.5)>	6 ( 0.8)	215 ( 2.6)	1 ( 0.2)	... ( ... )	2 ( 0.3)	... ( ... )
IOWA†	88 ( 1.0)	231 ( 1.0)	3 ( 0.5)	205 ( 3.3)!	6 ( 0.8)	212 ( 2.9)	1 ( 0.2)	... ( ... )	2 ( 0.3)	... ( ... )
KENTUCKY	85 ( 1.1)	223 ( 1.1)>	9 ( 0.9)	203 ( 2.3)	4 ( 0.7)	201 ( 4.2)	0 ( 0.1)	... ( ... )	1 ( 0.2)	... ( ... )
LOUISIANA	49 ( 2.0)	222 ( 1.3)	40 ( 1.9)	196 ( 1.5)>	7 ( 0.9)	193 ( 3.2)	1 ( 0.3)	... ( ... )	3 ( 0.7)	205 ( 2.5)!
MAINE	93 ( 0.8)	233 ( 1.1)	1 ( 0.3)	... ( ... )	4 ( 0.6)	218 ( 2.8)	1 ( 0.2)	... ( ... )	2 ( 0.3)	... ( ... )
MARYLAND	53 ( 2.4)	235 ( 1.6)>	34 ( 2.3)	199 ( 1.4)	7 ( 0.7)	206 ( 3.8)	4 ( 0.6)	247 ( 5.0)	2 ( 0.3)	... ( ... )
MASSACHUSETTS	77 ( 1.9)	233 ( 1.3)	7 ( 0.8)	208 ( 3.3)>	11 ( 1.2)	211 ( 2.4)	3 ( 0.7)	237 ( 5.4)	1 ( 0.2)	... ( ... )
MICHIGAN†	74 ( 2.3)	233 ( 1.2)>	14 ( 2.2)	199 ( 2.8)>	8 ( 0.6)	205 ( 2.6)	2 ( 0.3)	... ( ... )	3 ( 0.4)	216 ( 4.0)
MINNESOTA	83 ( 1.1)	236 ( 1.1)>	4 ( 0.7)	193 ( 4.5)	6 ( 0.6)	219 ( 3.3)	4 ( 0.4)	220 ( 4.4)	3 ( 0.4)	218 ( 5.1)
MISSISSIPPI	45 ( 2.0)	222 ( 1.2)	47 ( 1.9)	197 ( 1.3)>	5 ( 0.7)	196 ( 3.0)	1 ( 0.3)	... ( ... )	1 ( 0.2)	... ( ... )
MISSOURI	76 ( 1.7)	230 ( 0.9)	15 ( 1.5)	201 ( 2.2)	6 ( 0.6)	214 ( 3.2)	1 ( 0.3)	... ( ... )	2 ( 0.3)	... ( ... )
MONTANA†	79 ( 2.6)	231 ( 1.2)	1 ( 0.2)	... ( ... )	7 ( 0.7)	218 ( 2.5)	1 ( 0.2)	... ( ... )	12 ( 2.4)	209 ( 2.6)
NEBRASKA	81 ( 1.2)	232 ( 1.1)	6 ( 1.1)	198 ( 3.5)	9 ( 0.8)	209 ( 3.2)	1 ( 0.2)	... ( ... )	3 ( 0.4)	215 ( 4.9)
NEVADA†	60 ( 1.4)	225 ( 1.2)	8 ( 1.1)	196 ( 3.4)	22 ( 1.0)	206 ( 2.1)	4 ( 0.6)	225 ( 3.5)	5 ( 1.0)	213 ( 3.1)!
NEW JERSEY†	59 ( 2.8)	239 ( 1.2)	21 ( 2.4)	204 ( 2.4)	14 ( 1.6)	206 ( 2.9)	5 ( 0.5)	248 ( 2.7)	2 ( 0.3)	... ( ... )
NEW MEXICO	43 ( 2.5)	227 ( 1.2)	3 ( 0.5)	205 ( 8.2)	43 ( 1.6)	205 ( 1.6)	2 ( 0.3)	... ( ... )	9 ( 2.3)	197 ( 4.6)!
NEW YORK†	58 ( 1.6)	234 ( 1.0)>	16 ( 1.4)	204 ( 2.7)	19 ( 1.4)	205 ( 2.3)	5 ( 0.6)	233 ( 2.8)	2 ( 0.5)	... ( ... )
NORTH CAROLINA	66 ( 1.6)	234 ( 1.1)>	27 ( 1.7)	205 ( 1.2)>	4 ( 0.6)	206 ( 4.3)	1 ( 0.4)	... ( ... )	2 ( 0.4)	... ( ... )
NORTH DAKOTA	89 ( 1.3)	232 ( 1.0)	1 ( 0.2)	... ( ... )	5 ( 0.5)	222 ( 5.0)	1 ( 0.2)	... ( ... )	4 ( 1.1)	209 ( 7.3)!
OREGON	78 ( 1.5)	227 ( 1.4)	2 ( 0.4)	... ( ... )	11 ( 1.1)	201 ( 2.4)	5 ( 0.7)	229 ( 3.7)	4 ( 0.6)	210 ( 3.2)
PENNSYLVANIA†	79 ( 1.4)	232 ( 1.3)	10 ( 1.6)	199 ( 2.0)	9 ( 1.3)	207 ( 2.0)	2 ( 0.3)	... ( ... )	1 ( 0.2)	... ( ... )
RHODE ISLAND	76 ( 1.4)	226 ( 1.3)	6 ( 0.6)	194 ( 4.0)	13 ( 1.0)	201 ( 3.0)>	3 ( 0.5)	215 ( 5.3)>	2 ( 0.3)	... ( ... )
SOUTH CAROLINA†	54 ( 1.7)	225 ( 1.4)	37 ( 1.7)	199 ( 1.3)	6 ( 0.7)	199 ( 2.9)	1 ( 0.3)	... ( ... )	2 ( 0.3)	... ( ... )
TENNESSEE	72 ( 2.2)	226 ( 1.2)>	21 ( 2.3)	198 ( 2.4)	4 ( 0.6)	208 ( 4.5)	1 ( 0.2)	... ( ... )	1 ( 0.3)	... ( ... )
TEXAS	49 ( 2.1)	242 ( 1.4)>	14 ( 1.9)	212 ( 1.8)>	33 ( 2.6)	216 ( 1.8)>	2 ( 0.3)	... ( ... )	2 ( 0.3)	... ( ... )
UTAH	82 ( 1.3)	230 ( 1.0)>	1 ( 0.2)	... ( ... )	12 ( 1.1)	208 ( 2.9)	2 ( 0.3)	... ( ... )	3 ( 0.4)	214 ( 4.2)
VERMONT†	88 ( 0.9)	226 ( 1.2)	2 ( 0.3)	... ( ... )	7 ( 0.7)	214 ( 4.1)	1 ( 0.2)	... ( ... )	3 ( 0.4)	... ( ... )
VIRGINIA	65 ( 2.0)	230 ( 1.4)	24 ( 1.8)	204 ( 1.5)>	6 ( 0.7)	214 ( 3.3)	3 ( 0.4)	240 ( 4.5)	2 ( 0.3)	... ( ... )
WASHINGTON	73 ( 1.7)	229 ( 1.1)	5 ( 0.7)	203 ( 3.3)	11 ( 1.0)	208 ( 2.7)	6 ( 0.9)	228 ( 2.9)	5 ( 0.4)	221 ( 2.3)
WEST VIRGINIA	87 ( 1.0)	225 ( 1.1)>	4 ( 0.7)	205 ( 4.1)	6 ( 0.7)	210 ( 3.2)	1 ( 0.2)	... ( ... )	2 ( 0.3)	... ( ... )
WISCONSIN	80 ( 1.2)	237 ( 0.8)	9 ( 1.0)	201 ( 2.3)	7 ( 1.0)	214 ( 3.8)	2 ( 0.4)	... ( ... )	2 ( 0.3)	... ( ... )
WYOMING	81 ( 1.3)	226 ( 1.1)	1 ( 0.3)	... ( ... )	13 ( 1.0)	208 ( 3.3)	1 ( 0.2)	... ( ... )	3 ( 0.6)	211 ( 4.7)
<b>Other Jurisdictions</b>										
DDESS	49 ( 1.6)	234 ( 1.2)	25 ( 1.3)	211 ( 2.5)	18 ( 1.2)	215 ( 3.0)	4 ( 0.6)	... ( ... )	3 ( 0.6)	... ( ... )
DoDDS	48 ( 1.0)	230 ( 1.2)	18 ( 0.8)	210 ( 1.4)	16 ( 0.8)	214 ( 1.9)	11 ( 0.7)	228 ( 2.3)	3 ( 0.4)	218 ( 3.6)
GUAM	8 ( 0.8)<	198 ( 5.2)	4 ( 0.5)	... ( ... )	22 ( 1.3)	176 ( 3.8)	64 ( 1.4)	192 ( 1.5)	2 ( 0.3)	... ( ... )

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).

... Characteristics of the sample do not permit a reliable estimate.

> (<) The value for the students was significantly higher (lower) than in the 1992 assessment at about the 95% confidence level using appropriate multiple comparison procedures.

! Interpret with caution — the nature of the sample does not allow accurate determination of the variability of this statistic.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 2.3**

**1992 Mathematics Assessment**



POPULATION:  
REPORTED STATISTICS:  
BREAKDOWNS BY:

1992 Grade 4 Public School Students  
Percentage of Students and Average Mathematics Scale Score  
Parents' Education Level

What is the highest level of education either your mother or father obtained?	Did Not Finish High School		High School Graduate		Some Education After High School		College Graduate		I Don't Know	
	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )
<b>JURISDICTIONS</b>										
<b>Nation</b>										
NATION	4 ( 0.3 )	204 ( 2.6 )	13 ( 0.6 )	214 ( 1.6 )	7 ( 0.4 )	224 ( 1.7 )	40 ( 1.1 )	226 ( 1.1 )	36 ( 0.8 )	213 ( 0.9 )
NORTHEAST	4 ( 0.7 )	... ( ... )	11 ( 0.9 )	216 ( 5.1 )	6 ( 0.6 )	230 ( 4.6 )	44 ( 3.2 )	232 ( 3.0 )	35 ( 2.0 )	217 ( 2.4 )
SOUTHEAST	6 ( 0.6 )	200 ( 3.7 )	16 ( 1.1 )	204 ( 3.3 )	7 ( 0.8 )	218 ( 3.7 )	37 ( 1.8 )	216 ( 2.2 )	34 ( 1.2 )	206 ( 1.6 )
CENTRAL	4 ( 0.6 )	... ( ... )	13 ( 1.6 )	219 ( 3.2 )	8 ( 0.9 )	229 ( 4.0 )	40 ( 2.3 )	230 ( 2.1 )	35 ( 2.1 )	217 ( 2.3 )
WEST	4 ( 0.5 )	203 ( 5.0 )	12 ( 1.0 )	218 ( 2.4 )	7 ( 1.0 )	220 ( 2.2 )	38 ( 1.9 )	225 ( 2.3 )	39 ( 1.3 )	213 ( 1.8 )
<b>States</b>										
ALABAMA	8 ( 0.7 )	204 ( 1.8 )	19 ( 1.0 )	205 ( 2.0 )	9 ( 0.7 )	218 ( 2.2 )	35 ( 1.3 )	212 ( 2.3 )	28 ( 1.1 )	204 ( 2.0 )
ALASKA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
ARIZONA	4 ( 0.4 )	203 ( 3.2 )	11 ( 0.7 )	211 ( 2.5 )	8 ( 0.7 )	226 ( 1.8 )	33 ( 1.1 )	221 ( 1.4 )	44 ( 1.1 )	211 ( 1.4 )
ARKANSAS	7 ( 0.5 )	200 ( 2.2 )	18 ( 0.9 )	209 ( 1.5 )	9 ( 0.7 )	216 ( 1.8 )	32 ( 1.3 )	214 ( 1.6 )	34 ( 1.2 )	207 ( 1.1 )
CALIFORNIA	5 ( 0.5 )	191 ( 4.6 )	8 ( 0.6 )	201 ( 2.7 )	7 ( 0.7 )	218 ( 2.9 )	35 ( 1.5 )	217 ( 2.0 )	45 ( 1.4 )	203 ( 1.7 )
COLORADO	4 ( 0.3 )	202 ( 2.5 )	10 ( 0.6 )	214 ( 1.9 )	9 ( 0.6 )	229 ( 1.9 )	40 ( 1.0 )	229 ( 1.2 )	37 ( 1.2 )	214 ( 1.2 )
CONNECTICUT	4 ( 0.4 )	206 ( 2.7 )	10 ( 0.6 )	219 ( 2.0 )	7 ( 0.7 )	226 ( 2.7 )	44 ( 1.2 )	235 ( 1.2 )	35 ( 1.2 )	221 ( 1.6 )
DELAWARE	5 ( 0.6 )	198 ( 3.3 )	14 ( 0.9 )	214 ( 1.8 )	7 ( 0.6 )	220 ( 2.7 )	39 ( 0.9 )	226 ( 1.6 )	35 ( 0.8 )	213 ( 1.0 )
DISTRICT OF COLUMBIA	4 ( 0.4 )	187 ( 3.1 )	14 ( 0.7 )	188 ( 1.9 )	6 ( 0.4 )	199 ( 2.8 )	42 ( 1.0 )	197 ( 1.0 )	33 ( 0.8 )	188 ( 1.1 )
FLORIDA	4 ( 0.5 )	200 ( 2.6 )	13 ( 0.9 )	206 ( 2.1 )	8 ( 0.5 )	222 ( 2.2 )	37 ( 1.5 )	220 ( 2.3 )	38 ( 1.2 )	210 ( 1.5 )
GEORGIA	5 ( 0.6 )	204 ( 2.5 )	18 ( 0.8 )	206 ( 1.8 )	7 ( 0.6 )	224 ( 2.2 )	37 ( 1.2 )	223 ( 1.7 )	32 ( 1.2 )	212 ( 1.5 )
HAWAII	3 ( 0.4 )	200 ( 4.1 )	14 ( 0.8 )	204 ( 1.8 )	6 ( 0.5 )	221 ( 2.7 )	36 ( 1.3 )	220 ( 1.9 )	41 ( 1.2 )	213 ( 1.4 )
INDIANA	6 ( 0.5 )	211 ( 2.4 )	18 ( 0.9 )	218 ( 1.5 )	8 ( 0.6 )	231 ( 2.0 )	34 ( 1.2 )	228 ( 1.3 )	34 ( 1.1 )	216 ( 1.2 )
IOWA	3 ( 0.4 )	212 ( 2.9 )	13 ( 0.8 )	224 ( 2.0 )	9 ( 0.6 )	236 ( 2.0 )	40 ( 1.3 )	236 ( 1.2 )	34 ( 1.0 )	224 ( 1.2 )
KENTUCKY	10 ( 0.6 )	205 ( 1.8 )	20 ( 1.1 )	211 ( 1.5 )	9 ( 0.7 )	223 ( 2.6 )	27 ( 1.3 )	224 ( 1.7 )	35 ( 0.9 )	212 ( 1.2 )
LOUISIANA	6 ( 0.5 )	195 ( 2.6 )	16 ( 0.8 )	200 ( 2.3 )	8 ( 0.5 )	215 ( 2.8 )	36 ( 1.4 )	209 ( 1.7 )	34 ( 1.1 )	202 ( 1.8 )
MAINE	4 ( 0.4 )	217 ( 3.3 )	16 ( 1.1 )	226 ( 1.8 )	9 ( 0.9 )	241 ( 2.0 )	36 ( 1.7 )	240 ( 1.4 )	35 ( 1.6 )	225 ( 1.3 )
MARYLAND	4 ( 0.5 )	202 ( 2.7 )	12 ( 0.8 )	208 ( 2.8 )	8 ( 0.6 )	227 ( 2.5 )	41 ( 1.2 )	225 ( 1.6 )	36 ( 1.1 )	211 ( 1.5 )
MASSACHUSETTS	2 ( 0.3 )	197 ( 4.0 )	11 ( 0.7 )	220 ( 1.9 )	7 ( 0.8 )	231 ( 2.8 )	46 ( 1.6 )	235 ( 1.2 )	33 ( 1.4 )	218 ( 1.6 )
MICHIGAN	3 ( 0.4 )	203 ( 5.2 )	14 ( 0.8 )	214 ( 2.4 )	9 ( 0.7 )	225 ( 2.0 )	38 ( 1.7 )	228 ( 2.1 )	36 ( 1.4 )	214 ( 1.8 )
MINNESOTA	2 ( 0.3 )	... ( ... )	12 ( 0.7 )	221 ( 1.7 )	6 ( 0.5 )	231 ( 2.7 )	38 ( 1.2 )	237 ( 1.4 )	41 ( 1.2 )	224 ( 1.1 )
MISSISSIPPI	8 ( 0.7 )	195 ( 2.3 )	18 ( 1.2 )	199 ( 2.3 )	6 ( 0.5 )	211 ( 2.8 )	35 ( 1.5 )	206 ( 1.5 )	32 ( 1.3 )	199 ( 1.5 )
MISSOURI	5 ( 0.7 )	211 ( 2.5 )	15 ( 0.9 )	218 ( 2.2 )	9 ( 0.6 )	228 ( 1.8 )	36 ( 1.3 )	229 ( 1.5 )	34 ( 1.1 )	217 ( 1.4 )
MONTANA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
NEBRASKA	3 ( 0.3 )	... ( ... )	13 ( 0.8 )	223 ( 2.2 )	11 ( 0.7 )	231 ( 2.3 )	39 ( 1.4 )	231 ( 1.5 )	34 ( 1.5 )	220 ( 1.4 )
NEVADA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
NEW JERSEY	3 ( 0.4 )	211 ( 3.7 )	11 ( 0.7 )	220 ( 2.0 )	8 ( 0.6 )	231 ( 2.7 )	47 ( 1.7 )	235 ( 1.7 )	31 ( 1.3 )	219 ( 2.0 )
NEW MEXICO	7 ( 0.7 )	204 ( 2.3 )	15 ( 1.0 )	209 ( 2.3 )	9 ( 0.7 )	224 ( 2.8 )	31 ( 1.9 )	222 ( 2.0 )	38 ( 1.4 )	207 ( 1.4 )
NEW YORK	4 ( 0.5 )	212 ( 2.9 )	11 ( 1.0 )	212 ( 2.4 )	7 ( 0.8 )	226 ( 3.0 )	41 ( 1.4 )	228 ( 1.7 )	37 ( 1.7 )	211 ( 1.4 )
NORTH CAROLINA	6 ( 0.5 )	203 ( 2.4 )	16 ( 0.7 )	205 ( 1.8 )	9 ( 0.7 )	221 ( 2.4 )	38 ( 1.5 )	220 ( 1.6 )	30 ( 1.3 )	208 ( 1.3 )
NORTH DAKOTA	3 ( 0.4 )	... ( ... )	12 ( 0.8 )	225 ( 1.7 )	7 ( 0.7 )	235 ( 2.5 )	43 ( 1.3 )	234 ( 0.9 )	34 ( 1.4 )	222 ( 1.2 )
OREGON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
PENNSYLVANIA	4 ( 0.4 )	213 ( 3.2 )	16 ( 0.9 )	221 ( 1.5 )	9 ( 0.8 )	237 ( 2.0 )	37 ( 1.4 )	231 ( 2.0 )	34 ( 1.2 )	217 ( 1.7 )
RHODE ISLAND	5 ( 0.4 )	202 ( 2.6 )	11 ( 0.7 )	209 ( 2.6 )	8 ( 0.6 )	221 ( 2.5 )	36 ( 1.3 )	225 ( 1.8 )	40 ( 1.3 )	209 ( 2.0 )
SOUTH CAROLINA	5 ( 0.5 )	206 ( 2.2 )	17 ( 1.0 )	206 ( 1.6 )	7 ( 0.5 )	220 ( 2.5 )	36 ( 1.2 )	221 ( 1.5 )	35 ( 1.2 )	207 ( 1.5 )
TENNESSEE	8 ( 0.6 )	203 ( 2.3 )	18 ( 0.9 )	206 ( 1.9 )	9 ( 0.6 )	214 ( 2.7 )	34 ( 1.4 )	219 ( 2.1 )	31 ( 1.0 )	207 ( 1.4 )
TEXAS	7 ( 0.6 )	213 ( 2.4 )	13 ( 0.8 )	215 ( 2.6 )	8 ( 0.6 )	226 ( 2.4 )	33 ( 1.6 )	225 ( 1.9 )	39 ( 1.4 )	213 ( 1.5 )
UTAH	3 ( 0.4 )	207 ( 4.0 )	10 ( 0.7 )	218 ( 2.2 )	8 ( 0.6 )	229 ( 2.0 )	40 ( 1.4 )	231 ( 1.2 )	39 ( 1.1 )	218 ( 1.3 )
VERMONT	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
VIRGINIA	6 ( 0.5 )	204 ( 2.6 )	14 ( 0.8 )	211 ( 1.8 )	8 ( 0.6 )	220 ( 2.4 )	43 ( 1.4 )	231 ( 1.8 )	30 ( 1.1 )	215 ( 1.7 )
WASHINGTON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
WEST VIRGINIA	8 ( 0.6 )	202 ( 2.1 )	21 ( 0.8 )	211 ( 1.3 )	9 ( 0.5 )	223 ( 2.1 )	30 ( 1.3 )	224 ( 1.7 )	32 ( 1.0 )	211 ( 1.3 )
WISCONSIN	3 ( 0.4 )	220 ( 4.6 )	15 ( 0.8 )	226 ( 1.9 )	10 ( 0.6 )	238 ( 1.9 )	35 ( 1.3 )	235 ( 1.5 )	38 ( 1.1 )	223 ( 1.2 )
WYOMING	4 ( 0.4 )	217 ( 2.7 )	12 ( 0.7 )	223 ( 1.9 )	11 ( 0.9 )	233 ( 1.4 )	37 ( 1.3 )	230 ( 1.4 )	35 ( 1.1 )	220 ( 1.1 )
<b>Other Jurisdictions</b>										
DDESS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
DoDDS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
GUAM	6 ( 0.6 )	185 ( 3.6 )	13 ( 0.8 )	188 ( 2.8 )	6 ( 0.5 )	208 ( 3.4 )	31 ( 0.9 )	193 ( 1.5 )	44 ( 1.0 )	193 ( 1.2 )

— State or other jurisdiction did not participate in the NAEP assessment year presented in this table.

... Characteristics of the sample do not permit a reliable estimate.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.



**TABLE 2.3** (continued)

**1996 Mathematics Assessment**



POPULATION:

1996 Grade 4 Public School Students

REPORTED STATISTICS:

Percentage of Students and Average Mathematics Scale Score

BREAKDOWNS BY:

Parents' Education Level

What is the highest level of education either your mother or father obtained?

Did Not Finish High School	High School Graduate	Some Education After High School	College Graduate	I Don't Know
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JURISDICTIONS	PCT ( SE )		SS ( SE )		PCT ( SE )		SS ( SE )		PCT ( SE )		SS ( SE )		PCT ( SE )		SS ( SE )	
<b>Nation</b>																
NATION	4 ( 0.4 )	205 ( 2.5 )	13 ( 0.7 )	218 ( 1.7 )	7 ( 0.4 )	232 ( 1.7 )>	38 ( 1.2 )	230 ( 1.6 )	37 ( 1.0 )	216 ( 1.5 )						
NORTHEAST	4 ( 0.7 )	... ( ... )	12 ( 1.6 )	224 ( 4.3 )	8 ( 0.9 )	237 ( 3.3 )	40 ( 2.3 )	232 ( 4.4 )	36 ( 2.1 )	221 ( 3.5 )						
SOUTHEAST	6 ( 0.7 )	198 ( 3.0 )	19 ( 1.6 )	210 ( 2.8 )	7 ( 0.4 )	226 ( 3.5 )	36 ( 1.6 )	222 ( 4.0 )	31 ( 1.2 )	213 ( 2.1 )						
CENTRAL	3 ( 0.8 )	... ( ... )	13 ( 1.8 )	224 ( 3.9 )	7 ( 1.0 )	237 ( 2.2 )	42 ( 3.3 )	236 ( 2.4 )	35 ( 1.5 )	225 ( 2.2 )						
WEST	4 ( 0.7 )	... ( ... )	11 ( 0.7 )	218 ( 3.4 )	7 ( 0.7 )	228 ( 3.5 )	34 ( 1.8 )	227 ( 2.9 )	44 ( 2.2 )	211 ( 3.2 )						
<b>States</b>																
ALABAMA	7 ( 0.8 )	201 ( 2.3 )	19 ( 1.0 )	207 ( 2.1 )	9 ( 0.7 )	217 ( 2.4 )	35 ( 1.6 )	217 ( 1.9 )	30 ( 1.5 )	208 ( 1.4 )						
ALASKA†	3 ( 0.5 )	212 ( 4.9 )	10 ( 0.9 )	217 ( 2.7 )	8 ( 0.7 )	227 ( 3.1 )	34 ( 1.5 )	231 ( 1.8 )	45 ( 1.3 )	220 ( 1.4 )						
ARIZONA	5 ( 0.5 )	203 ( 3.9 )	11 ( 0.9 )	211 ( 2.8 )	9 ( 0.6 )	224 ( 2.8 )	34 ( 1.7 )	227 ( 2.3 )	41 ( 1.6 )	213 ( 1.8 )						
ARKANSAS†	6 ( 0.6 )	207 ( 3.7 )	20 ( 1.0 )	215 ( 1.8 )	9 ( 0.7 )	225 ( 2.0 )>	31 ( 1.3 )	220 ( 2.1 )	34 ( 1.2 )	212 ( 1.9 )						
CALIFORNIA	4 ( 0.6 )	191 ( 5.3 )	9 ( 0.7 )	202 ( 2.7 )	7 ( 0.6 )	216 ( 2.9 )	32 ( 1.4 )	221 ( 2.0 )	48 ( 1.4 )	203 ( 2.4 )						
COLORADO	3 ( 0.4 )	208 ( 3.8 )	10 ( 0.7 )	217 ( 2.2 )	10 ( 0.6 )	233 ( 2.0 )	42 ( 1.6 )	234 ( 1.3 )	35 ( 1.5 )	218 ( 1.3 )						
CONNECTICUT	3 ( 0.4 )	211 ( 4.7 )	9 ( 0.6 )	220 ( 2.5 )	8 ( 0.6 )	233 ( 2.4 )	47 ( 1.3 )	240 ( 1.4 )	33 ( 1.4 )	225 ( 1.4 )						
DELAWARE	3 ( 0.4 )	... ( ... )	13 ( 0.8 )	208 ( 2.8 )	8 ( 0.7 )	227 ( 3.8 )	37 ( 1.0 )	221 ( 1.9 )	39 ( 1.0 )	212 ( 1.3 )						
DISTRICT OF COLUMBIA	4 ( 0.4 )	177 ( 4.5 )	15 ( 0.6 )	180 ( 2.7 )	6 ( 0.4 )	186 ( 3.7 )<	42 ( 1.0 )	194 ( 1.7 )	33 ( 0.9 )	183 ( 2.5 )						
FLORIDA	4 ( 0.6 )	205 ( 3.4 )	12 ( 1.0 )	212 ( 2.9 )	7 ( 0.6 )	229 ( 2.5 )	38 ( 1.5 )	220 ( 1.4 )	40 ( 1.3 )	212 ( 1.5 )						
GEORGIA	6 ( 0.6 )	205 ( 2.3 )	17 ( 0.9 )	211 ( 1.9 )	7 ( 0.6 )	218 ( 2.6 )	36 ( 1.6 )	222 ( 2.2 )	35 ( 1.1 )	212 ( 1.4 )						
HAWAII	2 ( 0.3 )	... ( ... )	12 ( 0.7 )	209 ( 2.2 )	6 ( 0.5 )	221 ( 3.0 )	39 ( 1.2 )	221 ( 1.8 )	41 ( 1.2 )	211 ( 1.8 )						
INDIANA	4 ( 0.4 )	224 ( 3.5 )>	19 ( 1.0 )	224 ( 1.6 )>	9 ( 0.9 )	235 ( 2.2 )	37 ( 1.8 )	237 ( 1.7 )>	31 ( 1.3 )	223 ( 1.1 )>						
IOWA†	3 ( 0.4 )	... ( ... )	16 ( 0.9 )	225 ( 1.6 )	9 ( 0.7 )	233 ( 2.1 )	36 ( 1.7 )	237 ( 1.3 )	36 ( 1.3 )	223 ( 1.5 )						
KENTUCKY	9 ( 0.9 )	205 ( 2.7 )	19 ( 1.1 )	216 ( 1.6 )	8 ( 0.7 )	227 ( 2.1 )	31 ( 1.2 )	230 ( 1.5 )	33 ( 1.2 )	215 ( 1.4 )						
LOUISIANA	6 ( 0.6 )	198 ( 2.6 )	19 ( 1.1 )	207 ( 1.9 )	9 ( 0.7 )	216 ( 2.2 )	35 ( 1.4 )	211 ( 1.8 )	32 ( 1.2 )	208 ( 1.6 )						
MAINE	3 ( 0.4 )	220 ( 4.0 )	13 ( 0.9 )	228 ( 2.1 )	9 ( 0.6 )	236 ( 2.1 )	39 ( 1.8 )	239 ( 1.1 )	36 ( 1.5 )	227 ( 1.2 )						
MARYLAND	3 ( 0.4 )	205 ( 4.4 )	13 ( 0.9 )	209 ( 3.2 )	7 ( 0.6 )	226 ( 2.8 )	45 ( 1.6 )	229 ( 2.2 )	32 ( 1.2 )	215 ( 1.6 )						
MASSACHUSETTS	2 ( 0.3 )	212 ( 3.5 )	10 ( 0.7 )	223 ( 2.1 )	8 ( 0.6 )	234 ( 1.6 )	48 ( 1.9 )	235 ( 1.8 )	32 ( 1.7 )	221 ( 1.5 )						
MICHIGAN†	4 ( 0.5 )	208 ( 3.6 )	14 ( 1.0 )	220 ( 2.6 )	8 ( 0.7 )	235 ( 2.3 )>	38 ( 1.5 )	233 ( 2.1 )	36 ( 1.5 )	222 ( 1.4 )>						
MINNESOTA	2 ( 0.3 )	... ( ... )	11 ( 0.8 )	227 ( 2.3 )	7 ( 0.6 )	236 ( 3.3 )	42 ( 1.5 )	240 ( 1.2 )	37 ( 1.4 )	225 ( 1.6 )						
MISSISSIPPI	7 ( 0.6 )	204 ( 2.2 )	19 ( 1.0 )	206 ( 2.0 )	7 ( 0.5 )	215 ( 2.6 )	35 ( 1.3 )	213 ( 1.6 )>	32 ( 1.2 )	205 ( 1.4 )>						
MISSOURI	4 ( 0.5 )	215 ( 2.5 )	16 ( 0.9 )	219 ( 1.9 )	9 ( 0.7 )	230 ( 2.2 )	36 ( 1.6 )	232 ( 1.4 )	35 ( 1.4 )	219 ( 1.3 )						
MONTANA†	3 ( 0.4 )	211 ( 5.2 )	11 ( 0.8 )	224 ( 2.1 )	11 ( 0.8 )	231 ( 2.4 )	40 ( 1.5 )	234 ( 1.5 )	35 ( 1.4 )	222 ( 1.7 )						
NEBRASKA	3 ( 0.4 )	210 ( 4.5 )	13 ( 0.9 )	221 ( 2.8 )	9 ( 0.7 )	235 ( 2.4 )	41 ( 1.2 )	234 ( 1.4 )	35 ( 1.3 )	222 ( 1.4 )						
NEVADA†	4 ( 0.6 )	203 ( 4.2 )	12 ( 0.7 )	214 ( 2.5 )	8 ( 0.6 )	235 ( 2.3 )	34 ( 1.2 )	224 ( 1.4 )	42 ( 1.4 )	213 ( 1.8 )						
NEW JERSEY†	3 ( 0.5 )	207 ( 4.6 )	12 ( 1.1 )	222 ( 3.1 )	7 ( 0.6 )	233 ( 2.2 )	46 ( 2.0 )	234 ( 2.1 )	32 ( 1.5 )	221 ( 1.7 )						
NEW MEXICO	6 ( 0.6 )	197 ( 4.2 )	15 ( 0.8 )	207 ( 2.7 )	11 ( 0.9 )	223 ( 2.6 )	35 ( 1.3 )	224 ( 2.0 )	33 ( 1.1 )	207 ( 2.0 )						
NEW YORK†	4 ( 0.4 )	204 ( 3.7 )	10 ( 0.8 )	217 ( 2.4 )	6 ( 0.6 )	229 ( 3.3 )	43 ( 1.6 )	231 ( 1.5 )	37 ( 1.4 )	215 ( 1.5 )						
NORTH CAROLINA	5 ( 0.6 )	212 ( 3.9 )	12 ( 0.8 )	218 ( 2.3 )>	7 ( 0.6 )	235 ( 2.2 )>	42 ( 1.7 )	231 ( 1.6 )>	34 ( 1.3 )	218 ( 1.5 )>						
NORTH DAKOTA	2 ( 0.3 )	... ( ... )	11 ( 0.7 )	226 ( 2.5 )	8 ( 0.8 )	233 ( 3.3 )	47 ( 1.4 )	237 ( 1.2 )	32 ( 1.3 )	224 ( 1.6 )						
OREGON	4 ( 0.5 )	206 ( 4.3 )	11 ( 0.8 )	216 ( 2.8 )	7 ( 0.5 )	230 ( 2.7 )	38 ( 1.5 )	232 ( 1.6 )	41 ( 1.5 )	218 ( 1.4 )						
PENNSYLVANIA†	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )						
RHODE ISLAND	5 ( 0.4 )	206 ( 4.7 )	12 ( 0.9 )	214 ( 2.1 )	7 ( 0.5 )	226 ( 3.7 )	40 ( 1.3 )	229 ( 1.5 )	36 ( 1.2 )	214 ( 1.9 )						
SOUTH CAROLINA†	5 ( 0.5 )	204 ( 3.6 )	16 ( 1.0 )	208 ( 2.1 )	7 ( 0.8 )	220 ( 3.3 )	38 ( 1.2 )	219 ( 1.6 )	34 ( 1.2 )	209 ( 1.6 )						
TENNESSEE	6 ( 0.6 )	206 ( 2.6 )	19 ( 0.9 )	211 ( 1.8 )	8 ( 0.6 )	226 ( 2.3 )>	36 ( 1.5 )	228 ( 1.7 )>	31 ( 1.2 )	214 ( 1.8 )>						
TEXAS	6 ( 0.5 )	215 ( 2.9 )	11 ( 0.8 )	222 ( 2.4 )	7 ( 0.5 )	235 ( 1.8 )>	38 ( 1.6 )	238 ( 1.9 )>	39 ( 1.6 )	222 ( 1.4 )>						
UTAH	2 ( 0.3 )	... ( ... )	10 ( 0.7 )	221 ( 2.4 )	8 ( 0.6 )	229 ( 2.2 )	41 ( 1.7 )	234 ( 1.4 )	39 ( 1.4 )	221 ( 1.1 )						
VERMONT†	3 ( 0.4 )	... ( ... )	12 ( 0.9 )	218 ( 2.6 )	7 ( 0.7 )	228 ( 3.3 )	44 ( 1.4 )	235 ( 1.2 )	34 ( 1.2 )	216 ( 1.8 )						
VIRGINIA	5 ( 0.7 )	206 ( 3.7 )	15 ( 1.0 )	215 ( 1.7 )	7 ( 0.7 )	224 ( 2.7 )	41 ( 1.8 )	231 ( 1.7 )	32 ( 1.1 )	218 ( 1.4 )						
WASHINGTON	2 ( 0.3 )	215 ( 5.0 )	9 ( 0.7 )	219 ( 2.5 )	8 ( 0.6 )	233 ( 2.6 )	38 ( 1.5 )	231 ( 1.2 )	43 ( 1.6 )	220 ( 1.6 )						
WEST VIRGINIA	7 ( 0.7 )	211 ( 2.2 )>	21 ( 0.9 )	218 ( 1.5 )>	9 ( 0.7 )	231 ( 2.5 )	35 ( 1.4 )	231 ( 1.3 )>	29 ( 1.0 )	219 ( 1.5 )>						
WISCONSIN	2 ( 0.5 )	... ( ... )	13 ( 1.0 )	226 ( 1.8 )	8 ( 0.8 )	237 ( 2.3 )	38 ( 1.6 )	237 ( 1.3 )	39 ( 1.5 )	227 ( 1.1 )>						
WYOMING	4 ( 0.5 )	209 ( 5.0 )	12 ( 0.7 )	218 ( 2.4 )	8 ( 0.5 )	232 ( 3.5 )	38 ( 1.2 )	231 ( 1.4 )	39 ( 1.1 )	217 ( 1.9 )						
<b>Other Jurisdictions</b>																
DDESS	1 ( 0.3 )	... ( ... )	11 ( 0.8 )	227 ( 3.9 )	10 ( 0.7 )	231 ( 4.3 )	36 ( 0.9 )	226 ( 1.4 )	42 ( 1.5 )	220 ( 1.6 )						
DoDDS	2 ( 0.3 )	... ( ... )	10 ( 0.7 )	214 ( 2.5 )	10 ( 0.6 )	231 ( 3.1 )	38 ( 1.1 )	227 ( 1.5 )	40 ( 1.2 )	221 ( 1.4 )						
GUAM	5 ( 0.7 )	... ( ... )	14 ( 1.0 )	185 ( 4.1 )	5 ( 0.6 )	195 ( 5.2 )	36 ( 1.4 )	189 ( 2.2 )	40 ( 1.5 )	190 ( 1.5 )						

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).  
 — State or other jurisdiction did not participate in the NAEP assessment year presented in this table.  
 ... Characteristics of the sample do not permit a reliable estimate.  
 > (<) The value for the students was significantly higher (lower) than in the 1992 assessment at about the 95% confidence level using appropriate multiple comparison procedures.  
 ‡ 1996 results for Pennsylvania are not reported for this table; the PA Department of Education requested that students refrain from answering this home environment background question.  
 SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.



**TABLE 2.4****1996 Mathematics Assessment**

POPULATION:  
 REPORTED STATISTICS:  
 BREAKDOWNS BY:

1996 Grade 4 Public School Students  
 Percentage of Students and Average Mathematics Scale Score  
 Title I Participation



Title I participation...	Participated		Did Not Participate	
	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )
<b>JURISDICTIONS</b>				
<b>Nation</b>				
NATION	24 ( 1.5)	200 ( 1.9)	76 ( 1.5)	229 ( 1.1)
NORTHEAST	19 ( 2.9)	197 ( 3.4)	81 ( 2.9)	233 ( 2.4)
SOUTHEAST	30 ( 3.1)	197 ( 2.2)	70 ( 3.1)	224 ( 3.0)
CENTRAL	18 ( 2.7)	205 ( 3.7)	82 ( 2.7)	235 ( 2.0)
WEST	28 ( 3.1)	200 ( 3.6)	72 ( 3.1)	226 ( 1.9)
<b>States</b>				
ALABAMA	28 ( 2.9)	194 ( 1.9)	72 ( 2.9)	218 ( 1.4)
ALASKA†	11 ( 2.4)	208 ( 3.1)!	89 ( 2.4)	226 ( 1.5)
ARIZONA	24 ( 3.1)	194 ( 2.1)	76 ( 3.1)	225 ( 1.7)
ARKANSAS†	33 ( 3.0)	195 ( 1.8)	67 ( 3.0)	226 ( 1.1)
CALIFORNIA	30 ( 3.5)	186 ( 2.2)	70 ( 3.5)	219 ( 1.7)
COLORADO	7 ( 1.0)	195 ( 2.9)	93 ( 1.0)	228 ( 1.0)
CONNECTICUT	11 ( 1.4)	207 ( 4.1)	89 ( 1.4)	235 ( 1.1)
DELAWARE	11 ( 0.6)	187 ( 2.2)	89 ( 0.6)	218 ( 0.7)
DISTRICT OF COLUMBIA	52 ( 0.5)	176 ( 1.4)	48 ( 0.5)	199 ( 1.3)
FLORIDA	22 ( 2.9)	198 ( 2.8)	78 ( 2.9)	221 ( 1.3)
GEORGIA	22 ( 2.2)	192 ( 1.7)	78 ( 2.2)	222 ( 1.4)
HAWAII	12 ( 1.5)	183 ( 3.4)	88 ( 1.5)	219 ( 1.3)
INDIANA	8 ( 1.3)	203 ( 1.9)	92 ( 1.3)	232 ( 1.1)
IOWA†	14 ( 2.0)	210 ( 2.4)	86 ( 2.0)	232 ( 1.2)
KENTUCKY	36 ( 2.3)	204 ( 1.4)	64 ( 2.3)	229 ( 1.1)
LOUISIANA	35 ( 3.3)	198 ( 1.7)	65 ( 3.3)	215 ( 1.5)
MAINE	14 ( 1.0)	209 ( 1.8)	86 ( 1.0)	236 ( 1.0)
MARYLAND	12 ( 2.4)	190 ( 4.1)!	88 ( 2.4)	225 ( 1.6)
MASSACHUSETTS	13 ( 2.1)	208 ( 3.2)	87 ( 2.1)	232 ( 1.4)
MICHIGAN†	24 ( 2.7)	202 ( 2.3)	76 ( 2.7)	234 ( 1.4)
MINNESOTA	13 ( 1.6)	204 ( 3.0)	87 ( 1.6)	236 ( 1.3)
MISSISSIPPI	55 ( 3.2)	197 ( 1.4)	45 ( 3.2)	222 ( 1.6)
MISSOURI	18 ( 2.0)	203 ( 2.1)	82 ( 2.0)	230 ( 1.1)
MONTANA†	13 ( 1.7)	203 ( 2.9)	87 ( 1.7)	231 ( 1.3)
NEBRASKA	11 ( 1.3)	199 ( 2.4)	89 ( 1.3)	231 ( 1.2)
NEVADA†	11 ( 2.0)	192 ( 3.5)	89 ( 2.0)	221 ( 1.2)
NEW JERSEY†	14 ( 1.7)	195 ( 3.2)	86 ( 1.7)	233 ( 1.4)
NEW MEXICO	22 ( 2.6)	196 ( 3.3)	78 ( 2.6)	219 ( 1.5)
NEW YORK†	24 ( 2.3)	197 ( 2.7)	76 ( 2.3)	231 ( 1.5)
NORTH CAROLINA	13 ( 2.1)	200 ( 2.2)	87 ( 2.1)	228 ( 1.0)
NORTH DAKOTA	16 ( 1.5)	207 ( 2.5)	84 ( 1.5)	235 ( 1.0)
OREGON	11 ( 2.0)	196 ( 2.7)	89 ( 2.0)	227 ( 1.4)
PENNSYLVANIA†	22 ( 2.5)	203 ( 1.8)	78 ( 2.5)	233 ( 1.4)
RHODE ISLAND	7 ( 1.3)	192 ( 4.2)	93 ( 1.3)	223 ( 1.3)
SOUTH CAROLINA†	28 ( 3.3)	199 ( 1.9)	72 ( 3.3)	219 ( 1.6)
TENNESSEE	24 ( 2.7)	196 ( 2.2)	76 ( 2.7)	227 ( 1.3)
TEXAS	32 ( 3.4)	213 ( 2.1)	68 ( 3.4)	236 ( 1.4)
UTAH	10 ( 1.7)	199 ( 3.1)	90 ( 1.7)	230 ( 1.0)
VERMONT†	11 ( 1.4)	194 ( 2.5)	89 ( 1.4)	229 ( 1.2)
VIRGINIA	7 ( 1.5)	189 ( 2.9)!	93 ( 1.5)	225 ( 1.2)
WASHINGTON	13 ( 2.6)	202 ( 2.7)!	87 ( 2.6)	228 ( 1.0)
WEST VIRGINIA	18 ( 2.0)	198 ( 2.1)	82 ( 2.0)	229 ( 1.0)
WISCONSIN	12 ( 2.2)	200 ( 2.4)	88 ( 2.2)	235 ( 0.9)
WYOMING	11 ( 1.7)	199 ( 2.6)	89 ( 1.7)	226 ( 1.3)
<b>Other Jurisdictions</b>				
DDESS	0 ( ... )	... ( ... )	100 ( ... )	224 ( 1.0)
DoDDS	9 ( 1.1)	217 ( 3.7)	91 ( 1.1)	224 ( 0.7)
GUAM	1 ( 0.5)	... ( ... )	99 ( 0.5)	189 ( 1.3)

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).

... Characteristics of the sample do not permit a reliable estimate.

! Interpret with caution — the nature of the sample does not allow accurate determination of the variability of this statistic.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 2.5**

**1996 Mathematics Assessment**



POPULATION:  
REPORTED STATISTICS:  
BREAKDOWNS BY:

**1996 Grade 4 Public School Students**  
**Percentage of Students and Average Mathematics Scale Score**  
**Free/Reduced-Price Lunch Program Eligibility**

Free/reduced-price lunch program eligibility...	Eligible		Not Eligible		Information Not Available	
	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )
<b>JURISDICTIONS</b>						
<b>Nation</b>						
NATION	34 ( 1.6)	207 ( 2.0)	52 ( 2.5)	231 ( 1.1)	13 ( 3.1)	230 ( 4.2)!
NORTHEAST	31 ( 2.2)	205 ( 5.9)	60 ( 4.6)	237 ( 1.8)	9 ( 4.9)	... ( ... )
SOUTHEAST	46 ( 3.3)	204 ( 2.0)	48 ( 3.3)	227 ( 2.9)	6 ( 3.4)	220 ( 7.1)!
CENTRAL	25 ( 4.0)	217 ( 3.4)	49 ( 7.6)	234 ( 2.3)	26 (10.1)	237 ( 3.2)!
WEST	35 ( 3.2)	205 ( 3.6)	53 ( 4.1)	226 ( 1.7)	12 ( 4.8)	225 (10.3)!
<b>States</b>						
ALABAMA	49 ( 2.1)	199 ( 1.5)	48 ( 2.2)	224 ( 1.6)	3 ( 1.5)	214 ( 2.4)!
ALASKA†	25 ( 2.0)	207 ( 2.9)	30 ( 2.5)	233 ( 1.6)	45 ( 3.4)	227 ( 1.8)
ARIZONA	36 ( 2.8)	202 ( 1.9)	44 ( 4.2)	230 ( 1.6)	20 ( 4.8)	218 ( 4.1)!
ARKANSAS†	45 ( 2.1)	204 ( 1.5)	52 ( 2.2)	227 ( 1.3)	3 ( 1.9)	... ( ... )
CALIFORNIA	44 ( 2.8)	194 ( 2.4)	40 ( 3.1)	222 ( 1.9)	16 ( 3.7)	216 ( 3.0)!
COLORADO	29 ( 1.7)	210 ( 1.6)	66 ( 2.6)	233 ( 1.0)	5 ( 2.0)	227 ( 3.1)!
CONNECTICUT	25 ( 1.4)	207 ( 1.8)	72 ( 2.2)	240 ( 1.1)	3 ( 1.8)	... ( ... )
DELAWARE	30 ( 0.9)	199 ( 1.5)	47 ( 0.8)	227 ( 1.0)	23 ( 0.6)	211 ( 2.0)
DISTRICT OF COLUMBIA	74 ( 0.6)	178 ( 1.3)	21 ( 0.5)	213 ( 1.6)	5 ( 0.3)	206 ( 2.8)
FLORIDA	47 ( 2.1)	204 ( 1.3)	48 ( 2.4)	227 ( 1.1)	5 ( 2.0)	224 ( 5.9)!
GEORGIA	44 ( 2.2)	201 ( 1.4)	49 ( 2.6)	226 ( 1.7)	7 ( 2.6)	226 ( 6.5)!
HAWAII	40 ( 1.9)	202 ( 2.0)	57 ( 2.0)	224 ( 1.2)	3 ( 1.5)	212 ( 7.5)!
INDIANA	29 ( 1.9)	213 ( 1.4)	69 ( 2.2)	236 ( 1.1)	2 ( 1.2)	... ( ... )
IOWA†	31 ( 2.2)	219 ( 1.6)	64 ( 2.5)	234 ( 1.1)	5 ( 2.1)	226 ( 6.0)!
KENTUCKY	47 ( 2.1)	209 ( 1.3)	51 ( 2.2)	230 ( 1.0)	3 ( 1.4)	218 ( 6.9)!
LOUISIANA	58 ( 2.4)	200 ( 1.2)	32 ( 2.4)	224 ( 1.5)	10 ( 3.0)	214 ( 5.5)!
MAINE	32 ( 1.7)	221 ( 1.4)	62 ( 2.5)	238 ( 1.2)	6 ( 2.4)	239 ( 4.4)!
MARYLAND	32 ( 1.9)	199 ( 1.6)	64 ( 2.3)	233 ( 1.7)	4 ( 1.3)	204 ( 4.5)!
MASSACHUSETTS	24 ( 2.4)	213 ( 1.4)	66 ( 3.2)	235 ( 1.4)	11 ( 2.6)	229 ( 5.1)!
MICHIGAN†	31 ( 2.1)	210 ( 1.7)	62 ( 2.9)	234 ( 1.3)	7 ( 2.9)	228 ( 8.0)!
MINNESOTA	22 ( 1.9)	218 ( 2.6)	65 ( 2.4)	238 ( 1.3)	13 ( 3.1)	227 ( 5.9)!
MISSISSIPPI	64 ( 2.2)	200 ( 1.2)	35 ( 2.0)	224 ( 1.5)	1 ( ... )	... ( ... )
MISSOURI	36 ( 2.0)	210 ( 1.4)	63 ( 2.1)	233 ( 1.0)	1 ( 0.6)	... ( ... )
MONTANA†	35 ( 2.0)	217 ( 2.1)	60 ( 2.5)	234 ( 1.1)	5 ( 1.8)	223 ( 5.7)!
NEBRASKA	33 ( 1.7)	213 ( 1.8)	57 ( 2.5)	235 ( 1.3)	10 ( 2.5)	235 ( 3.2)!
NEVADA†	15 ( 2.3)	202 ( 2.9)	28 ( 3.6)	223 ( 2.3)	57 ( 4.8)	219 ( 1.7)
NEW JERSEY†	33 ( 2.1)	206 ( 2.2)	65 ( 2.3)	238 ( 1.4)	2 ( 1.2)	... ( ... )
NEW MEXICO	50 ( 3.0)	203 ( 2.2)	37 ( 2.8)	227 ( 1.3)	13 ( 2.7)	221 ( 3.3)!
NEW YORK†	44 ( 2.0)	206 ( 2.0)	49 ( 3.0)	236 ( 1.1)	7 ( 2.6)	233 ( 5.5)!
NORTH CAROLINA	34 ( 1.5)	209 ( 1.7)	58 ( 2.2)	234 ( 1.1)	8 ( 2.2)	217 ( 5.7)!
NORTH DAKOTA	24 ( 1.3)	223 ( 2.5)	65 ( 2.4)	234 ( 1.1)	11 ( 2.4)	230 ( 3.0)!
OREGON	31 ( 2.6)	210 ( 1.6)	60 ( 3.1)	231 ( 1.5)	9 ( 2.9)	222 ( 4.9)!
PENNSYLVANIA†	33 ( 2.1)	211 ( 1.5)	58 ( 3.3)	235 ( 1.2)	9 ( 3.2)	226 ( 5.6)!
RHODE ISLAND	34 ( 2.3)	204 ( 1.8)	65 ( 2.4)	229 ( 1.4)	1 ( ... )	... ( ... )
SOUTH CAROLINA†	52 ( 1.7)	201 ( 1.3)	48 ( 1.7)	226 ( 1.5)	0 ( 0.1)	... ( ... )
TENNESSEE	36 ( 2.6)	204 ( 1.7)	59 ( 2.1)	229 ( 1.4)	5 ( 2.2)	217 ( 8.1)!
TEXAS	43 ( 3.1)	215 ( 1.4)	52 ( 3.0)	240 ( 1.4)	6 ( 2.3)	228 ( 5.9)!
UTAH	27 ( 2.0)	216 ( 1.8)	60 ( 2.4)	231 ( 1.3)	13 ( 2.8)	226 ( 2.4)!
VERMONT†	26 ( 1.6)	210 ( 2.2)	65 ( 2.3)	231 ( 1.3)	9 ( 2.1)	226 ( 2.6)!
VIRGINIA	31 ( 1.8)	206 ( 1.7)	65 ( 2.4)	230 ( 1.3)	4 ( 1.7)	228 ( 8.5)!
WASHINGTON	32 ( 1.7)	212 ( 2.0)	62 ( 2.0)	232 ( 1.0)	6 ( 2.0)	230 ( 2.5)!
WEST VIRGINIA	46 ( 1.7)	213 ( 1.2)	49 ( 1.9)	232 ( 1.2)	5 ( 2.2)	231 ( 2.8)!
WISCONSIN	25 ( 1.8)	215 ( 1.5)	64 ( 3.3)	237 ( 1.1)	10 ( 3.2)	234 ( 2.5)!
WYOMING	33 ( 1.5)	213 ( 2.2)	64 ( 2.0)	228 ( 1.3)	3 ( 1.4)	224 ( 6.9)!
<b>Other Jurisdictions</b>						
DDESS	35 ( 0.9)	218 ( 1.6)	38 ( 0.9)	229 ( 1.5)	27 ( 0.4)	225 ( 2.7)
DoDDS	12 ( 0.9)	220 ( 2.4)	36 ( 1.6)	225 ( 1.2)	52 ( 2.1)	222 ( 1.1)
GUAM	35 ( 1.4)	177 ( 2.0)	59 ( 1.4)	195 ( 1.8)	6 ( 0.3)	186 ( 3.2)

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).

... Characteristics of the sample do not permit a reliable estimate.

! Interpret with caution — the nature of the sample does not allow accurate determination of the variability of this statistic.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 2.6**

**1992 Mathematics Assessment**



POPULATION:  
REPORTED STATISTICS:  
BREAKDOWNS BY:

**1992 Grade 4 Public School Students**  
**Percentage of Students and Average Mathematics Scale Score**  
**Type of Location**

Type of location...	Central City		Urban Fringe/Large Town		Rural/Small Town	
JURISDICTIONS	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )
<b>Nation</b>						
NATION	32 ( 3.0)	212 ( 1.6)	40 ( 3.6)	225 ( 1.6)	28 ( 2.9)	217 ( 2.0)
NORTHEAST	36 ( 8.1)	211 ( 4.1)!	48 ( 9.4)	234 ( 3.2)	16 ( 7.3)	... ( ... )
SOUTHEAST	29 ( 5.4)	208 ( 2.2)!	33 ( 6.5)	216 ( 3.3)	38 ( 5.5)	206 ( 4.6)
CENTRAL	24 ( 5.2)	210 ( 4.3)!	39 ( 7.0)	227 ( 3.2)	36 ( 4.1)	... ( ... )
WEST	39 ( 5.5)	215 ( 2.3)	42 ( 5.5)	223 ( 3.3)	19 ( 6.0)	215 ( 2.7)!
<b>States</b>						
ALABAMA	34 ( 2.9)	209 ( 2.8)	26 ( 4.1)	214 ( 3.4)	40 ( 3.6)	205 ( 2.1)
ALASKA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
ARIZONA	56 ( 2.6)	217 ( 1.1)	24 ( 3.3)	220 ( 2.3)	19 ( 2.0)	204 ( 4.0)
ARKANSAS	23 ( 3.2)	208 ( 3.3)	14 ( 4.0)	216 ( 2.6)!	63 ( 3.0)	210 ( 1.1)
CALIFORNIA	47 ( 3.8)	206 ( 2.9)	46 ( 4.1)	210 ( 2.5)	7 ( 2.3)	210 ( 7.0)!
COLORADO	33 ( 3.2)	217 ( 1.8)	46 ( 3.9)	224 ( 1.6)	20 ( 2.4)	221 ( 1.9)
CONNECTICUT	30 ( 3.1)	210 ( 3.5)	40 ( 4.3)	233 ( 1.7)	31 ( 4.1)	236 ( 1.7)
DELAWARE	46 ( 0.2)	218 ( 1.2)	29 ( 0.2)	218 ( 1.8)	25 ( 0.1)	215 ( 1.4)
DISTRICT OF COLUMBIA	100 ( ... )	193 ( 0.5)	0 ( ... )	... ( ... )	0 ( ... )	... ( ... )
FLORIDA	34 ( 4.5)	208 ( 3.0)	55 ( 5.0)	217 ( 1.6)	11 ( 2.3)	208 ( 3.6)!
GEORGIA	24 ( 2.7)	204 ( 2.9)	38 ( 3.7)	226 ( 2.4)	38 ( 2.8)	213 ( 1.5)
HAWAII	26 ( 1.7)	219 ( 2.7)	40 ( 3.7)	211 ( 2.5)	34 ( 3.3)	214 ( 1.6)
INDIANA	37 ( 2.8)	217 ( 2.6)	31 ( 3.7)	224 ( 1.8)	32 ( 2.7)	224 ( 1.3)
IOWA	27 ( 2.0)	228 ( 2.5)	17 ( 3.0)	236 ( 1.9)	57 ( 2.7)	229 ( 1.1)
KENTUCKY	18 ( 2.2)	217 ( 4.2)	24 ( 3.1)	220 ( 2.5)	58 ( 2.7)	213 ( 1.0)
LOUISIANA	35 ( 2.3)	201 ( 2.9)	33 ( 3.6)	209 ( 2.4)	31 ( 3.6)	203 ( 3.3)
MAINE	8 ( 2.2)	231 ( 5.1)!	10 ( 3.3)	233 ( 3.7)!	82 ( 3.5)	231 ( 1.0)
MARYLAND	28 ( 2.7)	204 ( 3.5)	65 ( 3.2)	223 ( 1.6)	8 ( 2.0)	214 ( 3.9)!
MASSACHUSETTS	25 ( 2.0)	208 ( 2.7)	44 ( 4.0)	234 ( 1.6)	30 ( 4.0)	231 ( 1.6)
MICHIGAN	26 ( 3.1)	204 ( 5.5)	41 ( 4.0)	226 ( 1.6)	33 ( 4.0)	225 ( 1.6)
MINNESOTA	16 ( 2.9)	214 ( 3.0)	51 ( 3.8)	233 ( 1.3)	34 ( 2.6)	228 ( 1.0)
MISSISSIPPI	13 ( 1.7)	201 ( 2.5)	20 ( 3.7)	210 ( 3.1)	67 ( 3.6)	200 ( 1.6)
MISSOURI	20 ( 2.8)	212 ( 3.5)	40 ( 4.0)	226 ( 1.8)	40 ( 3.0)	224 ( 1.3)
MONTANA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
NEBRASKA	34 ( 2.5)	226 ( 2.0)	10 ( 2.8)	226 ( 2.7)!	56 ( 2.9)	225 ( 1.7)
NEVADA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
NEW JERSEY	14 ( 2.7)	202 ( 4.1)	82 ( 3.3)	231 ( 1.6)	3 ( 1.7)	... ( ... )
NEW MEXICO	33 ( 3.1)	214 ( 2.1)	32 ( 4.9)	216 ( 3.0)	35 ( 4.9)	211 ( 1.7)
NEW YORK	42 ( 2.0)	206 ( 2.1)	46 ( 3.6)	228 ( 2.1)	12 ( 3.7)	225 ( 3.8)!
NORTH CAROLINA	35 ( 2.7)	215 ( 2.0)	25 ( 3.9)	214 ( 2.5)	40 ( 3.9)	210 ( 1.8)
NORTH DAKOTA	24 ( 2.5)	232 ( 1.9)	13 ( 1.9)	230 ( 1.9)	63 ( 2.8)	227 ( 1.0)
OREGON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
PENNSYLVANIA	28 ( 4.0)	214 ( 3.6)	50 ( 4.7)	228 ( 1.9)	21 ( 4.2)	228 ( 1.9)!
RHODE ISLAND	40 ( 3.6)	204 ( 2.7)	42 ( 4.5)	221 ( 1.9)	18 ( 3.8)	228 ( 2.8)!
SOUTH CAROLINA	29 ( 3.3)	211 ( 2.6)	24 ( 2.9)	223 ( 1.9)	46 ( 3.4)	208 ( 1.8)
TENNESSEE	39 ( 3.3)	209 ( 2.8)	30 ( 4.3)	216 ( 2.1)	31 ( 3.1)	209 ( 1.8)
TEXAS	47 ( 3.1)	216 ( 1.9)	34 ( 4.6)	222 ( 2.2)	19 ( 3.7)	215 ( 3.1)
UTAH	25 ( 3.4)	225 ( 2.6)	52 ( 4.1)	225 ( 1.2)	23 ( 2.5)	220 ( 1.9)
VERMONT	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
VIRGINIA	33 ( 3.0)	217 ( 2.2)	43 ( 4.0)	228 ( 2.1)	24 ( 2.8)	211 ( 2.3)
WASHINGTON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
WEST VIRGINIA	11 ( 1.6)	219 ( 3.9)	28 ( 3.7)	218 ( 2.2)	61 ( 3.6)	213 ( 1.1)
WISCONSIN	32 ( 2.5)	225 ( 2.4)	28 ( 3.3)	231 ( 1.5)	40 ( 2.8)	230 ( 1.7)
WYOMING	25 ( 2.2)	224 ( 1.9)	5 ( 1.3)	225 ( 2.5)!	70 ( 2.0)	226 ( 1.0)
<b>Other Jurisdictions</b>						
DDESS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
DoDDS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
GUAM	0 ( ... )	... ( ... )	0 ( ... )	... ( ... )	100 ( ... )	193 ( 0.8)

— State or other jurisdiction did not participate in the NAEP assessment year presented in this table.

... Characteristics of the sample do not permit a reliable estimate.

! Interpret with caution — the nature of the sample does not allow accurate determination of the variability of this statistic.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 2.6** (continued) **1996 Mathematics Assessment**



POPULATION: **1996 Grade 4 Public School Students**  
 REPORTED STATISTICS: **Percentage of Students and Average Mathematics Scale Score**  
 BREAKDOWNS BY: **Type of Location**

Type of location...	Central City		Urban Fringe/Large Town		Rural/Small Town	
JURISDICTIONS	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )
<b>Nation</b>						
NATION	28 ( 2.9)	214 ( 2.8)	46 ( 3.6)	228 ( 1.7)	26 ( 2.8)	222 ( 1.9)
NORTHEAST	28 ( 4.8)	208 ( 8.1)!	56 ( 7.0)	235 ( 2.5)	16 ( 8.0)	... ( ... )
SOUTHEAST	31 ( 5.9)	211 ( 3.5)!	29 ( 7.5)	225 ( 6.8)!	41 ( 6.1)	212 ( 3.5)
CENTRAL	28 ( 6.4)	223 ( 4.3)!	42 ( 9.0)	235 ( 3.6)!	29 ( 4.8)	229 ( 3.0)
WEST	26 ( 5.6)	213 ( 4.9)!	55 ( 5.5)	220 ( 3.2)	20 ( 3.8)	224 ( 2.6)!
<b>States</b>						
ALABAMA	33 ( 2.7)	210 ( 2.6)	22 ( 3.5)	215 ( 2.4)	45 ( 2.8)	211 ( 1.9)
ALASKA†	38 ( 1.5)	223 ( 2.4)	0 ( ... )	... ( ... )	62 ( 1.5)	224 ( 1.6)
ARIZONA	49 ( 4.0)	218 ( 2.1)	39 ( 4.5)	220 ( 3.2)	13 ( 2.1)	209 ( 4.6)
ARKANSAS†	25 ( 2.9)	212 ( 4.0)	15 ( 3.4)	221 ( 3.1)!	60 ( 3.2)	216 ( 1.9)>
CALIFORNIA	41 ( 3.9)	206 ( 3.5)	52 ( 4.6)	212 ( 2.0)	7 ( 3.5)	205 (13.5)!
COLORADO	39 ( 3.2)	223 ( 2.3)	41 ( 3.4)	229 ( 1.9)	20 ( 2.3)	226 ( 2.3)
CONNECTICUT	28 ( 3.0)	214 ( 3.1)	39 ( 5.0)	238 ( 2.3)	33 ( 4.6)	240 ( 1.5)
DELAWARE	44 ( 0.5)	216 ( 1.0)	31 ( 0.5)	215 ( 1.3)	25 ( 0.4)	214 ( 1.7)
DISTRICT OF COLUMBIA	100 ( ... )	187 ( 1.1)<	0 ( ... )	... ( ... )	0 ( ... )	... ( ... )
FLORIDA	30 ( 3.4)	210 ( 2.4)	62 ( 4.0)	218 ( 1.5)	8 ( 2.0)	217 ( 4.0)!
GEORGIA	18 ( 1.7)	206 ( 3.9)	43 ( 3.9)	222 ( 2.2)	38 ( 3.7)	213 ( 1.8)
HAWAII	26 ( 2.0)	222 ( 4.8)	38 ( 3.3)	213 ( 1.6)	36 ( 2.9)	212 ( 2.3)
INDIANA	29 ( 3.3)	226 ( 2.3)	36 ( 4.6)	232 ( 2.3)>	35 ( 3.2)	230 ( 1.2)>
IOWA†	27 ( 2.6)	224 ( 2.8)	7 ( 2.7)	240 ( 4.5)!	67 ( 1.9)	230 ( 1.1)
KENTUCKY	21 ( 3.3)	221 ( 2.3)	22 ( 3.9)	226 ( 3.2)	57 ( 2.6)	217 ( 1.5)
LOUISIANA	34 ( 2.7)	204 ( 2.8)	35 ( 3.7)	213 ( 1.8)	31 ( 3.2)	209 ( 1.6)
MAINE	12 ( 3.0)	236 ( 2.8)!	10 ( 2.4)	239 ( 2.7)!	78 ( 3.8)	231 ( 1.2)
MARYLAND	25 ( 2.6)	204 ( 4.5)	68 ( 3.0)	227 ( 1.7)	7 ( 1.5)	217 ( 1.6)
MASSACHUSETTS	27 ( 3.5)	216 ( 2.4)	55 ( 4.8)	234 ( 2.1)	18 ( 4.0)	232 ( 1.6)!
MICHIGAN†	26 ( 2.9)	210 ( 3.3)	45 ( 4.0)	233 ( 1.7)>	29 ( 2.7)	230 ( 1.8)
MINNESOTA	22 ( 2.7)	222 ( 2.1)	46 ( 3.7)	238 ( 1.8)	33 ( 3.3)	231 ( 1.6)
MISSISSIPPI	17 ( 2.3)	212 ( 3.3)	10 ( 1.7)	223 ( 4.9)	74 ( 2.2)	206 ( 1.3)>
MISSOURI	23 ( 3.2)	214 ( 3.3)	42 ( 3.6)	230 ( 1.7)	35 ( 2.5)	225 ( 1.5)
MONTANA†	19 ( 1.6)	230 ( 1.8)	1 ( ... )	... ( ... )	80 ( 1.4)	227 ( 1.6)
NEBRASKA	34 ( 2.5)	224 ( 2.7)	8 ( 2.2)	234 ( 4.3)!	59 ( 2.3)	229 ( 1.4)
NEVADA†	36 ( 3.5)	219 ( 2.1)	41 ( 4.4)	216 ( 2.3)	22 ( 2.9)	218 ( 2.4)
NEW JERSEY†	15 ( 4.2)	213 ( 6.1)!	84 ( 4.4)	229 ( 1.9)	1 ( ... )	... ( ... )
NEW MEXICO	34 ( 2.2)	217 ( 3.5)	16 ( 3.8)	210 ( 4.0)!	50 ( 3.7)	213 ( 2.5)
NEW YORK†	47 ( 3.1)	212 ( 2.6)	42 ( 3.4)	234 ( 1.6)	11 ( 2.7)	225 ( 2.3)!
NORTH CAROLINA	34 ( 3.1)	227 ( 2.4)>	24 ( 4.3)	226 ( 2.3)>	43 ( 4.2)	221 ( 1.8)>
NORTH DAKOTA	31 ( 1.9)	235 ( 1.7)	7 ( 1.4)	230 ( 2.6)	62 ( 1.6)	229 ( 1.8)
OREGON	36 ( 3.7)	223 ( 2.9)	32 ( 4.2)	225 ( 1.9)	32 ( 3.1)	223 ( 2.2)
PENNSYLVANIA†	24 ( 2.9)	207 ( 2.5)	53 ( 4.7)	234 ( 1.7)	22 ( 4.3)	229 ( 2.2)!
RHODE ISLAND	38 ( 2.7)	208 ( 2.2)	39 ( 3.2)	225 ( 1.4)	23 ( 3.2)	233 ( 2.5)
SOUTH CAROLINA†	22 ( 4.1)	216 ( 3.0)	36 ( 4.6)	217 ( 1.9)	43 ( 4.0)	208 ( 2.0)
TENNESSEE	32 ( 3.2)	213 ( 2.9)	28 ( 4.1)	226 ( 2.7)	40 ( 3.3)	219 ( 2.1)>
TEXAS	47 ( 3.4)	225 ( 2.1)>	39 ( 4.4)	232 ( 2.6)	14 ( 2.6)	232 ( 2.4)>
UTAH	23 ( 3.1)	225 ( 2.8)	52 ( 4.0)	227 ( 1.4)	25 ( 2.9)	227 ( 2.0)
VERMONT†	4 ( 1.5)	... ( ... )	6 ( 3.5)	... ( ... )	90 ( 3.6)	225 ( 1.3)
VIRGINIA	32 ( 2.5)	219 ( 2.6)	41 ( 3.8)	231 ( 2.0)	27 ( 3.0)	214 ( 2.4)
WASHINGTON	33 ( 3.0)	225 ( 2.4)	45 ( 3.9)	225 ( 1.5)	22 ( 3.1)	226 ( 3.4)
WEST VIRGINIA	15 ( 1.4)	225 ( 2.1)	24 ( 3.6)	227 ( 2.0)	61 ( 3.7)	222 ( 1.4)>
WISCONSIN	35 ( 2.5)	224 ( 2.2)	30 ( 3.9)	237 ( 1.8)	35 ( 3.3)	235 ( 1.1)
WYOMING	25 ( 1.7)	221 ( 2.7)	1 ( ... )	... ( ... )	74 ( 1.4)	224 ( 1.5)
<b>Other Jurisdictions</b>						
DDESS	4 ( 0.1)	... ( ... )	74 ( 0.4)	226 ( 1.3)	22 ( 0.4)	222 ( 2.2)
DoDDS	... ( ... )	... ( ... )	... ( ... )	... ( ... )	... ( ... )	... ( ... )
GUAM	... ( ... )	... ( ... )	... ( ... )	... ( ... )	... ( ... )	... ( ... )

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).  
 ... Characteristics of the sample do not permit a reliable estimate.  
 > (<) The value for the students was significantly higher (lower) than in the 1992 assessment at about the 95% confidence level using appropriate multiple comparison procedures.  
 ! Interpret with caution — the nature of the sample does not allow accurate determination of the variability of this statistic.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 2.7****1990 Mathematics Assessment**POPULATION:  
REPORTED STATISTICS:  
BREAKDOWNS BY:**1990 Grade 8 Public School Students**  
**Percentage of Students and Average Mathematics Scale Score**  
**Gender**

What is your gender?	Male		Female	
JURISDICTIONS	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )
<b>Nation</b>				
NATION	51 ( 1.1 )	262 ( 1.7 )	49 ( 1.1 )	261 ( 1.4 )
NORTHEAST	50 ( 2.1 )	271 ( 4.1 )	50 ( 2.1 )	269 ( 3.2 )
SOUTHEAST	49 ( 2.8 )	253 ( 2.9 )	51 ( 2.8 )	255 ( 2.5 )
CENTRAL	50 ( 1.4 )	266 ( 2.8 )	50 ( 1.4 )	264 ( 2.7 )
WEST	55 ( 2.1 )	262 ( 3.3 )	45 ( 2.1 )	259 ( 2.7 )
<b>States</b>				
ALABAMA	50 ( 1.0 )	254 ( 1.5 )	50 ( 1.0 )	252 ( 1.3 )
ALASKA	— ( — )	— ( — )	— ( — )	— ( — )
ARIZONA	50 ( 0.9 )	262 ( 1.5 )	50 ( 0.9 )	257 ( 1.5 )
ARKANSAS	50 ( 1.1 )	257 ( 1.3 )	50 ( 1.1 )	255 ( 1.1 )
CALIFORNIA	51 ( 0.9 )	258 ( 1.6 )	49 ( 0.9 )	255 ( 1.3 )
COLORADO	51 ( 1.0 )	269 ( 1.0 )	49 ( 1.0 )	266 ( 1.4 )
CONNECTICUT	48 ( 0.8 )	271 ( 1.2 )	52 ( 0.8 )	269 ( 1.4 )
DELAWARE	52 ( 1.2 )	260 ( 1.6 )	48 ( 1.2 )	262 ( 1.6 )
DISTRICT OF COLUMBIA	47 ( 0.9 )	230 ( 1.2 )	53 ( 0.9 )	233 ( 1.0 )
FLORIDA	51 ( 1.1 )	257 ( 1.6 )	49 ( 1.1 )	254 ( 1.4 )
GEORGIA	51 ( 0.8 )	259 ( 1.7 )	49 ( 0.8 )	258 ( 1.5 )
HAWAII	53 ( 1.0 )	248 ( 1.1 )	47 ( 1.0 )	254 ( 1.3 )
INDIANA	51 ( 0.9 )	270 ( 1.4 )	49 ( 0.9 )	264 ( 1.4 )
IOWA	50 ( 1.2 )	281 ( 1.2 )	50 ( 1.2 )	275 ( 1.3 )
KENTUCKY	51 ( 1.1 )	259 ( 1.4 )	49 ( 1.1 )	256 ( 1.2 )
LOUISIANA	50 ( 1.1 )	248 ( 1.4 )	50 ( 1.1 )	245 ( 1.5 )
MAINE	— ( — )	— ( — )	— ( — )	— ( — )
MARYLAND	51 ( 0.8 )	261 ( 1.5 )	49 ( 0.8 )	261 ( 1.8 )
MASSACHUSETTS	— ( — )	— ( — )	— ( — )	— ( — )
MICHIGAN	52 ( 1.0 )	265 ( 1.4 )	48 ( 1.0 )	264 ( 1.3 )
MINNESOTA	50 ( 1.0 )	276 ( 1.1 )	50 ( 1.0 )	275 ( 1.1 )
MISSISSIPPI	— ( — )	— ( — )	— ( — )	— ( — )
MISSOURI	— ( — )	— ( — )	— ( — )	— ( — )
MONTANA	51 ( 1.4 )	283 ( 1.4 )	49 ( 1.4 )	278 ( 1.4 )
NEBRASKA	52 ( 1.2 )	277 ( 1.4 )	48 ( 1.2 )	275 ( 1.4 )
NEW MEXICO	50 ( 1.2 )	259 ( 1.1 )	50 ( 1.2 )	254 ( 1.0 )
NEW YORK	49 ( 1.3 )	262 ( 1.6 )	51 ( 1.3 )	259 ( 1.7 )
NORTH CAROLINA	51 ( 1.0 )	250 ( 1.3 )	49 ( 1.0 )	251 ( 1.2 )
NORTH DAKOTA	51 ( 1.6 )	284 ( 1.5 )	49 ( 1.6 )	278 ( 1.6 )
OREGON	52 ( 0.9 )	272 ( 1.3 )	48 ( 0.9 )	270 ( 1.0 )
RHODE ISLAND	50 ( 0.9 )	262 ( 1.0 )	50 ( 0.9 )	259 ( 1.0 )
SOUTH CAROLINA	— ( — )	— ( — )	— ( — )	— ( — )
TENNESSEE	— ( — )	— ( — )	— ( — )	— ( — )
TEXAS	50 ( 1.0 )	260 ( 1.8 )	50 ( 1.0 )	256 ( 1.4 )
UTAH	— ( — )	— ( — )	— ( — )	— ( — )
VERMONT	— ( — )	— ( — )	— ( — )	— ( — )
VIRGINIA	49 ( 0.9 )	266 ( 2.0 )	51 ( 0.9 )	263 ( 1.4 )
WASHINGTON	— ( — )	— ( — )	— ( — )	— ( — )
WEST VIRGINIA	52 ( 1.1 )	256 ( 1.5 )	48 ( 1.1 )	255 ( 1.1 )
WISCONSIN	50 ( 1.1 )	275 ( 1.4 )	50 ( 1.1 )	274 ( 1.6 )
WYOMING	51 ( 0.8 )	274 ( 0.8 )	49 ( 0.8 )	270 ( 0.9 )
<b>Other Jurisdictions</b>				
DDESS	— ( — )	— ( — )	— ( — )	— ( — )
DoDDS	— ( — )	— ( — )	— ( — )	— ( — )
GUAM	51 ( 1.2 )	232 ( 1.4 )	49 ( 1.2 )	231 ( 1.1 )

— State or other jurisdiction did not participate in the NAEP assessment year presented in this table.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 2.7** (continued)

**1992 Mathematics Assessment**



POPULATION:

1992 Grade 8 Public School Students

REPORTED STATISTICS:

Percentage of Students and Average Mathematics Scale Score

BREAKDOWNS BY:

Gender

What is your gender?	Male		Female	
JURISDICTIONS	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )
<b>Nation</b>				
NATION	52 ( 0.6)	266 ( 1.1)	48 ( 0.6)	267 ( 1.1)»
NORTHEAST	53 ( 1.3)	268 ( 2.8)	47 ( 1.3)	268 ( 3.5)
SOUTHEAST	48 ( 1.2)	258 ( 1.6)	52 ( 1.2)	259 ( 1.4)
CENTRAL	56 ( 0.7)»	273 ( 2.9)	44 ( 0.7)«	274 ( 2.4)
WEST	51 ( 1.4)	266 ( 2.7)	49 ( 1.4)	269 ( 2.2)
<b>States</b>				
ALABAMA	52 ( 1.0)	253 ( 1.8)	48 ( 1.0)	251 ( 1.9)
ALASKA	— ( — )	— ( — )	— ( — )	— ( — )
ARIZONA	51 ( 1.0)	266 ( 1.4)	49 ( 1.0)	265 ( 1.4)»
ARKANSAS	51 ( 1.0)	257 ( 1.4)	49 ( 1.0)	256 ( 1.3)
CALIFORNIA	49 ( 1.2)	260 ( 1.9)	51 ( 1.2)	262 ( 1.9)»
COLORADO	51 ( 0.8)	274 ( 1.2)»	49 ( 0.8)	271 ( 1.3)»
CONNECTICUT	50 ( 0.9)	275 ( 1.4)	50 ( 0.9)	273 ( 1.3)
DELAWARE	50 ( 1.2)	264 ( 1.4)	50 ( 1.2)	262 ( 1.2)
DISTRICT OF COLUMBIA	49 ( 1.4)	234 ( 1.2)	51 ( 1.4)	236 ( 1.4)
FLORIDA	49 ( 1.0)	260 ( 1.5)	51 ( 1.0)	260 ( 1.7)»
GEORGIA	48 ( 1.0)	261 ( 1.5)	52 ( 1.0)	258 ( 1.2)
HAWAII	52 ( 1.2)	254 ( 1.1)»	48 ( 1.2)	261 ( 1.2)»
INDIANA	51 ( 1.0)	272 ( 1.4)	49 ( 1.0)	268 ( 1.3)
IOWA	52 ( 0.9)	284 ( 1.1)	48 ( 0.9)	282 ( 1.3)»
KENTUCKY	50 ( 1.0)	263 ( 1.4)»	50 ( 1.0)	261 ( 1.4)»
LOUISIANA	47 ( 1.0)	252 ( 1.6)	53 ( 1.0)	248 ( 2.0)
MAINE	51 ( 1.0)	279 ( 1.3)	49 ( 1.0)	279 ( 1.2)
MARYLAND	50 ( 1.0)	266 ( 1.6)	50 ( 1.0)	264 ( 1.5)
MASSACHUSETTS	50 ( 0.8)	274 ( 1.5)	50 ( 0.8)	272 ( 1.1)
MICHIGAN	48 ( 1.0)	270 ( 1.6)	52 ( 1.0)	265 ( 1.5)
MINNESOTA	49 ( 1.0)	282 ( 1.4)»	51 ( 1.0)	283 ( 1.0)»
MISSISSIPPI	48 ( 1.0)	248 ( 1.6)	52 ( 1.0)	245 ( 1.4)
MISSOURI	52 ( 1.0)	272 ( 1.5)	48 ( 1.0)	270 ( 1.4)
MONTANA	— ( — )	— ( — )	— ( — )	— ( — )
NEBRASKA	53 ( 1.2)	278 ( 1.3)	47 ( 1.2)	277 ( 1.4)
NEW MEXICO	50 ( 1.0)	261 ( 1.3)	50 ( 1.0)	258 ( 1.0)»
NEW YORK	49 ( 1.2)	267 ( 2.3)	51 ( 1.2)	266 ( 2.2)
NORTH CAROLINA	50 ( 0.9)	259 ( 1.4)»	50 ( 0.9)	257 ( 1.4)»
NORTH DAKOTA	51 ( 1.1)	285 ( 1.3)	49 ( 1.1)	282 ( 1.4)
OREGON	— ( — )	— ( — )	— ( — )	— ( — )
RHODE ISLAND	50 ( 0.8)	266 ( 0.9)»	50 ( 0.8)	266 ( 0.9)»
SOUTH CAROLINA	50 ( 0.9)	261 ( 1.4)	50 ( 0.9)	260 ( 1.0)
TENNESSEE	50 ( 1.1)	261 ( 1.7)	50 ( 1.1)	257 ( 1.5)
TEXAS	49 ( 0.9)	267 ( 1.3)»	51 ( 0.9)	262 ( 1.6)»
UTAH	52 ( 1.2)	276 ( 1.0)	48 ( 1.2)	273 ( 1.0)
VERMONT	— ( — )	— ( — )	— ( — )	— ( — )
VIRGINIA	50 ( 0.7)	268 ( 1.6)	50 ( 0.7)	267 ( 1.2)
WASHINGTON	— ( — )	— ( — )	— ( — )	— ( — )
WEST VIRGINIA	49 ( 1.0)	260 ( 1.1)	51 ( 1.0)	259 ( 1.2)
WISCONSIN	51 ( 1.1)	278 ( 1.8)	49 ( 1.1)	277 ( 1.6)
WYOMING	50 ( 1.0)	275 ( 1.1)	50 ( 1.0)	275 ( 1.2)»
<b>Other Jurisdictions</b>				
DDESS	— ( — )	— ( — )	— ( — )	— ( — )
DoDDS	— ( — )	— ( — )	— ( — )	— ( — )
GUAM	52 ( 1.2)	233 ( 1.5)	48 ( 1.2)	237 ( 1.5)»

— State or other jurisdiction did not participate in the NAEP assessment year presented in this table.

» («) The value for the students was significantly higher (lower) than in the 1990 assessment at about the 95% confidence level using appropriate multiple comparison procedures.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.



**TABLE 2.7** (continued)

**1996 Mathematics Assessment**



POPULATION:

1996 Grade 8 Public School Students

REPORTED STATISTICS:

Percentage of Students and Average Mathematics Scale Score

BREAKDOWNS BY:

Gender

What is your gender?	Male		Female	
JURISDICTIONS	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )
<b>Nation</b>				
NATION	52 ( 0.9)	270 ( 1.5)»	48 ( 0.9)	271 ( 1.2)»
NORTHEAST	53 ( 1.3)	276 ( 5.0)	47 ( 1.3)	275 ( 2.9)
SOUTHEAST	50 ( 2.1)	264 ( 3.6)	50 ( 2.1)	263 ( 3.1)
CENTRAL	51 ( 2.0)	276 ( 3.8)	49 ( 2.0)	276 ( 3.3)»
WEST	54 ( 1.3)	267 ( 2.7)	46 ( 1.3)	270 ( 2.5)
<b>States</b>				
ALABAMA	49 ( 0.9)	257 ( 2.9)	51 ( 0.9)	256 ( 1.8)
ALASKA†	52 ( 1.2)	277 ( 2.4)	48 ( 1.2)	278 ( 2.0)
ARIZONA	48 ( 1.0)	271 ( 1.5)»	52 ( 1.0)	265 ( 2.2)»
ARKANSAS†	50 ( 1.3)	261 ( 1.9)	50 ( 1.3)	262 ( 1.6)»>
CALIFORNIA	49 ( 1.1)	264 ( 2.4)»	51 ( 1.1)	261 ( 1.7)»
COLORADO	51 ( 1.0)	278 ( 1.4)»	49 ( 1.0)	274 ( 1.3)»
CONNECTICUT	51 ( 1.1)	280 ( 1.5)»	49 ( 1.1)	279 ( 1.4)»>
DELAWARE	49 ( 1.2)	269 ( 1.8)»	51 ( 1.2)	265 ( 1.5)
DISTRICT OF COLUMBIA	47 ( 1.5)	231 ( 2.2)	53 ( 1.5)	235 ( 1.5)
FLORIDA	47 ( 1.1)	265 ( 1.8)»	53 ( 1.1)	262 ( 2.4)»
GEORGIA	50 ( 0.9)	262 ( 1.8)	50 ( 0.9)	263 ( 1.8)
HAWAII	52 ( 1.0)	259 ( 1.3)»	48 ( 1.0)	266 ( 1.3)»>
INDIANA	51 ( 1.2)	276 ( 1.7)»	49 ( 1.2)	275 ( 1.5)»>
IOWA†	52 ( 1.4)	283 ( 1.6)	48 ( 1.4)	285 ( 1.5)»
KENTUCKY	51 ( 1.0)	267 ( 1.4)»	49 ( 1.0)	266 ( 1.2)»>
LOUISIANA	48 ( 1.0)	252 ( 1.8)	52 ( 1.0)	253 ( 1.7)»
MAINE	50 ( 1.1)	285 ( 1.4)»	50 ( 1.1)	283 ( 1.4)
MARYLAND†	50 ( 1.0)	271 ( 2.5)»	50 ( 1.0)	269 ( 2.2)»
MASSACHUSETTS	52 ( 1.4)	278 ( 2.1)	48 ( 1.4)	277 ( 2.0)
MICHIGAN†	50 ( 1.1)	279 ( 2.0)»>	50 ( 1.1)	275 ( 2.0)»>
MINNESOTA	51 ( 1.0)	285 ( 1.7)»	49 ( 1.0)	283 ( 1.5)»
MISSISSIPPI	48 ( 1.1)	251 ( 1.4)	52 ( 1.1)	250 ( 1.4)
MISSOURI	49 ( 1.0)	274 ( 1.5)	51 ( 1.0)	273 ( 1.6)
MONTANA†	49 ( 0.9)	283 ( 1.6)	51 ( 0.9)	283 ( 1.7)»
NEBRASKA	51 ( 1.0)	283 ( 1.4)»	49 ( 1.0)	282 ( 1.1)»>
NEW MEXICO	48 ( 1.1)	262 ( 1.8)	52 ( 1.1)	262 ( 1.4)»
NEW YORK†	50 ( 1.1)	272 ( 2.0)»	50 ( 1.1)	269 ( 1.8)»
NORTH CAROLINA	48 ( 1.2)	270 ( 1.9)»>	52 ( 1.2)	266 ( 1.5)»>
NORTH DAKOTA	51 ( 1.2)	285 ( 1.1)	49 ( 1.2)	284 ( 1.3)»
OREGON	51 ( 1.0)	276 ( 1.7)	49 ( 1.0)	277 ( 1.7)»
RHODE ISLAND	49 ( 1.2)	271 ( 1.2)»>	51 ( 1.2)	267 ( 1.4)»
SOUTH CAROLINA†	47 ( 1.1)	262 ( 1.8)	53 ( 1.1)	259 ( 1.7)
TENNESSEE	50 ( 1.1)	263 ( 1.8)	50 ( 1.1)	263 ( 1.5)»>
TEXAS	47 ( 1.3)	273 ( 1.7)»	53 ( 1.3)	268 ( 1.7)»
UTAH	50 ( 0.9)	278 ( 1.1)	50 ( 0.9)	275 ( 1.3)
VERMONT†	51 ( 1.4)	281 ( 1.3)	49 ( 1.4)	278 ( 1.4)
VIRGINIA	50 ( 1.2)	273 ( 1.7)»	50 ( 1.2)	267 ( 1.8)
WASHINGTON	51 ( 0.9)	276 ( 1.6)	49 ( 0.9)	277 ( 1.3)
WEST VIRGINIA	50 ( 1.1)	264 ( 1.2)»	50 ( 1.1)	266 ( 1.3)»>
WISCONSIN†	51 ( 1.0)	283 ( 1.7)»	49 ( 1.0)	282 ( 1.6)»
WYOMING	51 ( 0.8)	276 ( 1.2)	49 ( 0.8)	274 ( 1.3)»
<b>Other Jurisdictions</b>				
DDESS	52 ( 2.1)	271 ( 3.9)	48 ( 2.1)	267 ( 2.2)
DoDDS	52 ( 1.2)	276 ( 1.3)	48 ( 1.2)	274 ( 1.9)
GUAM	53 ( 1.4)	235 ( 2.7)	47 ( 1.4)	242 ( 2.4)»

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).  
 » (») The value for the students was significantly higher (lower) than in the 1990 assessment at about the 95% confidence level using appropriate multiple comparison procedures.  
 > (<) The value for the students was significantly higher (lower) than in the 1992 assessment at about the 95% confidence level using appropriate multiple comparison procedures.  
 SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 2.8**

**1990 Mathematics Assessment**

POPULATION:  
REPORTED STATISTICS:  
BREAKDOWNS BY:

1990 Grade 8 Public School Students  
Percentage of Students and Average Mathematics Scale Score  
Race/Ethnicity



Which best describes your race or your ethnic background?	White		Black		Hispanic		Asian/Pacific Islander		American Indian	
	PCT ( SE)	SS ( SE)	PCT ( SE)	SS ( SE)	PCT ( SE)	SS ( SE)	PCT ( SE)	SS ( SE)	PCT ( SE)	SS ( SE)
<b>JURISDICTIONS</b>										
<b>Nation</b>										
NATION	70 ( 0.5)	270 ( 1.5)	16 ( 0.3)	237 ( 2.8)	10 ( 0.4)	242 ( 2.8)	2 ( 0.5)	279 ( 5.4)!	2 ( 0.7)	244 ( 9.0)!
NORTHEAST	80 ( 4.2)	274 ( 2.6)	12 ( 4.2)	246 ( 8.1)!	5 ( 1.2)	... ( ...)	3 ( 1.1)	... ( ...)	1 ( 0.3)	... ( ...)
SOUTHEAST	63 ( 3.0)	265 ( 2.9)	32 ( 3.0)	235 ( 4.5)	3 ( 0.8)	... ( ...)	1 ( 0.4)	... ( ...)	0 ( 0.1)	... ( ...)
CENTRAL	79 ( 2.6)	271 ( 2.4)	13 ( 3.2)	231 ( 5.2)!	5 ( 1.0)	... ( ...)	1 ( 0.4)	... ( ...)	1 ( 0.4)	... ( ...)
WEST	63 ( 2.0)	269 ( 3.3)	7 ( 2.0)	245 ( 5.9)!	21 ( 1.5)	244 ( 3.4)	4 ( 1.3)	... ( ...)	4 ( 2.3)	... ( ...)
<b>States</b>										
ALABAMA	64 ( 1.9)	263 ( 1.0)	29 ( 1.8)	234 ( 1.6)	5 ( 0.6)	227 ( 3.7)	1 ( 0.3)	... ( ...)	1 ( 0.2)	... ( ...)
ALASKA	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)
ARIZONA	59 ( 1.8)	271 ( 1.1)	3 ( 0.4)	245 ( 3.2)	29 ( 1.3)	242 ( 1.9)	2 ( 0.3)	... ( ...)	7 ( 1.5)	235 ( 2.5)!
ARKANSAS	72 ( 1.5)	265 ( 0.9)	22 ( 1.5)	232 ( 1.2)	4 ( 0.4)	230 ( 4.0)	1 ( 0.2)	... ( ...)	2 ( 0.3)	... ( ...)
CALIFORNIA	45 ( 1.8)	271 ( 1.5)	7 ( 0.8)	233 ( 3.4)	35 ( 1.4)	236 ( 1.6)	12 ( 1.1)	271 ( 2.8)	2 ( 0.4)	... ( ...)
COLORADO	73 ( 1.3)	274 ( 1.0)	4 ( 1.0)	237 ( 3.1)!	19 ( 1.6)	247 ( 1.4)	2 ( 0.3)	... ( ...)	2 ( 0.3)	... ( ...)
CONNECTICUT	77 ( 1.5)	278 ( 0.9)	10 ( 1.0)	241 ( 2.4)	10 ( 0.9)	237 ( 2.7)	2 ( 0.3)	... ( ...)	1 ( 0.2)	... ( ...)
DELAWARE	68 ( 1.0)	268 ( 1.0)	24 ( 0.9)	242 ( 1.8)	5 ( 0.5)	242 ( 4.9)	1 ( 0.2)	... ( ...)	1 ( 0.3)	... ( ...)
DISTRICT OF COLUMBIA	3 ( 0.4)	... ( ...)	84 ( 1.0)	231 ( 0.7)	10 ( 0.6)	217 ( 3.1)	1 ( 0.2)	... ( ...)	2 ( 0.3)	... ( ...)
FLORIDA	60 ( 2.0)	265 ( 1.4)	20 ( 1.2)	231 ( 1.7)	17 ( 2.1)	245 ( 2.6)	2 ( 0.4)	272 ( 5.1)	1 ( 0.2)	... ( ...)
GEORGIA	59 ( 1.8)	271 ( 1.5)	33 ( 1.7)	240 ( 1.5)	6 ( 0.6)	231 ( 3.3)	1 ( 0.2)	... ( ...)	1 ( 0.1)	... ( ...)
HAWAII	18 ( 0.8)	263 ( 2.0)	2 ( 0.3)	... ( ...)	10 ( 0.6)	231 ( 2.5)	67 ( 1.0)	252 ( 1.0)	1 ( 0.2)	... ( ...)
INDIANA	84 ( 1.2)	271 ( 1.0)	9 ( 1.2)	243 ( 2.9)	4 ( 0.7)	245 ( 3.6)	1 ( 0.3)	... ( ...)	1 ( 0.3)	... ( ...)
IOWA	91 ( 0.7)	280 ( 1.1)	2 ( 0.7)	... ( ...)	4 ( 0.4)	256 ( 3.9)	1 ( 0.2)	... ( ...)	1 ( 0.3)	... ( ...)
KENTUCKY	85 ( 1.1)	260 ( 1.2)	9 ( 1.0)	240 ( 2.4)	4 ( 0.5)	229 ( 3.5)	1 ( 0.2)	... ( ...)	1 ( 0.2)	... ( ...)
LOUISIANA	55 ( 2.1)	259 ( 1.4)	38 ( 1.9)	230 ( 1.3)	5 ( 0.6)	226 ( 4.2)	1 ( 0.2)	... ( ...)	1 ( 0.3)	... ( ...)
MAINE	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)
MARYLAND	59 ( 1.5)	273 ( 1.5)	28 ( 1.5)	238 ( 1.9)	7 ( 0.8)	237 ( 2.9)	4 ( 0.7)	291 ( 4.3)	1 ( 0.3)	... ( ...)
MASSACHUSETTS	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)
MICHIGAN	77 ( 1.4)	271 ( 1.0)	13 ( 1.1)	232 ( 1.5)	5 ( 0.6)	243 ( 3.2)	2 ( 0.4)	... ( ...)	2 ( 0.5)	... ( ...)
MINNESOTA	90 ( 0.9)	278 ( 0.9)	2 ( 0.5)	239 ( 4.7)!	3 ( 0.4)	239 ( 5.0)	3 ( 0.4)	270 ( 5.6)	2 ( 0.5)	... ( ...)
MISSISSIPPI	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)
MISSOURI	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)
MONTANA	87 ( 1.1)	283 ( 0.9)	0 ( 0.1)	... ( ...)	3 ( 0.4)	263 ( 3.8)	1 ( 0.3)	... ( ...)	8 ( 1.1)	257 ( 3.3)
NEBRASKA	88 ( 0.8)	279 ( 1.1)	5 ( 0.4)	235 ( 5.2)	5 ( 0.5)	253 ( 4.1)	1 ( 0.2)	... ( ...)	1 ( 0.2)	... ( ...)
NEW MEXICO	40 ( 1.3)	272 ( 1.2)	2 ( 0.4)	... ( ...)	45 ( 1.3)	247 ( 1.1)	1 ( 0.3)	... ( ...)	11 ( 0.8)	238 ( 1.4)
NEW YORK	60 ( 1.9)	274 ( 1.1)	17 ( 1.6)	236 ( 3.1)	17 ( 1.7)	237 ( 2.9)	4 ( 0.8)	278 ( 6.9)!	1 ( 0.3)	... ( ...)
NORTH CAROLINA	62 ( 1.7)	262 ( 1.3)	30 ( 1.3)	233 ( 1.3)	5 ( 0.5)	218 ( 3.3)	1 ( 0.2)	... ( ...)	3 ( 0.9)	233 ( 4.3)!
NORTH DAKOTA	91 ( 1.4)	284 ( 1.0)	1 ( 0.3)	... ( ...)	3 ( 0.4)	248 ( 6.0)	1 ( 0.4)	... ( ...)	5 ( 1.2)	242 ( 2.6)!
OREGON	85 ( 0.9)	274 ( 0.9)	1 ( 0.4)	... ( ...)	7 ( 0.6)	254 ( 2.8)	3 ( 0.3)	277 ( 4.3)	4 ( 0.5)	253 ( 3.8)
RHODE ISLAND	83 ( 0.8)	266 ( 0.7)	5 ( 0.5)	227 ( 3.1)	8 ( 0.5)	230 ( 2.4)	2 ( 0.3)	... ( ...)	1 ( 0.2)	... ( ...)
SOUTH CAROLINA	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)
TENNESSEE	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)
TEXAS	47 ( 2.1)	273 ( 1.3)	13 ( 1.3)	236 ( 1.8)	36 ( 2.1)	245 ( 1.9)	2 ( 0.6)	... ( ...)	1 ( 0.2)	... ( ...)
UTAH	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)
VERMONT	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)
VIRGINIA	68 ( 1.5)	272 ( 1.6)	23 ( 1.5)	242 ( 1.6)	5 ( 0.5)	243 ( 4.1)	4 ( 0.4)	295 ( 4.2)	1 ( 0.2)	... ( ...)
WASHINGTON	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)
WEST VIRGINIA	90 ( 0.7)	258 ( 0.9)	3 ( 0.5)	235 ( 4.1)	4 ( 0.4)	232 ( 4.2)	1 ( 0.2)	... ( ...)	2 ( 0.3)	... ( ...)
WISCONSIN	85 ( 1.2)	279 ( 1.1)	8 ( 1.1)	237 ( 4.2)	4 ( 0.3)	250 ( 3.8)	2 ( 0.3)	... ( ...)	1 ( 0.2)	... ( ...)
WYOMING	86 ( 0.8)	275 ( 0.7)	1 ( 0.2)	... ( ...)	9 ( 0.6)	255 ( 2.2)	1 ( 0.2)	... ( ...)	3 ( 0.4)	257 ( 3.4)
<b>Other Jurisdictions</b>										
DDESS	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)
DoDDS	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)
GUAM	7 ( 0.7)	257 ( 3.5)	1 ( 0.4)	... ( ...)	19 ( 1.0)	210 ( 1.9)	72 ( 1.2)	235 ( 0.9)	1 ( 0.2)	... ( ...)

— State or other jurisdiction did not participate in the NAEP assessment year presented in this table.

... Characteristics of the sample do not permit a reliable estimate.

! Interpret with caution — the nature of the sample does not allow accurate determination of the variability of this statistic.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.



**TABLE 2.8** (continued)

**1992 Mathematics Assessment**



POPULATION:

1992 Grade 8 Public School Students

REPORTED STATISTICS:

Percentage of Students and Average Mathematics Scale Score

BREAKDOWNS BY:

Race/Ethnicity

Which best describes your race or your ethnic background?	White		Black		Hispanic		Asian/Pacific Islander		American Indian	
	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )
<b>JURISDICTIONS</b>										
<b>Nation</b>										
NATION	69 ( 0.4)	277 ( 1.1)»	16 ( 0.2)	237 ( 1.3)	10 ( 0.3)	245 ( 1.3)	2 ( 0.2)	287 ( 6.5)	1 ( 0.2)	255 ( 2.9)
NORTHEAST	67 ( 2.6)	279 ( 3.3)	19 ( 1.5)	240 ( 3.8)	10 ( 1.7)	242 ( 3.8)!	2 ( 0.5)	...	1 ( 0.3)	...
SOUTHEAST	68 ( 1.8)	269 ( 1.1)	27 ( 1.8)	234 ( 1.7)	4 ( 0.7)	241 ( 2.7)!	1 ( 0.3)	...	1 ( 0.2)	...
CENTRAL	79 ( 2.0)	281 ( 2.0)	13 ( 1.9)	240 ( 3.5)	5 ( 0.8)	247 ( 4.2)	2 ( 0.5)	...	1 ( 0.4)	...
WEST	63 ( 1.5)	277 ( 2.4)	8 ( 1.3)	235 ( 3.5)	21 ( 1.7)	247 ( 1.6)	5 ( 0.8)	287 ( 11.2)	2 ( 0.7)	...
<b>States</b>										
ALABAMA	61 ( 2.3)	265 ( 1.4)	32 ( 2.1)	232 ( 2.2)	4 ( 0.6)	221 ( 5.3)	1 ( 0.2)	...	2 ( 0.4)	...
ALASKA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
ARIZONA	60 ( 2.1)	276 ( 1.1)»	4 ( 0.5)	252 ( 3.3)	28 ( 1.6)	248 ( 2.7)	2 ( 0.3)	...	6 ( 1.3)	252 ( 2.7)
ARKANSAS	72 ( 1.4)	265 ( 1.0)	22 ( 1.3)	231 ( 1.8)	4 ( 0.4)	229 ( 4.1)	1 ( 0.2)	...	1 ( 0.2)	...
CALIFORNIA	44 ( 1.8)	277 ( 1.9)	7 ( 1.1)	234 ( 3.6)	36 ( 1.7)	241 ( 2.0)	11 ( 1.0)	277 ( 2.8)	1 ( 0.2)	...
COLORADO	74 ( 1.2)	278 ( 1.0)»	4 ( 0.6)	242 ( 4.4)	18 ( 1.1)	255 ( 1.6)»	2 ( 0.3)	...	2 ( 0.3)	...
CONNECTICUT	72 ( 1.6)	284 ( 0.9)»	12 ( 1.1)	243 ( 2.9)	12 ( 0.9)	242 ( 2.4)	3 ( 0.4)	287 ( 7.9)	0 ( 0.1)	...
DELAWARE	65 ( 0.9)	273 ( 1.0)»	25 ( 1.1)	242 ( 1.8)	6 ( 0.6)	240 ( 3.3)	2 ( 0.3)	...	2 ( 0.3)	...
DISTRICT OF COLUMBIA	3 ( 0.2)	...	85 ( 0.8)	234 ( 0.9)»	10 ( 0.7)	227 ( 3.7)	1 ( 0.2)	...	1 ( 0.3)	...
FLORIDA	56 ( 2.1)	273 ( 1.3)»	23 ( 2.0)	237 ( 2.3)	18 ( 2.0)	246 ( 2.5)	2 ( 0.3)	...	1 ( 0.2)	...
GEORGIA	59 ( 2.1)	271 ( 1.3)	35 ( 1.9)	242 ( 1.3)	4 ( 0.5)	234 ( 5.5)	2 ( 0.3)	...	0 ( 0.1)	...
HAWAII	17 ( 0.9)	266 ( 1.6)	3 ( 0.3)	...	11 ( 0.7)	239 ( 2.2)	66 ( 1.1)	259 ( 1.1)»	1 ( 0.2)	...
INDIANA	85 ( 1.3)	274 ( 1.2)	8 ( 1.1)	244 ( 2.5)	4 ( 0.6)	250 ( 4.5)	1 ( 0.2)	...	1 ( 0.2)	...
IOWA	92 ( 0.7)	285 ( 1.0)»	2 ( 0.4)	...	4 ( 0.4)	262 ( 3.7)	1 ( 0.2)	...	1 ( 0.2)	...
KENTUCKY	87 ( 1.0)	265 ( 1.1)»	9 ( 1.0)	242 ( 2.6)	3 ( 0.4)	233 ( 4.5)	1 ( 0.2)	...	1 ( 0.2)	...
LOUISIANA	54 ( 1.7)	263 ( 1.7)	39 ( 1.5)	233 ( 2.1)	5 ( 0.5)	229 ( 3.5)	2 ( 0.4)	...	1 ( 0.2)	...
MAINE	94 ( 0.5)	280 ( 0.9)	0 ( 0.1)	...	2 ( 0.3)	...	1 ( 0.2)	...	3 ( 0.4)	262 ( 4.4)
MARYLAND	60 ( 1.8)	279 ( 1.5)»	29 ( 1.8)	240 ( 2.0)	6 ( 0.6)	241 ( 3.2)	3 ( 0.5)	287 ( 4.6)	1 ( 0.2)	...
MASSACHUSETTS	83 ( 1.1)	278 ( 1.1)	5 ( 1.0)	244 ( 4.9)	8 ( 1.5)	241 ( 3.4)	2 ( 0.4)	...	1 ( 0.2)	...
MICHIGAN	73 ( 1.6)	277 ( 1.5)»	18 ( 1.9)	233 ( 1.8)	5 ( 0.8)	249 ( 3.9)	1 ( 0.3)	...	2 ( 0.3)	...
MINNESOTA	91 ( 1.0)	284 ( 0.9)»	2 ( 0.3)	...	3 ( 0.5)	254 ( 3.7)	2 ( 0.3)	...	1 ( 0.4)	...
MISSISSIPPI	49 ( 1.9)	263 ( 1.4)	44 ( 1.8)	231 ( 1.4)	6 ( 0.6)	224 ( 3.1)	0 ( 0.1)	...	1 ( 0.2)	...
MISSOURI	82 ( 1.5)	276 ( 1.0)	12 ( 1.4)	242 ( 2.9)	3 ( 0.3)	251 ( 4.1)	1 ( 0.2)	...	2 ( 0.3)	...
MONTANA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
NEBRASKA	87 ( 1.1)	282 ( 1.1)	5 ( 0.9)	237 ( 4.7)	6 ( 0.7)	255 ( 3.1)	1 ( 0.2)	...	2 ( 0.4)	...
NEW MEXICO	44 ( 1.5)	273 ( 1.2)	2 ( 0.4)	...	49 ( 1.4)	249 ( 1.0)	1 ( 0.3)	...	4 ( 0.7)«	250 ( 2.9)»
NEW YORK	61 ( 2.7)	280 ( 1.1)»	17 ( 2.2)	233 ( 4.4)	14 ( 2.0)	244 ( 4.7)	4 ( 0.6)	281 ( 6.7)	1 ( 0.3)	...
NORTH CAROLINA	68 ( 1.4)	267 ( 1.0)»	27 ( 1.3)	239 ( 1.7)»	3 ( 0.3)	239 ( 4.7)»	1 ( 0.2)	...	2 ( 0.4)	...
NORTH DAKOTA	93 ( 0.8)	284 ( 1.1)	0 ( 0.1)	...	3 ( 0.3)	...	1 ( 0.2)	...	3 ( 0.7)	262 ( 4.3)!
OREGON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
RHODE ISLAND	81 ( 0.7)	271 ( 0.8)»	6 ( 0.6)	241 ( 2.9)»	8 ( 0.4)	233 ( 2.7)	3 ( 0.4)	264 ( 3.4)	2 ( 0.3)	...
SOUTH CAROLINA	58 ( 1.5)	274 ( 1.1)	35 ( 1.3)	242 ( 1.0)	6 ( 0.6)	234 ( 2.6)	1 ( 0.2)	...	1 ( 0.2)	...
TENNESSEE	75 ( 2.0)	266 ( 1.1)	21 ( 2.1)	235 ( 2.4)	3 ( 0.3)	229 ( 4.8)	0 ( 0.1)	...	1 ( 0.2)	...
TEXAS	48 ( 1.9)	279 ( 1.5)»	12 ( 1.6)	244 ( 2.0)»	36 ( 2.0)	249 ( 1.2)	3 ( 0.4)	301 ( 4.8)	1 ( 0.3)	...
UTAH	90 ( 0.9)	276 ( 0.8)	1 ( 0.2)	...	7 ( 0.6)	254 ( 2.2)	2 ( 0.3)	...	2 ( 0.2)	...
VERMONT	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
VIRGINIA	69 ( 1.9)	275 ( 1.1)	22 ( 1.6)	245 ( 1.8)	5 ( 0.6)	254 ( 4.0)	4 ( 0.5)	281 ( 3.9)	1 ( 0.2)	...
WASHINGTON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
WEST VIRGINIA	91 ( 0.9)	261 ( 1.0)	4 ( 0.8)	244 ( 3.7)	3 ( 0.3)	231 ( 4.9)	0 ( 0.1)	...	2 ( 0.3)	...
WISCONSIN	86 ( 1.7)	282 ( 1.1)	7 ( 1.2)	247 ( 6.7)	4 ( 0.8)	248 ( 4.0)	1 ( 0.2)	...	2 ( 0.6)	262 ( 6.0)!
WYOMING	86 ( 1.7)	278 ( 0.8)»	1 ( 0.2)	...	9 ( 0.6)	258 ( 2.1)	1 ( 0.2)	...	4 ( 1.6)	251 ( 2.3)!
<b>Other Jurisdictions</b>										
DDESS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
DoDDS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
GUAM	5 ( 0.5)	267 ( 5.5)	1 ( 0.3)	...	15 ( 0.9)	218 ( 2.9)	76 ( 1.1)	237 ( 1.1)	1 ( 0.1)	...

— State or other jurisdiction did not participate in the NAEP assessment year presented in this table.

... Characteristics of the sample do not permit a reliable estimate.

» (») The value for the students was significantly higher (lower) than in the 1990 assessment at about the 95% confidence level using appropriate multiple comparison procedures.

! Interpret with caution — the nature of the sample does not allow accurate determination of the variability of this statistic.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 2.8** (continued)

**1996 Mathematics Assessment**



POPULATION:

1996 Grade 8 Public School Students

REPORTED STATISTICS:

Percentage of Students and Average Mathematics Scale Score

BREAKDOWNS BY:

Race/Ethnicity

Which best describes your race or your ethnic background?	White		Black		Hispanic		Asian/Pacific Islander		American Indian	
	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )
<b>JURISDICTIONS</b>										
<b>Nation</b>										
NATION	68 ( 0.5)◀	281 ( 1.4)»	15 ( 0.4)◀	242 ( 2.1)	13 ( 0.3)»»	250 ( 2.1)	3 ( 0.3)	271 ( 3.8)	1 ( 0.3)	263 ( 3.3)!
NORTHEAST	68 ( 3.8)	285 ( 4.7)	21 ( 3.9)	251 ( 2.0)!	8 ( 2.0)	265 ( 3.6)!	2 ( 0.7)	...	0 ( 0.1)	...
SOUTHEAST	69 ( 3.8)	275 ( 2.2)	22 ( 3.2)	234 ( 2.8)	6 ( 1.1)	243 ( 5.3)!	1 ( 0.4)	...	2 ( 1.0)	...
CENTRAL	81 ( 3.5)	284 ( 2.2)»	13 ( 3.1)	239 ( 5.3)!	5 ( 1.0)	...	1 ( 0.3)	...	1 ( 0.2)	...
WEST	58 ( 2.6)	280 ( 2.3)	8 ( 1.9)	246 ( 2.4)!	26 ( 1.6)	249 ( 2.5)	7 ( 1.1)	265 ( 4.3)	1 ( 0.3)	...
<b>States</b>										
ALABAMA	59 ( 2.3)	271 ( 2.4)»	34 ( 2.2)	233 ( 1.8)	4 ( 0.5)	232 ( 5.0)	1 ( 0.2)	...	2 ( 0.5)	...
ALASKA†	68 ( 1.8)	287 ( 1.5)	4 ( 0.4)	...	6 ( 0.8)	253 ( 6.5)	5 ( 0.5)	277 ( 6.7)	16 ( 1.6)	257 ( 4.7)
ARIZONA	58 ( 2.2)	278 ( 1.2)»	3 ( 0.4)	254 ( 3.5)	30 ( 1.7)	251 ( 2.4)»	2 ( 0.3)	...	6 ( 1.3)	254 ( 8.6)!
ARKANSAS†	74 ( 2.2)	270 ( 1.3)»	20 ( 1.9)	235 ( 3.0)	3 ( 0.5)	...	1 ( 0.4)	...	1 ( 0.4)	...
CALIFORNIA	39 ( 2.1)	279 ( 1.5)»	8 ( 0.8)	239 ( 3.9)	38 ( 1.8)	246 ( 1.8)»	12 ( 1.3)	279 ( 4.0)	1 ( 0.3)	...
COLORADO	69 ( 1.4)	283 ( 1.0)»»	5 ( 0.9)	255 ( 2.8)	21 ( 1.5)	257 ( 2.3)»	3 ( 0.3)	287 ( 4.9)	2 ( 0.4)	...
CONNECTICUT	77 ( 1.4)	288 ( 1.1)»»	9 ( 1.0)	245 ( 2.3)	11 ( 1.0)	252 ( 1.8)»»	3 ( 0.4)	281 ( 6.2)	1 ( 0.2)	...
DELAWARE	66 ( 1.0)	275 ( 1.2)»	24 ( 0.8)	244 ( 2.5)	5 ( 0.6)	244 ( 4.6)	3 ( 0.4)	...	2 ( 0.3)	...
DISTRICT OF COLUMBIA	4 ( 0.5)	303 ( 8.6)	83 ( 1.2)	231 ( 1.4)	10 ( 1.0)	221 ( 3.4)	2 ( 0.4)	...	1 ( 0.3)	...
FLORIDA	54 ( 2.1)	278 ( 1.5)»	22 ( 2.0)	236 ( 2.5)	21 ( 2.2)	252 ( 2.3)	2 ( 0.3)	...	1 ( 0.2)	...
GEORGIA	57 ( 2.5)	276 ( 1.9)	36 ( 2.5)	241 ( 1.5)	4 ( 0.5)	246 ( 4.9)»	2 ( 0.4)	...	1 ( 0.2)	...
HAWAII	15 ( 0.9)	273 ( 2.3)»	3 ( 0.4)	...	18 ( 0.7)»»	244 ( 2.7)»	61 ( 1.0)◀	266 ( 1.1)»»	2 ( 0.4)	...
INDIANA	82 ( 1.5)	281 ( 1.3)»»	10 ( 1.2)	247 ( 2.1)	6 ( 0.8)	254 ( 4.8)	1 ( 0.2)	...	1 ( 0.2)	...
IOWA†	91 ( 0.9)	285 ( 1.3)»	3 ( 0.6)	255 ( 4.4)!	3 ( 0.5)	268 ( 4.7)	2 ( 0.4)	...	1 ( 0.2)	...
KENTUCKY	87 ( 1.0)	269 ( 1.1)»	9 ( 0.9)	248 ( 3.3)	2 ( 0.4)	...	1 ( 0.1)	...	1 ( 0.2)	...
LOUISIANA	53 ( 2.3)	266 ( 1.3)»	41 ( 2.4)	235 ( 1.8)	4 ( 0.6)	242 ( 3.5)»	1 ( 0.3)	...	1 ( 0.4)	...
MAINE	95 ( 0.7)	285 ( 1.3)»	1 ( 0.2)	...	2 ( 0.3)	...	1 ( 0.3)	...	2 ( 0.3)	...
MARYLAND†	55 ( 2.2)	285 ( 1.9)»	33 ( 2.2)	243 ( 1.8)	5 ( 0.5)	248 ( 4.2)	5 ( 1.0)	306 ( 5.4)!	1 ( 0.3)	...
MASSACHUSETTS	80 ( 1.6)	283 ( 1.5)»	7 ( 1.0)	250 ( 4.2)	8 ( 1.0)	242 ( 4.1)	5 ( 0.6)	277 ( 6.4)	1 ( 0.2)	...
MICHIGAN†	75 ( 2.3)	285 ( 1.6)»»	15 ( 2.1)	246 ( 3.7)»»	5 ( 0.6)	249 ( 4.4)	2 ( 0.5)	...	1 ( 0.3)	...
MINNESOTA	86 ( 1.6)	287 ( 1.2)»	4 ( 0.7)	248 ( 5.0)	3 ( 0.4)	266 ( 5.9)»	5 ( 1.0)	274 ( 5.1)!	2 ( 0.5)	...
MISSISSIPPI	48 ( 1.9)	266 ( 1.2)	45 ( 1.8)	236 ( 1.4)	5 ( 0.6)	225 ( 3.3)	1 ( 0.3)	...	0 ( 0.1)	...
MISSOURI	82 ( 1.2)	278 ( 1.3)	12 ( 1.0)	243 ( 3.8)	3 ( 0.5)	259 ( 4.3)	1 ( 0.2)	...	1 ( 0.3)	...
MONTANA†	84 ( 1.8)	287 ( 1.2)	0 ( 0.1)	...	5 ( 0.5)	256 ( 5.6)	1 ( 0.4)	...	10 ( 1.7)	265 ( 3.6)
NEBRASKA	87 ( 0.9)	286 ( 1.0)»»	4 ( 0.6)	256 ( 3.3)»»	6 ( 0.7)	253 ( 4.2)	2 ( 0.2)	...	1 ( 0.3)	...
NEW MEXICO	36 ( 1.7)	280 ( 1.0)»»	3 ( 0.5)	...	51 ( 1.7)	252 ( 1.5)»	1 ( 0.3)	...	9 ( 1.4)	252 ( 2.6)»
NEW YORK†	60 ( 2.4)	283 ( 1.3)»	16 ( 1.8)	246 ( 3.0)	16 ( 1.3)	245 ( 2.7)	6 ( 0.9)	283 ( 5.9)	2 ( 0.5)	...
NORTH CAROLINA	64 ( 1.8)	278 ( 1.3)»»	28 ( 1.2)	247 ( 1.6)»»	4 ( 0.5)	253 ( 3.5)»	2 ( 0.3)	...	2 ( 1.1)	...
NORTH DAKOTA	92 ( 0.9)	286 ( 0.9)	1 ( 0.2)	...	3 ( 0.3)	264 ( 5.0)	1 ( 0.2)	...	3 ( 0.8)	252 ( 3.8)!
OREGON	82 ( 1.4)	279 ( 1.3)»	3 ( 0.7)	...	8 ( 0.8)	259 ( 3.7)	4 ( 0.5)	285 ( 4.4)	4 ( 0.6)	257 ( 4.5)
RHODE ISLAND	79 ( 0.7)◀	275 ( 0.8)»»	5 ( 0.5)	244 ( 3.9)»	10 ( 0.5)	239 ( 4.3)	4 ( 0.3)	267 ( 4.7)	1 ( 0.3)	...
SOUTH CAROLINA†	53 ( 1.8)	274 ( 1.6)	40 ( 1.8)	246 ( 1.5)	4 ( 0.4)	235 ( 6.0)	1 ( 0.4)	...	2 ( 0.3)	...
TENNESSEE	78 ( 1.3)	271 ( 1.5)	18 ( 1.2)	234 ( 2.9)	3 ( 0.5)	246 ( 5.2)	1 ( 0.2)	...	1 ( 0.2)	...
TEXAS	48 ( 2.0)	285 ( 1.4)»»	12 ( 1.3)	249 ( 2.6)»	37 ( 2.2)	256 ( 1.8)»»	3 ( 0.6)	299 ( 5.6)!	1 ( 0.2)	...
UTAH	87 ( 0.8)	279 ( 0.9)	1 ( 0.2)	...	8 ( 0.7)	256 ( 2.9)	2 ( 0.2)	274 ( 3.6)	2 ( 0.2)	...
VERMONT†	93 ( 0.7)	281 ( 0.9)	1 ( 0.2)	...	3 ( 0.4)	...	1 ( 0.3)	...	2 ( 0.4)	...
VIRGINIA	66 ( 2.2)	279 ( 1.3)»	24 ( 2.2)	244 ( 2.6)	5 ( 0.5)	258 ( 4.8)»	4 ( 0.6)	284 ( 4.6)	1 ( 0.2)	...
WASHINGTON	76 ( 1.9)	282 ( 1.2)	4 ( 0.6)	245 ( 4.3)	9 ( 1.2)	251 ( 3.2)	6 ( 0.9)	278 ( 3.4)	4 ( 0.8)	255 ( 5.3)
WEST VIRGINIA	92 ( 0.8)	266 ( 1.1)»»	3 ( 0.7)	246 ( 3.8)!	3 ( 0.4)	244 ( 5.6)	1 ( 0.1)	...	2 ( 0.3)	...
WISCONSIN†	84 ( 1.5)	288 ( 1.2)»»	6 ( 1.0)	240 ( 2.6)	5 ( 0.7)	258 ( 3.5)	2 ( 0.5)	...	2 ( 0.4)	...
WYOMING	86 ( 0.7)	278 ( 0.8)»	1 ( 0.1)	...	9 ( 0.6)	256 ( 3.2)	1 ( 0.1)	...	3 ( 0.4)	250 ( 5.4)
<b>Other Jurisdictions</b>										
DDESS	40 ( 1.9)	285 ( 4.0)	30 ( 1.8)	252 ( 4.5)	22 ( 1.5)	264 ( 6.0)	4 ( 0.9)	...	2 ( 0.8)	...
DoDDS	46 ( 1.1)	284 ( 1.4)	20 ( 1.0)	255 ( 2.0)	15 ( 0.7)	268 ( 2.6)	13 ( 0.6)	280 ( 3.4)	2 ( 0.3)	...
GUAM	4 ( 0.5)	...	1 ( 0.4)	...	17 ( 1.4)	218 ( 4.9)	76 ( 1.4)	242 ( 2.1)»	0 ( 0.2)	...

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).

... Characteristics of the sample do not permit a reliable estimate.

» (◀) The value for the students was significantly higher (lower) than in the 1990 assessment at about the 95% confidence level using appropriate multiple comparison procedures.

> (<) The value for the students was significantly higher (lower) than in the 1992 assessment at about the 95% confidence level using appropriate multiple comparison procedures.

! Interpret with caution — the nature of the sample does not allow accurate determination of the variability of this statistic.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 2.9**

**1990 Mathematics Assessment**



POPULATION:

1990 Grade 8 Public School Students

REPORTED STATISTICS:

Percentage of Students and Average Mathematics Scale Score

BREAKDOWNS BY:

Parents' Education Level

*What is the highest level of education either your mother or father obtained?*

Did Not Finish High School	High School Graduate	Some Education After High School	College Graduate	I Don't Know
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JURISDICTIONS	PCT ( SE )		SS ( SE )		PCT ( SE )		SS ( SE )		PCT ( SE )		SS ( SE )		PCT ( SE )		SS ( SE )		PCT ( SE )		SS ( SE )			
<b>Nation</b>																						
NATION	10 ( 0.8 )	241 ( 2.0 )	25 ( 1.2 )	255 ( 1.5 )	17 ( 0.9 )	267 ( 1.6 )	39 ( 1.9 )	274 ( 1.6 )	9 ( 0.7 )	240 ( 3.3 )												
NORTHEAST	7 ( 2.2 )	... ( ... )	23 ( 3.3 )	260 ( 2.6 )	15 ( 3.0 )	267 ( 3.5 )	49 ( 5.8 )	282 ( 3.5 )	7 ( 1.5 )	... ( ... )												
SOUTHEAST	14 ( 2.1 )	237 ( 3.2 )	27 ( 1.6 )	246 ( 4.2 )	18 ( 1.7 )	262 ( 2.5 )	32 ( 3.3 )	272 ( 3.3 )	9 ( 1.6 )	231 ( 5.0 )												
CENTRAL	7 ( 0.9 )	... ( ... )	33 ( 2.2 )	263 ( 2.3 )	19 ( 0.8 )	268 ( 3.9 )	35 ( 1.8 )	272 ( 3.5 )	6 ( 1.2 )	... ( ... )												
WEST	10 ( 1.3 )	245 ( 3.7 )	19 ( 2.5 )	249 ( 2.6 )	16 ( 1.2 )	269 ( 2.9 )	42 ( 4.0 )	273 ( 2.8 )	13 ( 1.2 )	241 ( 5.3 )												
<b>States</b>																						
ALABAMA	12 ( 0.8 )	239 ( 2.1 )	30 ( 1.0 )	246 ( 1.7 )	18 ( 0.7 )	260 ( 1.8 )	34 ( 1.5 )	263 ( 1.8 )	6 ( 0.5 )	238 ( 3.0 )												
ALASKA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )												
ARIZONA	9 ( 0.6 )	240 ( 2.2 )	22 ( 0.9 )	251 ( 1.7 )	20 ( 0.9 )	265 ( 1.9 )	37 ( 1.2 )	272 ( 1.7 )	11 ( 0.8 )	243 ( 2.1 )												
ARKANSAS	12 ( 0.6 )	244 ( 1.5 )	32 ( 0.9 )	250 ( 1.2 )	17 ( 0.8 )	266 ( 1.6 )	31 ( 1.1 )	267 ( 1.4 )	8 ( 0.6 )	238 ( 2.6 )												
CALIFORNIA	11 ( 0.7 )	241 ( 2.6 )	17 ( 0.9 )	246 ( 1.8 )	18 ( 0.7 )	262 ( 2.0 )	38 ( 1.6 )	271 ( 1.8 )	16 ( 0.9 )	238 ( 1.9 )												
COLORADO	7 ( 0.7 )	243 ( 2.5 )	19 ( 0.9 )	254 ( 1.5 )	19 ( 0.9 )	271 ( 1.3 )	47 ( 1.6 )	277 ( 1.2 )	8 ( 0.6 )	249 ( 2.5 )												
CONNECTICUT	5 ( 0.4 )	243 ( 3.0 )	23 ( 1.2 )	256 ( 1.9 )	16 ( 0.8 )	269 ( 1.6 )	47 ( 1.6 )	284 ( 1.0 )	7 ( 0.7 )	248 ( 3.6 )												
DELAWARE	8 ( 0.8 )	243 ( 2.7 )	31 ( 1.0 )	249 ( 1.8 )	17 ( 0.8 )	265 ( 1.9 )	38 ( 0.9 )	275 ( 1.6 )	6 ( 0.5 )	244 ( 3.5 )												
DISTRICT OF COLUMBIA	8 ( 0.7 )	225 ( 2.2 )	31 ( 1.0 )	224 ( 1.4 )	17 ( 0.8 )	238 ( 1.8 )	34 ( 1.2 )	239 ( 1.9 )	10 ( 0.7 )	221 ( 2.48 )												
FLORIDA	9 ( 0.9 )	237 ( 2.6 )	26 ( 0.9 )	245 ( 1.5 )	18 ( 0.7 )	263 ( 1.7 )	37 ( 1.3 )	267 ( 1.6 )	10 ( 0.7 )	242 ( 2.7 )												
GEORGIA	11 ( 0.9 )	245 ( 1.8 )	29 ( 1.1 )	248 ( 1.7 )	18 ( 0.9 )	267 ( 1.8 )	36 ( 1.8 )	272 ( 2.1 )	6 ( 0.6 )	240 ( 3.4 )												
HAWAII	5 ( 0.5 )	235 ( 3.2 )	27 ( 0.9 )	241 ( 1.5 )	18 ( 0.7 )	261 ( 1.9 )	36 ( 1.0 )	262 ( 1.3 )	14 ( 0.8 )	236 ( 2.6 )												
INDIANA	8 ( 0.7 )	251 ( 2.8 )	31 ( 1.1 )	260 ( 1.4 )	21 ( 0.9 )	272 ( 1.6 )	35 ( 1.4 )	278 ( 1.6 )	4 ( 0.4 )	246 ( 3.0 )												
IOWA	5 ( 0.5 )	258 ( 3.3 )	27 ( 1.0 )	270 ( 1.6 )	21 ( 0.9 )	282 ( 1.4 )	42 ( 1.3 )	285 ( 1.5 )	4 ( 0.5 )	266 ( 2.9 )												
KENTUCKY	16 ( 1.1 )	240 ( 1.9 )	32 ( 1.1 )	253 ( 1.3 )	18 ( 0.8 )	269 ( 1.4 )	26 ( 1.7 )	268 ( 1.9 )	8 ( 0.7 )	242 ( 2.9 )												
LOUISIANA	13 ( 0.8 )	235 ( 2.1 )	33 ( 1.1 )	242 ( 1.6 )	19 ( 0.9 )	255 ( 1.4 )	28 ( 1.2 )	254 ( 2.1 )	7 ( 0.5 )	236 ( 2.5 )												
MAINE	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )												
MARYLAND	7 ( 0.7 )	244 ( 3.1 )	27 ( 1.3 )	247 ( 1.6 )	17 ( 0.7 )	263 ( 2.0 )	43 ( 1.8 )	274 ( 1.8 )	6 ( 0.4 )	247 ( 2.5 )												
MASSACHUSETTS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )												
MICHIGAN	6 ( 0.6 )	248 ( 2.5 )	27 ( 1.0 )	255 ( 1.7 )	20 ( 0.8 )	269 ( 1.7 )	39 ( 1.5 )	275 ( 1.5 )	8 ( 0.6 )	250 ( 2.4 )												
MINNESOTA	4 ( 0.3 )	252 ( 3.6 )	27 ( 1.0 )	263 ( 1.5 )	22 ( 0.8 )	282 ( 1.5 )	42 ( 1.2 )	285 ( 1.3 )	6 ( 0.4 )	258 ( 2.9 )												
MISSISSIPPI	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )												
MISSOURI	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )												
MONTANA	5 ( 0.7 )	268 ( 2.7 )	23 ( 1.3 )	271 ( 2.0 )	23 ( 0.9 )	283 ( 1.8 )	45 ( 1.3 )	287 ( 1.3 )	4 ( 0.6 )	262 ( 3.0 )												
NEBRASKA	4 ( 0.5 )	251 ( 5.2 )	27 ( 1.0 )	266 ( 1.7 )	20 ( 0.7 )	278 ( 1.4 )	43 ( 1.0 )	286 ( 1.3 )	6 ( 0.5 )	257 ( 3.6 )												
NEW MEXICO	11 ( 0.8 )	241 ( 1.7 )	27 ( 1.1 )	248 ( 1.2 )	19 ( 0.8 )	263 ( 1.5 )	33 ( 1.0 )	272 ( 1.6 )	9 ( 0.7 )	234 ( 2.5 )												
NEW YORK	8 ( 0.7 )	242 ( 2.8 )	22 ( 0.9 )	252 ( 1.9 )	17 ( 0.9 )	265 ( 2.3 )	40 ( 1.2 )	273 ( 1.3 )	12 ( 0.8 )	242 ( 3.6 )												
NORTH CAROLINA	11 ( 0.7 )	235 ( 1.9 )	32 ( 1.0 )	242 ( 1.3 )	17 ( 0.8 )	258 ( 1.6 )	33 ( 1.3 )	263 ( 1.9 )	7 ( 0.5 )	230 ( 2.9 )												
NORTH DAKOTA	4 ( 0.7 )	254 ( 4.4 )	24 ( 1.3 )	273 ( 2.5 )	19 ( 0.8 )	282 ( 2.0 )	49 ( 1.3 )	288 ( 1.4 )	4 ( 0.5 )	263 ( 3.7 )												
OREGON	6 ( 0.6 )	250 ( 2.8 )	19 ( 0.8 )	258 ( 1.6 )	21 ( 0.8 )	277 ( 1.3 )	47 ( 1.4 )	280 ( 1.1 )	8 ( 0.5 )	254 ( 2.1 )												
RHODE ISLAND	8 ( 0.6 )	240 ( 2.3 )	26 ( 1.0 )	252 ( 1.3 )	15 ( 0.7 )	266 ( 1.8 )	41 ( 1.0 )	274 ( 1.1 )	10 ( 0.7 )	236 ( 2.3 )												
SOUTH CAROLINA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )												
TENNESSEE	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )												
TEXAS	17 ( 1.1 )	243 ( 1.8 )	23 ( 1.1 )	248 ( 1.7 )	15 ( 0.6 )	266 ( 2.0 )	34 ( 1.5 )	274 ( 1.5 )	10 ( 0.8 )	243 ( 2.5 )												
UTAH	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )												
VERMONT	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )												
VIRGINIA	10 ( 0.7 )	242 ( 2.3 )	27 ( 1.0 )	251 ( 1.3 )	16 ( 0.8 )	267 ( 1.7 )	40 ( 1.5 )	280 ( 2.1 )	7 ( 0.5 )	248 ( 2.6 )												
WASHINGTON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )												
WEST VIRGINIA	12 ( 0.9 )	241 ( 1.7 )	38 ( 1.3 )	250 ( 1.1 )	17 ( 0.8 )	263 ( 1.6 )	27 ( 1.5 )	270 ( 1.5 )	6 ( 0.5 )	240 ( 3.0 )												
WISCONSIN	5 ( 0.5 )	253 ( 3.3 )	31 ( 1.1 )	269 ( 1.4 )	23 ( 0.9 )	278 ( 1.5 )	34 ( 1.4 )	284 ( 1.8 )	6 ( 0.5 )	254 ( 3.0 )												
WYOMING	5 ( 0.4 )	255 ( 2.3 )	23 ( 1.0 )	263 ( 1.3 )	23 ( 0.8 )	276 ( 1.1 )	43 ( 1.0 )	280 ( 0.9 )	6 ( 0.5 )	246 ( 2.7 )												
<b>Other Jurisdictions</b>																						
DDESS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )												
DoDDS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )												
GUAM	10 ( 0.7 )	219 ( 2.7 )	30 ( 1.2 )	227 ( 1.6 )	11 ( 0.8 )	248 ( 2.7 )	27 ( 1.1 )	243 ( 1.4 )	22 ( 1.3 )	223 ( 1.8 )												

— State or other jurisdiction did not participate in the NAEP assessment year presented in this table.

... Characteristics of the sample do not permit a reliable estimate.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 2.9** (continued)

**1992 Mathematics Assessment**



POPULATION:

1992 Grade 8 Public School Students

REPORTED STATISTICS:

Percentage of Students and Average Mathematics Scale Score

BREAKDOWNS BY:

Parents' Education Level

*What is the highest level of education either your mother or father obtained?*

Did Not Finish High School	High School Graduate	Some Education After High School	College Graduate	I Don't Know
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JURISDICTIONS	PCT ( SE )		SS ( SE )		PCT ( SE )		SS ( SE )		PCT ( SE )		SS ( SE )		PCT ( SE )		SS ( SE )	
<b>Nation</b>																
NATION	8 ( 0.6 )	249 ( 1.8 )»	25 ( 0.8 )	257 ( 1.3 )	18 ( 0.6 )	270 ( 1.2 )	40 ( 1.4 )	279 ( 1.4 )	9 ( 0.5 )	251 ( 1.7 )»						
NORTHEAST	8 ( 0.9 )	247 ( 4.2 )	26 ( 2.2 )	260 ( 4.2 )	18 ( 1.1 )	268 ( 3.0 )	38 ( 3.1 )	282 ( 4.1 )	10 ( 1.2 )	251 ( 3.2 )						
SOUTHEAST	12 ( 1.6 )	247 ( 4.1 )	28 ( 1.4 )	250 ( 1.9 )	17 ( 0.8 )	264 ( 2.0 )	35 ( 1.9 )	270 ( 1.9 )	8 ( 1.0 )	249 ( 4.2 )						
CENTRAL	4 ( 0.7 )	... ( ... )	26 ( 1.7 )	265 ( 2.2 )	20 ( 1.4 )	274 ( 1.6 )	42 ( 2.7 )	284 ( 2.9 )	7 ( 0.8 )	259 ( 3.8 )						
WEST	9 ( 1.1 )	249 ( 2.4 )	19 ( 1.5 )	253 ( 2.9 )	18 ( 1.2 )	274 ( 2.6 )	43 ( 2.9 )	280 ( 2.6 )	11 ( 0.9 )	249 ( 2.8 )						
<b>States</b>																
ALABAMA	13 ( 0.9 )	240 ( 2.0 )	29 ( 1.1 )	245 ( 1.8 )	18 ( 0.7 )	259 ( 2.0 )	33 ( 1.6 )	262 ( 2.4 )	7 ( 0.6 )	238 ( 2.9 )						
ALASKA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )						
ARIZONA	10 ( 0.7 )	246 ( 2.5 )	21 ( 0.9 )	257 ( 1.6 )	22 ( 1.0 )	270 ( 1.5 )	36 ( 1.5 )	278 ( 1.4 )	12 ( 0.8 )	249 ( 2.7 )						
ARKANSAS	11 ( 0.7 )	247 ( 2.4 )	31 ( 1.1 )	249 ( 1.6 )	20 ( 0.8 )	264 ( 1.7 )	30 ( 1.1 )	264 ( 1.9 )	8 ( 0.6 )	246 ( 2.7 )						
CALIFORNIA	10 ( 0.9 )	242 ( 2.2 )	17 ( 0.9 )	252 ( 2.1 )	18 ( 1.0 )	266 ( 2.1 )	39 ( 1.8 )	276 ( 2.0 )	16 ( 1.1 )	241 ( 2.9 )						
COLORADO	6 ( 0.6 )	251 ( 2.3 )	21 ( 0.9 )	261 ( 1.5 )»	19 ( 0.9 )	276 ( 1.5 )	46 ( 1.2 )	282 ( 1.3 )	7 ( 0.5 )	253 ( 2.6 )						
CONNECTICUT	6 ( 0.6 )	246 ( 3.3 )	22 ( 0.9 )	261 ( 1.7 )	16 ( 0.8 )	273 ( 1.8 )	47 ( 1.3 )	288 ( 1.0 )»	9 ( 0.6 )	251 ( 2.4 )						
DELAWARE	6 ( 0.5 )	249 ( 4.0 )	30 ( 1.0 )	252 ( 1.7 )	18 ( 1.0 )	269 ( 2.2 )	39 ( 1.2 )	274 ( 1.3 )	8 ( 0.9 )	248 ( 3.3 )						
DISTRICT OF COLUMBIA	9 ( 0.7 )	226 ( 3.2 )	29 ( 0.8 )	225 ( 1.6 )	17 ( 0.8 )	241 ( 1.9 )	32 ( 1.0 )	245 ( 1.7 )	12 ( 0.6 )	230 ( 2.2 )						
FLORIDA	8 ( 0.7 )	245 ( 2.7 )	24 ( 1.1 )	251 ( 1.8 )	19 ( 0.7 )	267 ( 1.9 )	39 ( 1.5 )	269 ( 1.9 )	10 ( 0.7 )	245 ( 3.1 )						
GEORGIA	11 ( 0.8 )	245 ( 2.1 )	30 ( 1.2 )	250 ( 1.3 )	18 ( 0.7 )	265 ( 1.7 )	35 ( 1.7 )	271 ( 2.1 )	6 ( 0.6 )	246 ( 2.6 )						
HAWAII	6 ( 0.5 )	243 ( 3.4 )	25 ( 1.0 )	247 ( 1.8 )	15 ( 0.9 )	267 ( 1.9 )	38 ( 1.1 )	267 ( 1.5 )	16 ( 0.8 )	247 ( 2.0 )»						
INDIANA	8 ( 0.6 )	251 ( 2.5 )	32 ( 1.1 )	261 ( 1.5 )	21 ( 0.9 )	276 ( 1.8 )	33 ( 1.5 )	283 ( 1.5 )	6 ( 0.5 )	250 ( 3.3 )						
IOWA	4 ( 0.4 )	263 ( 2.3 )	25 ( 1.1 )	274 ( 1.3 )	21 ( 0.8 )	286 ( 1.5 )	44 ( 1.4 )	292 ( 1.2 )»	5 ( 0.4 )	267 ( 2.8 )						
KENTUCKY	15 ( 0.9 )	247 ( 1.7 )	32 ( 0.9 )	255 ( 1.5 )	19 ( 0.8 )	268 ( 1.6 )	28 ( 1.4 )	279 ( 1.5 )»	6 ( 0.4 )	243 ( 2.7 )						
LOUISIANA	10 ( 0.7 )	238 ( 2.4 )	30 ( 1.3 )	243 ( 1.6 )	20 ( 0.9 )	260 ( 1.7 )	32 ( 1.4 )	257 ( 2.5 )	7 ( 0.6 )	237 ( 3.7 )						
MAINE	6 ( 0.5 )	260 ( 2.6 )	26 ( 1.1 )	267 ( 1.1 )	22 ( 1.0 )	282 ( 1.5 )	40 ( 1.5 )	289 ( 1.4 )	5 ( 0.5 )	267 ( 2.6 )						
MARYLAND	6 ( 0.8 )	241 ( 3.7 )	25 ( 1.2 )	251 ( 1.8 )	18 ( 0.9 )	267 ( 1.9 )	44 ( 1.7 )	279 ( 1.7 )	7 ( 0.5 )	246 ( 3.8 )						
MASSACHUSETTS	7 ( 0.6 )	249 ( 3.2 )	21 ( 1.0 )	262 ( 1.3 )	17 ( 0.8 )	273 ( 1.8 )	48 ( 1.5 )	284 ( 1.3 )	7 ( 0.6 )	249 ( 2.6 )						
MICHIGAN	6 ( 0.5 )	250 ( 2.0 )	26 ( 0.9 )	258 ( 1.7 )	23 ( 0.9 )	271 ( 1.9 )	38 ( 1.6 )	278 ( 2.1 )	7 ( 0.6 )	249 ( 3.0 )						
MINNESOTA	3 ( 0.4 )	257 ( 4.2 )	22 ( 0.9 )»	271 ( 1.7 )»	21 ( 0.9 )	285 ( 1.8 )	48 ( 1.3 )	291 ( 1.0 )»	7 ( 0.6 )	269 ( 3.0 )						
MISSISSIPPI	13 ( 0.8 )	235 ( 1.8 )	29 ( 1.4 )	240 ( 1.6 )	16 ( 0.7 )	256 ( 2.0 )	36 ( 1.7 )	254 ( 1.6 )	7 ( 0.6 )	233 ( 2.8 )						
MISSOURI	8 ( 0.7 )	255 ( 2.4 )	29 ( 1.0 )	264 ( 1.6 )	22 ( 0.9 )	275 ( 1.4 )	36 ( 1.3 )	281 ( 1.6 )	6 ( 0.5 )	253 ( 2.9 )						
MONTANA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )						
NEBRASKA	4 ( 0.5 )	248 ( 3.3 )	24 ( 1.2 )	268 ( 1.6 )	20 ( 1.0 )	281 ( 1.6 )	46 ( 1.5 )	287 ( 1.2 )	6 ( 0.6 )	257 ( 3.8 )						
NEW MEXICO	11 ( 0.7 )	245 ( 1.9 )	26 ( 1.1 )	250 ( 1.4 )	20 ( 0.7 )	265 ( 1.4 )	34 ( 1.4 )	273 ( 1.4 )	10 ( 0.6 )	246 ( 2.0 )»						
NEW YORK	6 ( 0.8 )	244 ( 4.2 )	23 ( 1.0 )	257 ( 2.5 )	18 ( 1.1 )	272 ( 2.4 )	44 ( 1.8 )	278 ( 1.9 )	10 ( 1.0 )	241 ( 3.8 )						
NORTH CAROLINA	10 ( 0.6 )	241 ( 2.3 )	27 ( 0.9 )	247 ( 1.7 )	20 ( 0.8 )	266 ( 1.6 )»	36 ( 1.2 )	271 ( 1.4 )»	6 ( 0.5 )	241 ( 3.6 )						
NORTH DAKOTA	3 ( 0.5 )	260 ( 4.5 )	19 ( 1.3 )	272 ( 1.6 )	18 ( 0.7 )	284 ( 1.8 )	54 ( 1.2 )	289 ( 1.1 )	5 ( 0.5 )	273 ( 2.7 )						
OREGON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )						
RHODE ISLAND	8 ( 0.4 )	245 ( 2.1 )	22 ( 1.4 )	257 ( 1.6 )	18 ( 1.5 )	272 ( 1.5 )	43 ( 1.1 )	277 ( 1.1 )	8 ( 0.7 )	240 ( 2.5 )						
SOUTH CAROLINA	9 ( 0.6 )	249 ( 2.1 )	31 ( 0.9 )	249 ( 1.4 )	16 ( 0.7 )	269 ( 1.7 )	37 ( 1.4 )	273 ( 1.5 )	7 ( 0.3 )	248 ( 3.0 )						
TENNESSEE	12 ( 0.8 )	246 ( 2.0 )	29 ( 1.0 )	252 ( 1.6 )	21 ( 0.9 )	266 ( 1.8 )	33 ( 1.5 )	268 ( 2.1 )	5 ( 0.4 )	244 ( 3.6 )						
TEXAS	16 ( 1.0 )	248 ( 1.7 )	21 ( 1.0 )	254 ( 1.6 )	18 ( 0.8 )	273 ( 1.6 )	34 ( 1.6 )	281 ( 2.0 )»	11 ( 0.8 )	245 ( 2.4 )						
UTAH	3 ( 0.3 )	255 ( 3.2 )	15 ( 0.8 )	259 ( 1.8 )	22 ( 1.0 )	279 ( 1.2 )	53 ( 1.3 )	280 ( 1.0 )	7 ( 0.5 )	259 ( 2.7 )						
VERMONT	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )						
VIRGINIA	9 ( 0.6 )	249 ( 2.1 )	24 ( 0.9 )	253 ( 1.5 )	18 ( 0.8 )	271 ( 1.6 )	41 ( 1.5 )	283 ( 1.5 )	8 ( 0.6 )	252 ( 2.5 )						
WASHINGTON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )						
WEST VIRGINIA	13 ( 0.9 )	245 ( 1.8 )	33 ( 1.1 )	252 ( 1.2 )	18 ( 0.8 )	269 ( 1.4 )	29 ( 1.1 )	271 ( 1.5 )	7 ( 0.4 )	240 ( 2.3 )						
WISCONSIN	5 ( 0.6 )	255 ( 3.4 )	28 ( 1.8 )	270 ( 1.9 )	24 ( 0.8 )	283 ( 1.5 )	38 ( 2.4 )	287 ( 1.8 )	6 ( 0.6 )	256 ( 3.9 )						
WYOMING	5 ( 0.6 )	259 ( 3.2 )	23 ( 0.7 )	267 ( 1.1 )	22 ( 0.8 )	279 ( 1.7 )	42 ( 0.9 )	282 ( 0.9 )	7 ( 0.5 )	261 ( 2.2 )»						
<b>Other Jurisdictions</b>																
DDESS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )						
DoDDS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )						
GUAM	10 ( 0.9 )	224 ( 2.5 )	27 ( 1.1 )	230 ( 1.9 )	13 ( 0.7 )	245 ( 2.4 )	28 ( 1.2 )	246 ( 1.9 )	22 ( 1.2 )	227 ( 2.0 )						

— State or other jurisdiction did not participate in the NAEP assessment year presented in this table.  
 ... Characteristics of the sample do not permit a reliable estimate.  
 » ( « ) The value for the students was significantly higher (lower) than in the 1990 assessment at about the 95% confidence level using appropriate multiple comparison procedures.  
 SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 2.9** (continued)

**1996 Mathematics Assessment**



POPULATION:

1996 Grade 8 Public School Students

REPORTED STATISTICS:

Percentage of Students and Average Mathematics Scale Score

BREAKDOWNS BY:

Parents' Education Level

What is the highest level of education either your mother or father obtained?

JURISDICTIONS	Did Not Finish High School		High School Graduate		Some Education After High School		College Graduate		I Don't Know	
	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )
<b>Nation</b>										
NATION	8 ( 0.5 )	254 ( 1.9 )»	23 ( 0.8 )	260 ( 1.3 )»	19 ( 0.8 )	279 ( 1.5 )»»	40 ( 1.4 )	281 ( 1.8 )»	11 ( 0.6 )	253 ( 1.7 )»
NORTHEAST	4 ( 0.7 )	... ( ... )	23 ( 2.2 )	269 ( 2.0 )	19 ( 1.9 )	279 ( 3.1 )	45 ( 4.3 )	284 ( 6.4 )	9 ( 1.1 )	255 ( 3.8 )
SOUTHEAST	11 ( 1.5 )	249 ( 4.3 )	27 ( 1.4 )	255 ( 3.0 )	17 ( 1.1 )	273 ( 2.9 )	36 ( 2.7 )	273 ( 4.1 )	9 ( 0.9 )	254 ( 3.8 )»
CENTRAL	5 ( 0.7 )	... ( ... )	22 ( 1.8 )»	265 ( 4.0 )	20 ( 1.8 )	284 ( 4.1 )	43 ( 2.5 )	286 ( 3.5 )	9 ( 1.0 )	253 ( 4.6 )
WEST	9 ( 0.8 )	257 ( 3.0 )	20 ( 1.2 )	256 ( 2.9 )	19 ( 1.5 )	278 ( 2.4 )	36 ( 2.2 )	280 ( 2.5 )	15 ( 1.6 )	252 ( 2.7 )
<b>States</b>										
ALABAMA	10 ( 0.8 )	246 ( 2.3 )	30 ( 1.5 )	245 ( 2.6 )	15 ( 0.8 )	265 ( 2.3 )	37 ( 2.1 )	269 ( 2.8 )	9 ( 0.7 )»	240 ( 3.0 )
ALASKA†	4 ( 0.7 )	... ( ... )	19 ( 1.1 )	265 ( 2.9 )	20 ( 1.1 )	281 ( 3.3 )	43 ( 1.5 )	292 ( 1.9 )	14 ( 1.3 )	258 ( 5.0 )
ARIZONA	9 ( 0.9 )	247 ( 3.1 )	18 ( 1.1 )	260 ( 2.5 )»	21 ( 1.0 )	273 ( 1.5 )»	38 ( 1.8 )	281 ( 1.4 )»	14 ( 0.9 )	250 ( 2.4 )
ARKANSAS†	10 ( 0.8 )	245 ( 2.7 )	30 ( 1.6 )	256 ( 2.2 )»	19 ( 1.0 )	270 ( 2.1 )	30 ( 1.4 )	274 ( 2.1 )»»	11 ( 0.8 )»	248 ( 3.1 )»
CALIFORNIA	10 ( 0.8 )	246 ( 2.4 )	17 ( 0.8 )	251 ( 2.1 )	16 ( 1.0 )	271 ( 1.9 )»	38 ( 1.7 )	278 ( 2.3 )»	18 ( 1.3 )	244 ( 2.4 )
COLORADO	6 ( 0.6 )	247 ( 3.3 )	19 ( 0.9 )	264 ( 1.6 )»	20 ( 0.8 )	280 ( 1.7 )»	45 ( 1.5 )	287 ( 1.3 )»	10 ( 0.7 )	256 ( 2.7 )
CONNECTICUT	5 ( 0.6 )	253 ( 4.3 )	19 ( 0.9 )»	264 ( 1.6 )»	17 ( 0.8 )	277 ( 2.0 )»	51 ( 1.3 )	292 ( 1.3 )»	9 ( 0.5 )	264 ( 2.0 )»»
DELAWARE	5 ( 0.5 )	245 ( 4.1 )	27 ( 1.2 )	257 ( 2.3 )»	19 ( 0.9 )	268 ( 2.0 )	38 ( 1.2 )	279 ( 1.5 )	10 ( 0.7 )»	252 ( 3.8 )
DISTRICT OF COLUMBIA	7 ( 0.6 )	222 ( 5.1 )	28 ( 1.1 )	221 ( 1.8 )	18 ( 0.9 )	240 ( 3.6 )	33 ( 1.3 )	245 ( 2.2 )	14 ( 0.9 )»	226 ( 3.7 )
FLORIDA	8 ( 0.7 )	245 ( 2.3 )	23 ( 1.1 )	255 ( 2.4 )»	18 ( 0.9 )	269 ( 1.7 )»	40 ( 1.6 )	275 ( 2.6 )»	11 ( 0.8 )	248 ( 2.4 )
GEORGIA	8 ( 0.7 )»	246 ( 2.7 )	27 ( 1.4 )	248 ( 1.8 )	18 ( 1.0 )	269 ( 1.9 )	39 ( 2.0 )	277 ( 2.4 )	8 ( 0.6 )	247 ( 3.2 )
HAWAII	4 ( 0.5 )	252 ( 5.0 )»	26 ( 1.1 )	252 ( 1.8 )»	16 ( 0.8 )	267 ( 1.7 )»	38 ( 1.0 )	274 ( 1.5 )»»	15 ( 1.0 )	248 ( 2.6 )»
INDIANA	7 ( 0.7 )	251 ( 2.7 )	30 ( 1.2 )	268 ( 1.7 )»	21 ( 1.1 )	281 ( 2.0 )»	36 ( 1.4 )	287 ( 1.5 )»	7 ( 0.7 )»	260 ( 3.4 )»
IOWA†	5 ( 0.5 )	264 ( 3.9 )	24 ( 1.6 )	276 ( 2.0 )»	19 ( 0.9 )	288 ( 1.6 )»	46 ( 1.7 )	291 ( 1.5 )»	6 ( 0.6 )	266 ( 3.3 )
KENTUCKY	13 ( 0.8 )	251 ( 2.1 )»	31 ( 0.9 )	260 ( 1.4 )»	17 ( 0.8 )	271 ( 1.8 )	30 ( 1.3 )	281 ( 1.6 )»	9 ( 0.6 )»	256 ( 2.7 )»»
LOUISIANA	9 ( 0.7 )»	245 ( 2.1 )»	33 ( 1.0 )	246 ( 1.8 )	19 ( 0.8 )	262 ( 1.6 )»	30 ( 1.3 )	259 ( 2.5 )	9 ( 0.6 )	244 ( 2.7 )
MAINE	5 ( 0.5 )	260 ( 3.0 )	23 ( 0.9 )	273 ( 1.9 )	21 ( 1.1 )	285 ( 1.7 )	44 ( 1.6 )	295 ( 1.6 )	7 ( 0.6 )	269 ( 3.6 )
MARYLAND†	5 ( 0.6 )	243 ( 3.7 )	24 ( 1.3 )	256 ( 2.0 )»	17 ( 1.0 )	274 ( 2.0 )»	45 ( 1.6 )	281 ( 2.8 )	8 ( 0.8 )	259 ( 4.1 )»
MASSACHUSETTS	6 ( 0.6 )	254 ( 3.0 )	18 ( 1.0 )	263 ( 2.3 )	15 ( 0.8 )	277 ( 2.0 )	51 ( 1.7 )	290 ( 2.0 )	10 ( 0.8 )	256 ( 3.1 )
MICHIGAN†	5 ( 0.5 )	252 ( 4.0 )	22 ( 1.5 )	266 ( 2.0 )»»	21 ( 0.9 )	282 ( 1.9 )»»	42 ( 1.6 )	286 ( 2.2 )»	9 ( 0.8 )	264 ( 3.9 )»
MINNESOTA	3 ( 0.3 )	253 ( 5.1 )	21 ( 1.1 )»	272 ( 2.1 )»	19 ( 1.1 )	287 ( 1.7 )	50 ( 1.6 )»	293 ( 1.5 )»	8 ( 0.7 )	265 ( 3.0 )
MISSISSIPPI	11 ( 0.6 )	241 ( 2.0 )	29 ( 1.1 )	244 ( 1.7 )	15 ( 0.7 )	260 ( 1.7 )	36 ( 1.2 )	257 ( 1.9 )	9 ( 0.7 )	241 ( 3.3 )
MISSOURI	8 ( 0.6 )	259 ( 2.6 )	27 ( 1.0 )	266 ( 1.5 )	19 ( 0.9 )	280 ( 1.9 )	37 ( 1.6 )	282 ( 1.7 )	9 ( 0.7 )»	259 ( 2.6 )
MONTANA†	6 ( 0.8 )	251 ( 5.6 )»	21 ( 1.1 )	275 ( 2.2 )	20 ( 1.2 )	286 ( 1.9 )	48 ( 1.5 )	292 ( 1.4 )»	6 ( 0.5 )	263 ( 4.6 )
NEBRASKA	4 ( 0.6 )	258 ( 3.9 )	22 ( 0.8 )»	273 ( 1.8 )»	20 ( 0.8 )	287 ( 1.7 )»	47 ( 1.2 )	290 ( 1.2 )»	7 ( 0.7 )	263 ( 3.1 )
NEW MEXICO	11 ( 0.9 )	245 ( 2.9 )	25 ( 1.1 )	253 ( 2.0 )	19 ( 1.0 )	268 ( 2.0 )»	34 ( 1.3 )	277 ( 1.5 )»	11 ( 0.8 )	243 ( 2.4 )»
NEW YORK†	6 ( 0.6 )	254 ( 3.8 )»	20 ( 1.1 )	262 ( 2.5 )»	17 ( 1.0 )	273 ( 2.5 )»	45 ( 1.5 )	282 ( 1.9 )»	12 ( 0.9 )	247 ( 3.7 )
NORTH CAROLINA	7 ( 0.5 )»	250 ( 2.9 )»	24 ( 1.1 )»	257 ( 2.0 )»»	20 ( 0.9 )	272 ( 1.9 )»	40 ( 1.5 )»	279 ( 1.9 )»»	9 ( 0.6 )»	254 ( 2.7 )»
NORTH DAKOTA	3 ( 0.4 )	267 ( 5.0 )	19 ( 1.0 )»	273 ( 1.7 )	16 ( 0.7 )»	287 ( 2.0 )	55 ( 1.2 )»	291 ( 1.0 )»	7 ( 0.5 )»	263 ( 3.2 )
OREGON	7 ( 0.6 )	256 ( 2.8 )	18 ( 0.9 )	263 ( 2.0 )	20 ( 1.0 )	280 ( 1.7 )	44 ( 1.7 )	288 ( 1.8 )»	12 ( 0.7 )»	263 ( 2.9 )»
RHODE ISLAND	8 ( 0.5 )	249 ( 3.4 )	22 ( 0.9 )»	258 ( 2.2 )»	17 ( 0.7 )»	274 ( 2.0 )»	40 ( 0.9 )	282 ( 1.7 )»	13 ( 0.8 )»	253 ( 2.2 )»»
SOUTH CAROLINA†	9 ( 0.7 )	248 ( 1.9 )	28 ( 1.1 )	249 ( 2.2 )	17 ( 0.9 )	269 ( 2.2 )	37 ( 1.4 )	272 ( 2.2 )	9 ( 0.7 )»	251 ( 2.6 )
TENNESSEE	10 ( 0.7 )	250 ( 2.5 )	32 ( 1.4 )	256 ( 1.7 )	19 ( 0.8 )	270 ( 1.8 )	31 ( 1.6 )	275 ( 2.3 )	8 ( 0.6 )»	247 ( 3.1 )
TEXAS	13 ( 1.1 )»	254 ( 2.1 )»	21 ( 1.0 )	262 ( 1.9 )»»	15 ( 1.0 )	276 ( 1.8 )»	38 ( 2.0 )	283 ( 1.8 )»	12 ( 1.1 )	252 ( 2.7 )»
UTAH	3 ( 0.4 )	254 ( 3.3 )	17 ( 0.8 )	264 ( 1.7 )	18 ( 0.8 )	281 ( 1.3 )	53 ( 1.3 )	284 ( 1.1 )	9 ( 0.6 )	260 ( 2.9 )
VERMONT†	5 ( 0.5 )	253 ( 3.9 )	25 ( 1.1 )	268 ( 1.9 )	16 ( 0.9 )	280 ( 1.9 )	49 ( 1.4 )	290 ( 1.4 )	6 ( 0.6 )	264 ( 4.0 )
VIRGINIA	8 ( 0.8 )	248 ( 2.6 )	26 ( 1.1 )	257 ( 2.5 )	16 ( 0.9 )	271 ( 2.0 )	42 ( 1.7 )	284 ( 1.7 )	9 ( 0.7 )	261 ( 3.2 )»
WASHINGTON	6 ( 0.6 )	252 ( 4.3 )	16 ( 0.9 )	265 ( 1.9 )	21 ( 0.8 )	279 ( 1.9 )	46 ( 1.4 )	287 ( 1.4 )	12 ( 0.8 )	260 ( 2.9 )
WEST VIRGINIA	11 ( 0.8 )	249 ( 2.3 )»	33 ( 0.9 )»	259 ( 1.6 )»»	19 ( 0.8 )	269 ( 1.7 )»	30 ( 1.1 )	276 ( 1.5 )»	6 ( 0.5 )	253 ( 3.2 )»»
WISCONSIN†	5 ( 0.7 )	262 ( 3.4 )	26 ( 1.1 )»	278 ( 2.1 )»	21 ( 0.9 )	285 ( 1.8 )»	40 ( 1.6 )	292 ( 1.5 )»	9 ( 0.6 )»»	264 ( 2.9 )»
WYOMING	5 ( 0.5 )	262 ( 3.6 )	21 ( 0.9 )	268 ( 1.8 )	20 ( 0.8 )	277 ( 1.6 )	44 ( 1.2 )	283 ( 1.1 )	10 ( 0.6 )»»	257 ( 3.0 )»
<b>Other Jurisdictions</b>										
DDESS	2 ( 0.6 )	... ( ... )	21 ( 1.5 )	257 ( 4.0 )	22 ( 1.7 )	277 ( 4.2 )	43 ( 2.1 )	277 ( 3.1 )	11 ( 1.3 )	252 ( 4.7 )
DoDDS	2 ( 0.3 )	... ( ... )	15 ( 0.9 )	267 ( 2.3 )	24 ( 1.0 )	276 ( 2.4 )	49 ( 1.1 )	280 ( 1.1 )	10 ( 0.8 )	264 ( 2.7 )
GUAM	8 ( 0.9 )	225 ( 7.3 )	30 ( 1.5 )	232 ( 4.2 )	14 ( 1.3 )	254 ( 3.9 )	27 ( 1.3 )	246 ( 4.2 )	20 ( 1.3 )	234 ( 3.9 )»

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).

... Characteristics of the sample do not permit a reliable estimate.

» (») The value for the students was significantly higher (lower) than in the 1990 assessment at about the 95% confidence level using appropriate multiple comparison procedures.

> (<) The value for the students was significantly higher (lower) than in the 1992 assessment at about the 95% confidence level using appropriate multiple comparison procedures.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.



**TABLE 2.10**

**1996 Mathematics Assessment**

POPULATION:  
REPORTED STATISTICS:  
BREAKDOWNS BY:

1996 Grade 8 Public School Students  
Percentage of Students and Average Mathematics Scale Score  
Title I Participation



Title I participation...	Participated		Did Not Participate	
	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )
<b>JURISDICTIONS</b>				
<b>Nation</b>				
NATION	13 ( 1.8)	244 ( 3.4)	87 ( 1.8)	274 ( 1.3)
NORTHEAST	12 ( 3.9)	246 ( 4.0)!	88 ( 3.9)	280 ( 3.8)
SOUTHEAST	10 ( 3.3)	242 ( 6.2)!	90 ( 3.3)	266 ( 3.3)
CENTRAL	10 ( 3.5)	234 ( 4.1)!	90 ( 3.5)	281 ( 2.8)
WEST	17 ( 3.5)	248 ( 6.1)!	83 ( 3.5)	272 ( 1.9)
<b>States</b>				
ALABAMA	18 ( 2.7)	232 ( 2.9)	82 ( 2.7)	262 ( 2.2)
ALASKA†	1 ( 0.5)	... ( ... )	99 ( 0.5)	278 ( 1.8)
ARIZONA	15 ( 2.8)	249 ( 3.7)	85 ( 2.8)	271 ( 1.5)
ARKANSAS†	18 ( 2.6)	242 ( 4.6)	82 ( 2.6)	266 ( 1.3)
CALIFORNIA	23 ( 2.9)	239 ( 2.5)	77 ( 2.9)	270 ( 2.2)
COLORADO	2 ( 0.7)	... ( ... )	98 ( 0.7)	276 ( 1.0)
CONNECTICUT	4 ( 1.1)	249 ( 5.4)!	96 ( 1.1)	281 ( 1.4)
DELAWARE	0 ( 0.2)	... ( ... )	100 ( 0.2)	267 ( 1.0)
DISTRICT OF COLUMBIA	14 ( 0.4)	217 ( 2.4)	86 ( 0.4)	235 ( 1.4)
FLORIDA	12 ( 2.9)	234 ( 5.7)!	88 ( 2.9)	267 ( 1.7)
GEORGIA	12 ( 1.7)	230 ( 2.9)	88 ( 1.7)	267 ( 1.7)
HAWAII	9 ( 0.6)	239 ( 2.3)	91 ( 0.6)	264 ( 1.0)
INDIANA	1 ( 0.4)	... ( ... )	99 ( 0.4)	276 ( 1.5)
IOWA†	2 ( 0.8)	... ( ... )	98 ( 0.8)	284 ( 1.3)
KENTUCKY	23 ( 2.5)	246 ( 1.5)	77 ( 2.5)	273 ( 1.3)
LOUISIANA	14 ( 2.8)	239 ( 2.7)	86 ( 2.8)	255 ( 1.8)
MAINE	4 ( 0.7)	257 ( 4.7)	96 ( 0.7)	285 ( 1.2)
MARYLAND†	3 ( 0.7)	228 ( 6.5)!	97 ( 0.7)	271 ( 2.1)
MASSACHUSETTS	10 ( 2.0)	246 ( 3.9)	90 ( 2.0)	281 ( 1.7)
MICHIGAN†	14 ( 2.0)	250 ( 4.3)	86 ( 2.0)	281 ( 1.9)
MINNESOTA	3 ( 0.8)	249 ( 4.0)!	97 ( 0.8)	285 ( 1.4)
MISSISSIPPI	34 ( 3.1)	236 ( 2.2)	66 ( 3.1)	257 ( 1.3)
MISSOURI	7 ( 1.3)	238 ( 3.6)	93 ( 1.3)	276 ( 1.4)
MONTANA†	8 ( 0.7)	250 ( 4.1)	92 ( 0.7)	286 ( 1.3)
NEBRASKA	1 ( 0.4)	... ( ... )	99 ( 0.4)	283 ( 1.0)
NEW MEXICO	15 ( 2.1)	240 ( 1.9)	85 ( 2.1)	266 ( 1.2)
NEW YORK†	15 ( 2.2)	237 ( 3.1)	85 ( 2.2)	276 ( 1.7)
NORTH CAROLINA	7 ( 2.2)	241 ( 5.0)!	93 ( 2.2)	270 ( 1.3)
NORTH DAKOTA	7 ( 0.7)	255 ( 2.5)	93 ( 0.7)	286 ( 0.9)
OREGON	5 ( 1.0)	245 ( 3.0)	95 ( 1.0)	278 ( 1.4)
RHODE ISLAND	8 ( 0.5)	237 ( 4.3)	92 ( 0.5)	272 ( 0.9)
SOUTH CAROLINA†	7 ( 2.5)	245 ( 4.3)!	93 ( 2.5)	262 ( 1.6)
TENNESSEE	4 ( 1.6)	230 ( 7.8)!	96 ( 1.6)	265 ( 1.4)
TEXAS	22 ( 2.9)	249 ( 2.3)	78 ( 2.9)	276 ( 1.6)
UTAH	3 ( 0.8)	245 ( 4.1)!	97 ( 0.8)	278 ( 1.0)
VERMONT†	5 ( 0.9)	250 ( 3.6)	95 ( 0.9)	281 ( 0.9)
VIRGINIA	1 ( 0.3)	... ( ... )	99 ( 0.3)	270 ( 1.5)
WASHINGTON	7 ( 1.2)	251 ( 3.8)	93 ( 1.2)	278 ( 1.3)
WEST VIRGINIA	9 ( 1.7)	243 ( 3.3)	91 ( 1.7)	267 ( 1.1)
WISCONSIN†	9 ( 2.4)	243 ( 2.2)!	91 ( 2.4)	287 ( 1.2)
WYOMING	3 ( 0.2)	245 ( 5.6)	97 ( 0.2)	276 ( 0.9)
<b>Other Jurisdictions</b>				
DDESS	0 ( ... )	... ( ... )	100 ( ... )	269 ( 2.3)
DoDDS	2 ( 0.3)	... ( ... )	98 ( 0.3)	275 ( 0.9)
GUAM	0 ( ... )	... ( ... )	100 ( ... )	239 ( 1.7)

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).

... Characteristics of the sample do not permit a reliable estimate.

! Interpret with caution — the nature of the sample does not allow accurate determination of the variability of this statistic.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 2.11**

**1996 Mathematics Assessment**



POPULATION:  
REPORTED STATISTICS:  
BREAKDOWNS BY:

**1996 Grade 8 Public School Students**  
**Percentage of Students and Average Mathematics Scale Score**  
**Free/Reduced-Price Lunch Program Eligibility**

Free/reduced-price lunch program eligibility...	Eligible		Not Eligible		Information Not Available	
JURISDICTIONS	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )
<b>Nation</b>						
NATION	30 ( 1.5)	252 ( 1.5)	56 ( 2.6)	279 ( 1.5)	14 ( 3.1)	278 ( 3.9)!
NORTHEAST	33 ( 4.2)	260 ( 4.1)	67 ( 4.3)	284 ( 4.5)	0 ( 0.1)	... ( ... )
SOUTHEAST	31 ( 3.6)	244 ( 3.2)	56 ( 4.0)	272 ( 3.6)	13 ( 5.2)	273 ( 6.8)!
CENTRAL	27 ( 4.6)	252 ( 5.4)!	57 ( 7.0)	284 ( 2.2)	16 ( 8.7)	289 ( 4.0)!
WEST	30 ( 2.7)	252 ( 2.6)	48 ( 4.1)	276 ( 2.3)	22 ( 5.6)	274 ( 6.0)!
<b>States</b>						
ALABAMA	39 ( 2.4)	237 ( 2.2)	59 ( 2.5)	270 ( 2.3)	2 ( 0.8)	254 ( 7.7)!
ALASKA†	15 ( 1.6)	257 ( 5.2)	33 ( 1.5)	282 ( 2.3)	51 ( 2.2)	281 ( 2.3)
ARIZONA	27 ( 2.4)	254 ( 3.8)	50 ( 3.4)	277 ( 1.3)	23 ( 3.9)	264 ( 3.1)
ARKANSAS†	32 ( 1.9)	246 ( 2.7)	60 ( 2.7)	270 ( 1.4)	7 ( 3.2)	262 ( 4.7)!
CALIFORNIA	36 ( 2.5)	246 ( 2.1)	47 ( 3.5)	276 ( 1.9)	17 ( 3.2)	261 ( 4.5)
COLORADO	24 ( 1.6)	259 ( 1.5)	65 ( 2.5)	282 ( 1.2)	11 ( 2.3)	270 ( 5.2)!
CONNECTICUT	21 ( 2.2)	254 ( 3.3)	74 ( 2.4)	287 ( 1.1)	5 ( 1.7)	275 (10.3)!
DELAWARE	20 ( 0.9)	247 ( 1.9)	59 ( 1.0)	274 ( 1.1)	21 ( 0.5)	265 ( 1.5)
DISTRICT OF COLUMBIA	55 ( 1.1)	226 ( 1.8)	30 ( 1.0)	245 ( 2.4)	15 ( 0.6)	234 ( 2.7)
FLORIDA	39 ( 1.8)	248 ( 2.2)	53 ( 2.8)	275 ( 1.8)	8 ( 2.3)	263 ( 5.5)!
GEORGIA	32 ( 2.2)	242 ( 1.5)	54 ( 3.2)	273 ( 2.1)	14 ( 3.5)	271 ( 4.7)!
HAWAII	30 ( 1.3)	249 ( 1.5)	65 ( 1.3)	269 ( 1.2)	5 ( 0.4)	253 ( 3.5)
INDIANA	23 ( 1.5)	256 ( 1.9)	77 ( 1.7)	282 ( 1.4)	1 ( 0.6)	... ( ... )
IOWA†	19 ( 1.4)	272 ( 2.6)	74 ( 2.2)	287 ( 1.2)	6 ( 2.3)	284 ( 4.0)!
KENTUCKY	34 ( 1.7)	252 ( 1.3)	58 ( 2.0)	276 ( 1.3)	8 ( 2.4)	261 ( 4.1)!
LOUISIANA	48 ( 2.6)	241 ( 1.8)	44 ( 2.3)	265 ( 1.5)	8 ( 2.5)	250 ( 5.9)!
MAINE	22 ( 1.2)	272 ( 2.2)	73 ( 2.0)	288 ( 1.3)	6 ( 2.1)	284 ( 4.7)!
MARYLAND†	25 ( 1.6)	243 ( 2.3)	70 ( 2.2)	279 ( 2.4)	5 ( 2.1)	274 ( 6.5)!
MASSACHUSETTS	18 ( 1.3)	254 ( 2.5)	75 ( 2.3)	284 ( 1.5)	7 ( 2.3)	269 (10.2)!
MICHIGAN†	20 ( 1.9)	257 ( 2.7)	66 ( 2.8)	284 ( 1.7)	14 ( 3.2)	272 ( 6.9)!
MINNESOTA	20 ( 1.4)	270 ( 1.8)	65 ( 3.7)	288 ( 1.3)	15 ( 4.1)	286 ( 6.4)!
MISSISSIPPI	53 ( 1.7)	239 ( 1.6)	42 ( 2.0)	265 ( 1.2)	5 ( 2.2)	248 ( 6.2)!
MISSOURI	26 ( 1.3)	259 ( 1.9)	66 ( 2.5)	280 ( 1.3)	8 ( 3.0)	264 ( 9.5)!
MONTANA†	25 ( 1.9)	266 ( 2.6)	59 ( 2.1)	290 ( 1.0)	16 ( 1.9)	286 ( 2.2)
NEBRASKA	27 ( 1.0)	269 ( 1.9)	69 ( 1.2)	288 ( 1.1)	5 ( 0.9)	288 ( 2.0)
NEW MEXICO	42 ( 1.7)	251 ( 1.8)	43 ( 2.0)	272 ( 1.4)	15 ( 1.8)	265 ( 2.6)
NEW YORK†	37 ( 2.5)	253 ( 2.4)	54 ( 2.8)	282 ( 1.5)	9 ( 2.7)	271 ( 7.3)!
NORTH CAROLINA	31 ( 1.9)	250 ( 1.8)	62 ( 2.4)	277 ( 1.5)	7 ( 2.2)	263 ( 5.0)!
NORTH DAKOTA	24 ( 1.3)	274 ( 2.0)	67 ( 1.5)	288 ( 0.9)	9 ( 1.6)	282 ( 3.0)
OREGON	22 ( 1.7)	262 ( 2.1)	62 ( 2.3)	282 ( 1.5)	16 ( 2.7)	273 ( 3.7)
RHODE ISLAND	26 ( 0.8)	250 ( 2.2)	70 ( 0.8)	277 ( 0.9)	4 ( 0.3)	249 ( 8.5)
SOUTH CAROLINA†	44 ( 1.9)	246 ( 1.7)	55 ( 1.8)	272 ( 1.6)	1 ( ... )	... ( ... )
TENNESSEE	27 ( 2.0)	246 ( 2.3)	64 ( 2.7)	271 ( 1.9)	8 ( 2.8)	262 ( 4.7)!
TEXAS	37 ( 2.2)	252 ( 1.6)	57 ( 2.7)	282 ( 1.5)	6 ( 1.3)	271 ( 3.6)!
UTAH	20 ( 1.3)	268 ( 2.4)	70 ( 1.9)	280 ( 1.0)	10 ( 1.7)	276 ( 3.6)
VERMONT†	19 ( 1.2)	266 ( 1.8)	73 ( 1.7)	283 ( 1.1)	8 ( 1.9)	278 ( 3.1)!
VIRGINIA	23 ( 1.9)	246 ( 2.6)	67 ( 3.0)	277 ( 1.3)	10 ( 3.1)	277 ( 5.3)!
WASHINGTON	25 ( 1.5)	258 ( 2.1)	72 ( 2.0)	282 ( 1.1)	3 ( 1.4)	276 ( 3.3)!
WEST VIRGINIA	36 ( 1.3)	254 ( 1.5)	61 ( 1.7)	271 ( 1.1)	4 ( 1.7)	274 ( 3.5)!
WISCONSIN†	20 ( 1.7)	262 ( 3.0)	67 ( 4.0)	289 ( 1.3)	14 ( 3.8)	285 ( 3.4)!
WYOMING	21 ( 0.8)	262 ( 1.8)	73 ( 0.8)	277 ( 1.1)	6 ( 0.6)	285 ( 4.0)
<b>Other Jurisdictions</b>						
DDESS	29 ( 1.8)	260 ( 4.5)	40 ( 1.8)	276 ( 2.8)	31 ( 1.5)	269 ( 4.1)
DoDDS	8 ( 0.5)	267 ( 3.6)	47 ( 1.0)	276 ( 1.3)	44 ( 1.0)	275 ( 1.4)
GUAM	17 ( 1.3)	217 ( 3.7)	82 ( 1.4)	243 ( 1.9)	1 ( 0.3)	... ( ... )

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).

... Characteristics of the sample do not permit a reliable estimate.

! Interpret with caution — the nature of the sample does not allow accurate determination of the variability of this statistic.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 2.12**

**1992 Mathematics Assessment**



POPULATION:  
REPORTED STATISTICS:  
BREAKDOWNS BY:

**1992 Grade 8 Public School Students**  
**Percentage of Students and Average Mathematics Scale Score**  
**Type of Location**

Type of location...	Central City		Urban Fringe/Large Town		Rural/Small Town	
JURISDICTIONS	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )
<b>Nation</b>						
NATION	30 ( 2.8)	258 ( 2.6)	42 ( 3.8)	274 ( 2.0)	28 ( 3.1)	266 ( 1.5)
NORTHEAST	28 ( 5.1)	245 ( 1.9)!	56 ( 7.6)	279 ( 4.2)	16 ( 7.1)	... ( ... )
SOUTHEAST	24 ( 3.1)	252 ( 4.0)	33 ( 7.4)	267 ( 1.4)!	42 ( 7.0)	256 ( 2.6)
CENTRAL	31 ( 7.1)	266 ( 5.0)!	34 ( 6.1)	277 ( 5.4)	35 ( 4.7)	277 ( 2.9)
WEST	36 ( 6.2)	262 ( 4.6)	46 ( 8.0)	272 ( 3.6)	18 ( 6.9)	... ( ... )
<b>States</b>						
ALABAMA	30 ( 3.1)	252 ( 4.3)	26 ( 4.2)	254 ( 2.6)	44 ( 3.7)	251 ( 2.3)
ALASKA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
ARIZONA	56 ( 3.7)	267 ( 1.7)	28 ( 4.0)	264 ( 3.0)	16 ( 3.0)	263 ( 2.8)
ARKANSAS	24 ( 2.6)	253 ( 3.5)	15 ( 3.6)	263 ( 3.0)!	61 ( 3.4)	256 ( 1.4)
CALIFORNIA	37 ( 3.2)	257 ( 3.1)	58 ( 3.9)	262 ( 2.3)	5 ( 2.3)	264 ( 6.2)!
COLORADO	35 ( 2.6)	270 ( 1.6)	45 ( 3.8)	274 ( 1.6)	19 ( 2.9)	273 ( 2.4)
CONNECTICUT	34 ( 3.7)	257 ( 3.2)	34 ( 5.4)	278 ( 2.6)	32 ( 4.8)	287 ( 1.5)
DELAWARE	35 ( 0.2)	259 ( 1.9)	45 ( 0.2)	267 ( 1.3)	21 ( 0.2)	260 ( 1.9)
DISTRICT OF COLUMBIA	100 ( ... )	235 ( 0.9)	0 ( ... )	... ( ... )	0 ( ... )	... ( ... )
FLORIDA	36 ( 4.5)	259 ( 3.3)	53 ( 5.0)	261 ( 1.9)	11 ( 2.7)	260 ( 3.4)!
GEORGIA	19 ( 2.3)	254 ( 2.0)	40 ( 3.8)	269 ( 1.7)	41 ( 3.4)	253 ( 1.7)
HAWAII	26 ( 0.1)	263 ( 1.2)	40 ( 0.3)	255 ( 1.6)	34 ( 0.3)	256 ( 1.3)
INDIANA	33 ( 2.7)	261 ( 2.2)	24 ( 3.3)	277 ( 3.1)	43 ( 3.6)	274 ( 1.5)
IOWA	24 ( 2.3)	278 ( 2.3)	17 ( 3.2)	287 ( 2.4)	59 ( 3.1)	285 ( 1.2)
KENTUCKY	21 ( 3.4)	262 ( 3.4)	25 ( 3.8)	267 ( 2.8)	53 ( 3.0)	260 ( 1.3)
LOUISIANA	36 ( 2.5)	247 ( 3.4)	33 ( 4.4)	255 ( 2.5)	31 ( 3.9)	248 ( 2.4)
MAINE	9 ( 1.8)	277 ( 3.1)!	12 ( 3.4)	285 ( 3.7)!	79 ( 3.4)	278 ( 1.1)
MARYLAND	26 ( 3.4)	250 ( 4.2)	63 ( 4.1)	272 ( 1.7)	11 ( 2.4)	258 ( 3.3)!
MASSACHUSETTS	28 ( 2.6)	254 ( 3.0)	43 ( 4.6)	281 ( 1.8)	29 ( 4.5)	279 ( 1.7)
MICHIGAN	29 ( 2.6)	249 ( 3.8)	46 ( 3.6)	275 ( 2.1)	26 ( 2.7)	274 ( 2.2)
MINNESOTA	13 ( 2.8)	278 ( 2.4)!	50 ( 3.7)	285 ( 1.4)	37 ( 2.1)	281 ( 1.5)
MISSISSIPPI	15 ( 2.7)	243 ( 2.5)	19 ( 4.3)	253 ( 3.2)!	66 ( 3.5)	245 ( 1.4)
MISSOURI	22 ( 3.0)	264 ( 3.3)	38 ( 3.6)	275 ( 1.8)	40 ( 2.6)	271 ( 1.4)
MONTANA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
NEBRASKA	33 ( 2.5)	273 ( 2.2)	7 ( 2.2)	277 ( 2.7)!	60 ( 3.2)	280 ( 1.4)
NEW MEXICO	38 ( 2.1)	262 ( 1.2)	29 ( 3.3)	259 ( 2.0)	33 ( 3.2)	257 ( 2.0)
NEW YORK	39 ( 2.9)	245 ( 4.7)	47 ( 3.9)	280 ( 1.5)	14 ( 3.2)	278 ( 1.6)!
NORTH CAROLINA	32 ( 2.9)	262 ( 2.0)	24 ( 3.5)	259 ( 2.5)	44 ( 3.8)	255 ( 1.9)
NORTH DAKOTA	26 ( 2.2)	285 ( 1.2)	12 ( 1.9)	285 ( 2.5)	62 ( 2.7)	282 ( 1.5)
OREGON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
RHODE ISLAND	39 ( 0.2)	257 ( 1.4)	37 ( 0.2)	267 ( 1.2)	24 ( 0.2)	279 ( 1.6)
SOUTH CAROLINA	29 ( 2.5)	261 ( 2.4)	30 ( 4.1)	267 ( 2.3)	41 ( 4.3)	256 ( 1.7)
TENNESSEE	34 ( 3.1)	253 ( 3.2)	29 ( 2.9)	267 ( 2.2)	37 ( 3.1)	258 ( 1.7)
TEXAS	49 ( 3.1)	261 ( 1.9)	32 ( 4.0)	271 ( 2.7)	20 ( 3.3)	264 ( 2.2)
UTAH	25 ( 2.5)	275 ( 1.7)	53 ( 3.2)	275 ( 1.2)	23 ( 2.7)	273 ( 1.5)
VERMONT	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
VIRGINIA	33 ( 3.0)	264 ( 2.0)	41 ( 3.3)	277 ( 2.1)	26 ( 3.2)	258 ( 2.8)
WASHINGTON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
WEST VIRGINIA	13 ( 1.3)	265 ( 2.5)	23 ( 4.0)	262 ( 2.2)	64 ( 3.7)	257 ( 1.2)
WISCONSIN	32 ( 4.1)	273 ( 4.7)	27 ( 3.7)	280 ( 2.2)	40 ( 4.4)	280 ( 1.8)
WYOMING	24 ( 1.9)	276 ( 1.8)	4 ( 1.1)	... ( ... )	72 ( 1.4)	274 ( 1.0)
<b>Other Jurisdictions</b>						
DDESS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
DoDDS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
GUAM	0 ( ... )	... ( ... )	0 ( ... )	... ( ... )	100 ( ... )	235 ( 1.0)

— State or other jurisdiction did not participate in the NAEP assessment year presented in this table.

... Characteristics of the sample do not permit a reliable estimate.

! Interpret with caution — the nature of the sample does not allow accurate determination of the variability of this statistic.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.



**TABLE 2.12** (continued) **1996 Mathematics Assessment**



POPULATION: **1996 Grade 8 Public School Students**  
 REPORTED STATISTICS: **Percentage of Students and Average Mathematics Scale Score**  
 BREAKDOWNS BY: **Type of Location**

Type of location...	Central City		Urban Fringe/Large Town		Rural/Small Town	
JURISDICTIONS	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )
<b>Nation</b>						
NATION	29 ( 2.7)	260 ( 2.5)	38 ( 3.4)	274 ( 2.8)	33 ( 3.1)	276 ( 2.0)>
NORTHEAST	23 ( 4.9)	264 ( 3.8)!	53 ( 8.1)	277 ( 6.8)	24 ( 6.3)	... ( ... )
SOUTHEAST	33 ( 6.5)	256 ( 8.2)!	28 ( 5.5)	268 ( 7.1)!	38 ( 7.1)	267 ( 3.8)
CENTRAL	19 ( 5.8)	268 (10.2)!	33 ( 6.4)	275 ( 6.6)	49 ( 5.5)	280 ( 3.5)
WEST	37 ( 5.9)	257 ( 4.0)	39 ( 6.8)	274 ( 3.1)	24 ( 6.4)	276 ( 3.5)!
<b>States</b>						
ALABAMA	33 ( 3.1)	254 ( 4.4)	23 ( 3.9)	263 ( 3.8)	43 ( 3.7)	255 ( 3.4)
ALASKA†	38 ( 1.2)	281 ( 2.5)	0 ( ... )	... ( ... )	62 ( 1.2)	276 ( 2.3)
ARIZONA	58 ( 3.8)	268 ( 2.4)	29 ( 4.1)	273 ( 2.7)	14 ( 2.8)	259 ( 3.6)!
ARKANSAS†	23 ( 3.2)	262 ( 2.4)	11 ( 2.6)	267 ( 3.6)!	66 ( 3.8)	261 ( 2.1)
CALIFORNIA	43 ( 3.7)	257 ( 2.9)	52 ( 4.0)	267 ( 2.4)	5 ( 1.6)	... ( ... )
COLORADO	39 ( 2.8)	273 ( 2.0)	44 ( 3.9)	278 ( 2.0)	18 ( 3.3)	274 ( 2.5)
CONNECTICUT	24 ( 3.1)	258 ( 3.1)	39 ( 4.6)	285 ( 2.1)	37 ( 4.2)	288 ( 1.8)
DELAWARE	36 ( 0.5)	266 ( 1.7)	42 ( 0.5)<	269 ( 1.2)	22 ( 0.4)	265 ( 2.7)
DISTRICT OF COLUMBIA	100 ( ... )	233 ( 1.3)	0 ( ... )	... ( ... )	0 ( ... )	... ( ... )
FLORIDA	37 ( 4.4)	263 ( 4.1)	53 ( 4.7)	263 ( 2.3)	10 ( 2.2)	269 ( 2.4)!
GEORGIA	15 ( 2.3)	247 ( 4.6)	45 ( 3.8)	273 ( 2.9)	40 ( 3.6)	257 ( 2.4)
HAWAII	26 ( 0.3)	268 ( 1.6)	35 ( 0.6)<	261 ( 2.0)	39 ( 0.5)>	259 ( 1.6)
INDIANA	34 ( 3.3)	272 ( 2.6)	25 ( 4.4)	280 ( 4.0)	41 ( 2.7)	276 ( 1.6)
IOWA†	24 ( 2.1)	281 ( 2.5)	11 ( 2.9)	290 ( 2.6)!	65 ( 2.6)	284 ( 1.7)
KENTUCKY	17 ( 1.9)	272 ( 3.4)	17 ( 3.0)	271 ( 3.3)	66 ( 2.5)>	264 ( 1.2)
LOUISIANA	31 ( 2.6)	248 ( 3.3)	35 ( 4.3)	258 ( 2.3)	34 ( 3.7)	251 ( 2.6)
MAINE	11 ( 1.3)	282 ( 3.4)	12 ( 2.2)	294 ( 4.7)	77 ( 2.3)	283 ( 1.4)
MARYLAND†	23 ( 3.6)	247 ( 4.6)	67 ( 4.0)	277 ( 2.9)	10 ( 2.7)	270 ( 3.5)!
MASSACHUSETTS	30 ( 3.7)	260 ( 3.4)	51 ( 4.5)	286 ( 2.2)	18 ( 4.4)	282 ( 3.8)!
MICHIGAN†	28 ( 3.4)	264 ( 4.6)	44 ( 4.1)	282 ( 2.4)	29 ( 3.1)	281 ( 1.9)
MINNESOTA	17 ( 3.0)	277 ( 4.2)	40 ( 3.3)	288 ( 2.2)	42 ( 2.1)	283 ( 1.4)
MISSISSIPPI	15 ( 2.8)	252 ( 5.2)	15 ( 3.2)	260 ( 3.3)!	70 ( 3.4)	248 ( 1.2)
MISSOURI	16 ( 2.0)	262 ( 5.4)	44 ( 3.2)	276 ( 2.0)	40 ( 2.8)	275 ( 2.2)
MONTANA†	19 ( 0.6)	286 ( 1.5)	1 ( ... )	... ( ... )	80 ( 1.0)	282 ( 1.6)
NEBRASKA	26 ( 1.8)	278 ( 1.5)	13 ( 1.6)	291 ( 2.1)	61 ( 2.4)	283 ( 1.5)
NEW MEXICO	37 ( 1.6)	263 ( 2.4)	14 ( 1.8)<	256 ( 2.4)	50 ( 2.3)>	263 ( 1.4)
NEW YORK†	43 ( 3.2)	255 ( 2.6)	44 ( 3.5)	283 ( 2.1)	13 ( 3.3)	279 ( 2.5)!
NORTH CAROLINA	31 ( 2.0)	274 ( 2.4)>	24 ( 3.3)	265 ( 2.5)	45 ( 3.4)	265 ( 2.2)
NORTH DAKOTA	29 ( 0.8)	284 ( 1.5)	5 ( 0.3)<	... ( ... )	67 ( 1.0)	284 ( 1.2)
OREGON	29 ( 2.4)	279 ( 3.9)	34 ( 3.4)	281 ( 1.8)	37 ( 2.9)	270 ( 1.8)
RHODE ISLAND	39 ( 0.4)	259 ( 1.3)	42 ( 0.4)>	272 ( 1.6)	19 ( 0.4)<	283 ( 1.9)
SOUTH CAROLINA†	22 ( 3.2)	264 ( 3.5)	33 ( 4.1)	268 ( 1.8)	45 ( 3.8)	254 ( 2.4)
TENNESSEE	28 ( 2.9)	251 ( 4.0)	35 ( 4.1)	272 ( 2.7)	37 ( 3.4)	263 ( 1.5)
TEXAS	50 ( 3.7)	266 ( 2.3)	31 ( 4.8)	276 ( 3.3)	19 ( 3.1)	271 ( 2.8)
UTAH	23 ( 2.5)	273 ( 2.3)	49 ( 2.3)	278 ( 1.1)	28 ( 2.2)	278 ( 1.9)
VERMONT†	5 ( 0.3)	... ( ... )	8 ( 1.9)	273 ( 4.5)!	88 ( 1.8)	281 ( 1.0)
VIRGINIA	33 ( 3.1)	263 ( 3.7)	39 ( 3.4)	281 ( 1.6)	28 ( 3.2)	262 ( 2.0)
WASHINGTON	26 ( 2.6)	272 ( 3.2)	52 ( 4.2)	280 ( 1.6)	22 ( 3.4)	272 ( 2.8)
WEST VIRGINIA	14 ( 1.0)	267 ( 2.9)	22 ( 2.9)	268 ( 1.8)	64 ( 2.7)	263 ( 1.3)>
WISCONSIN†	32 ( 3.5)	272 ( 3.5)	27 ( 4.2)	289 ( 2.2)	40 ( 3.3)	287 ( 1.7)
WYOMING	24 ( 0.5)	273 ( 2.4)	0 ( ... )	... ( ... )	76 ( 0.5)	275 ( 0.8)
<b>Other Jurisdictions</b>						
DDESS	0 ( ... )	... ( ... )	85 ( 0.7)	269 ( 3.3)	15 ( 0.7)	268 ( 3.8)
DoDDS	... ( ... )	... ( ... )	... ( ... )	... ( ... )	... ( ... )	... ( ... )
GUAM	... ( ... )	... ( ... )	... ( ... )	... ( ... )	... ( ... )	... ( ... )

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).  
 ... Characteristics of the sample do not permit a reliable estimate.  
 > (<) The value for the students was significantly higher (lower) than in the 1992 assessment at about the 95% confidence level using appropriate multiple comparison procedures.  
 ! Interpret with caution — the nature of the sample does not allow accurate determination of the variability of this statistic.  
 SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.



# Chapter 3

## *Achievement Level Results for the Nation and the States*

### *Overview*

The achievement level results describe what students participating in the NAEP assessment should know and be able to do. The National Assessment Governing Board (NAGB) adopted three achievement levels: Basic, Proficient, and Advanced. The Basic level denotes partial mastery of fundamental knowledge and skills. The Proficient level defines solid academic performance that demonstrates competency in challenging subject matter, and the Advanced level signifies superior performance.

The achievement levels are based on collective judgments, gathered from a broadly representative panel of teachers, education specialists, and members of the general public, about what students should know and be able to do relative to a body of content reflected in the NAEP assessment framework. For reporting purposes, the achievement level cut scores are placed on the traditional NAEP scale resulting in four ranges: Basic, Proficient, Advanced, and the region below Basic. The definitions of the three achievement levels are presented below.

<b>Policy Definitions for the NAEP Achievement Levels</b>	
<b>Basic</b>	This level denotes partial mastery of prerequisite knowledge and skills that are fundamental for proficient work at that grade.
<b>Proficient</b>	This level represents solid academic performance. Students reaching this level have demonstrated competency over challenging subject matter, including subject-matter knowledge, application of such knowledge to real world situations, and analytical skills appropriate to the subject matter.
<b>Advanced</b>	This level signifies superior performance.

Chapter 3 provides achievement-level results for public school students and combined public and nonpublic school students.

**TABLE 3.1**

**1992 and 1996 Mathematics Assessment**

POPULATION:  
REPORTED STATISTICS:

1992 and 1996 Grade 4 Public School Students  
Percentage of Students by Achievement Levels



NAEP assessment year...	1992				1996			
	Advanced	At or Above Proficient	At or Above Basic	Below Basic	Advanced	At or Above Proficient	At or Above Basic	Below Basic
Achievement Level...								
JURISDICTIONS	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )
<b>Nation</b>								
NATION	2 ( 0.3)	17 ( 1.1)	57 ( 1.2)	43 ( 1.2)	2 ( 0.3)	20 ( 1.0)	62 ( 1.4)>	38 ( 1.4)<
NORTHEAST	3 ( 0.7)	23 ( 2.8)	62 ( 2.9)	38 ( 2.9)	3 ( 1.0)	26 ( 1.6)	68 ( 3.5)	32 ( 3.5)
SOUTHEAST	1 ( 0.4)	11 ( 1.4)	46 ( 2.5)	54 ( 2.5)	2 ( 0.9)	14 ( 2.7)	53 ( 3.3)	47 ( 3.3)
CENTRAL	2 ( 0.6)	20 ( 2.1)	64 ( 3.4)	36 ( 3.4)	2 ( 0.6)	25 ( 2.5)	73 ( 3.0)	27 ( 3.0)
WEST	2 ( 0.6)	17 ( 2.2)	57 ( 2.3)	43 ( 2.3)	2 ( 0.5)	16 ( 1.8)	57 ( 3.0)	43 ( 3.0)
<b>States</b>								
ALABAMA	0 ( 0.1)	10 ( 1.2)	43 ( 2.1)	57 ( 2.1)	1 ( 0.2)	11 ( 1.1)	48 ( 2.0)	52 ( 2.0)
ALASKA†	— ( — )	— ( — )	— ( — )	— ( — )	2 ( 0.5)	21 ( 1.2)	65 ( 2.0)	35 ( 2.0)
ARIZONA	1 ( 0.2)	13 ( 0.9)	53 ( 1.6)	47 ( 1.6)	1 ( 0.4)	15 ( 1.6)	57 ( 2.4)	43 ( 2.4)
ARKANSAS†	0 ( 0.2)	10 ( 0.7)	47 ( 1.5)	53 ( 1.5)	1 ( 0.3)	13 ( 1.4)	54 ( 2.2)	46 ( 2.2)
CALIFORNIA	1 ( 0.4)	12 ( 1.2)	46 ( 1.9)	54 ( 1.9)	1 ( 0.4)	11 ( 1.5)	46 ( 2.4)	54 ( 2.4)
COLORADO	2 ( 0.4)	17 ( 1.0)	61 ( 1.4)	39 ( 1.4)	2 ( 0.3)	22 ( 1.3)>	67 ( 1.6)>	33 ( 1.6)<
CONNECTICUT	3 ( 0.5)	24 ( 1.4)	67 ( 1.6)	33 ( 1.6)	3 ( 0.5)	31 ( 1.7)>	75 ( 1.5)>	25 ( 1.5)<
DELAWARE	2 ( 0.3)	17 ( 0.9)	55 ( 1.0)	45 ( 1.0)	1 ( 0.4)	16 ( 1.2)	54 ( 1.1)	46 ( 1.1)
DISTRICT OF COLUMBIA	1 ( 0.2)	5 ( 0.3)	23 ( 0.9)	77 ( 0.9)	1 ( 0.4)	5 ( 0.5)	20 ( 0.8)	80 ( 0.8)
FLORIDA	1 ( 0.3)	13 ( 1.4)	52 ( 1.7)	48 ( 1.7)	1 ( 0.2)	15 ( 1.1)	55 ( 1.7)	45 ( 1.7)
GEORGIA	1 ( 0.3)	15 ( 1.2)	53 ( 1.7)	47 ( 1.7)	1 ( 0.3)	13 ( 1.3)	53 ( 2.1)	47 ( 2.1)
HAWAII	1 ( 0.2)	15 ( 0.9)	52 ( 1.8)	48 ( 1.8)	2 ( 0.4)	16 ( 1.1)	53 ( 1.6)	47 ( 1.6)
INDIANA	1 ( 0.2)	16 ( 1.1)	60 ( 1.7)	40 ( 1.7)	2 ( 0.5)	24 ( 1.6)>	72 ( 1.7)>	28 ( 1.7)<
IOWA†	2 ( 0.4)	26 ( 1.2)	72 ( 1.5)	28 ( 1.5)	1 ( 0.4)	22 ( 1.4)	74 ( 1.4)	26 ( 1.4)
KENTUCKY	1 ( 0.3)	13 ( 1.2)	51 ( 1.5)	49 ( 1.5)	1 ( 0.3)	16 ( 1.1)	60 ( 1.8)>	40 ( 1.8)<
LOUISIANA	0 ( 0.2)	8 ( 0.8)	39 ( 2.0)	61 ( 2.0)	0 ( 0.2)	8 ( 0.9)	44 ( 1.8)	56 ( 1.8)
MAINE	2 ( 0.5)	27 ( 1.5)	75 ( 1.5)	25 ( 1.5)	3 ( 0.6)	27 ( 1.4)	75 ( 1.4)	25 ( 1.4)
MARYLAND	2 ( 0.3)	18 ( 1.2)	55 ( 1.6)	45 ( 1.6)	3 ( 0.7)	22 ( 1.7)	59 ( 1.8)	41 ( 1.8)
MASSACHUSETTS	2 ( 0.5)	23 ( 1.5)	68 ( 1.6)	32 ( 1.6)	2 ( 0.5)	24 ( 1.9)	71 ( 1.8)	29 ( 1.8)
MICHIGAN†	1 ( 0.4)	18 ( 1.7)	61 ( 2.2)	39 ( 2.2)	2 ( 0.5)	23 ( 1.5)	68 ( 1.8)	32 ( 1.8)
MINNESOTA	3 ( 0.4)	26 ( 1.3)	71 ( 1.6)	29 ( 1.6)	3 ( 0.5)	29 ( 1.5)	76 ( 1.5)	24 ( 1.5)
MISSISSIPPI	0 ( 0.1)	6 ( 0.6)	36 ( 1.3)	64 ( 1.3)	0 ( 0.2)	8 ( 0.9)	42 ( 1.9)	58 ( 1.9)
MISSOURI	1 ( 0.3)	19 ( 1.3)	62 ( 1.7)	38 ( 1.7)	1 ( 0.3)	20 ( 1.3)	66 ( 1.7)	34 ( 1.7)
MONTANA†	— ( — )	— ( — )	— ( — )	— ( — )	1 ( 0.4)	22 ( 1.6)	71 ( 1.9)	29 ( 1.9)
NEBRASKA	2 ( 0.5)	22 ( 1.6)	67 ( 1.8)	33 ( 1.8)	2 ( 0.3)	24 ( 1.4)	70 ( 1.6)	30 ( 1.6)
NEVADA†	— ( — )	— ( — )	— ( — )	— ( — )	1 ( 0.3)	14 ( 1.2)	57 ( 1.8)	43 ( 1.8)
NEW JERSEY†	2 ( 0.6)	25 ( 1.5)	68 ( 2.1)	32 ( 2.1)	3 ( 0.7)	25 ( 1.7)	68 ( 2.1)	32 ( 2.1)
NEW MEXICO	1 ( 0.2)	11 ( 1.3)	50 ( 2.0)	50 ( 2.0)	1 ( 0.3)	13 ( 1.2)	51 ( 2.4)	49 ( 2.4)
NEW YORK†	1 ( 0.3)	17 ( 1.3)	57 ( 1.8)	43 ( 1.8)	2 ( 0.4)	20 ( 1.2)	64 ( 1.8)>	36 ( 1.8)<
NORTH CAROLINA	1 ( 0.3)	13 ( 0.8)	50 ( 1.6)	50 ( 1.6)	2 ( 0.4)	21 ( 1.3)>	64 ( 1.6)>	36 ( 1.6)<
NORTH DAKOTA	1 ( 0.3)	22 ( 1.1)	72 ( 1.3)	28 ( 1.3)	2 ( 0.5)	24 ( 1.3)	75 ( 1.9)	25 ( 1.9)
OREGON	— ( — )	— ( — )	— ( — )	— ( — )	2 ( 0.5)	21 ( 1.3)	65 ( 2.2)	35 ( 2.2)
PENNSYLVANIA†	2 ( 0.4)	22 ( 1.5)	65 ( 2.0)	35 ( 2.0)	1 ( 0.3)	20 ( 1.5)	68 ( 1.8)	32 ( 1.8)
RHODE ISLAND	1 ( 0.4)	13 ( 1.1)	54 ( 2.2)	46 ( 2.2)	1 ( 0.3)	17 ( 1.3)	61 ( 2.0)	39 ( 2.0)
SOUTH CAROLINA†	1 ( 0.3)	13 ( 1.1)	48 ( 1.7)	52 ( 1.7)	1 ( 0.3)	12 ( 1.3)	48 ( 2.0)	52 ( 2.0)
TENNESSEE	0 ( 0.2)	10 ( 1.0)	47 ( 2.0)	53 ( 2.0)	1 ( 0.3)	17 ( 1.5)>	58 ( 2.0)>	42 ( 2.0)<
TEXAS	1 ( 0.3)	15 ( 1.2)	56 ( 1.6)	44 ( 1.6)	3 ( 0.5)	25 ( 1.5)>	69 ( 1.9)>	31 ( 1.9)<
UTAH	1 ( 0.3)	19 ( 1.1)	66 ( 1.7)	34 ( 1.7)	2 ( 0.4)	23 ( 1.3)	69 ( 1.6)	31 ( 1.6)
VERMONT†	— ( — )	— ( — )	— ( — )	— ( — )	3 ( 0.5)	23 ( 1.1)	67 ( 2.1)	33 ( 2.1)
VIRGINIA	2 ( 0.5)	19 ( 1.5)	59 ( 1.4)	41 ( 1.4)	2 ( 0.5)	19 ( 1.5)	62 ( 2.2)	38 ( 2.2)
WASHINGTON	— ( — )	— ( — )	— ( — )	— ( — )	1 ( 0.2)	21 ( 1.2)	67 ( 1.8)	33 ( 1.8)
WEST VIRGINIA	1 ( 0.3)	12 ( 0.9)	52 ( 1.5)	48 ( 1.5)	2 ( 0.5)	19 ( 1.2)>	63 ( 1.6)>	37 ( 1.6)<
WISCONSIN	2 ( 0.4)	24 ( 1.4)	71 ( 1.4)	29 ( 1.4)	3 ( 0.6)	27 ( 1.3)	74 ( 1.2)	26 ( 1.2)
WYOMING	1 ( 0.3)	19 ( 1.1)	69 ( 1.4)	31 ( 1.4)	1 ( 0.3)	19 ( 1.2)	64 ( 1.7)	36 ( 1.7)
<b>Other Jurisdictions</b>								
DDESS	— ( — )	— ( — )	— ( — )	— ( — )	2 ( 0.6)	20 ( 1.5)	64 ( 1.7)	36 ( 1.7)
DoDDS	— ( — )	— ( — )	— ( — )	— ( — )	1 ( 0.3)	19 ( 1.1)	64 ( 1.2)	36 ( 1.2)
GUAM	0 ( 0.2)	5 ( 0.5)	26 ( 1.4)	74 ( 1.4)	0 ( ... )	3 ( 0.5)	23 ( 1.4)	77 ( 1.4)

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).  
 — State or other jurisdiction did not participate in the NAEP assessment year presented in this table.  
 ... Characteristics of the sample do not permit a reliable estimate.  
 > (<) The value for the students was significantly higher (lower) than in the 1992 assessment at about the 95% confidence level using appropriate multiple comparison procedures.  
 SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 3.2****1996 Mathematics Assessment**

POPULATION:  
REPORTED STATISTICS:  
BREAKDOWNS BY:

1996 Grade 4 Combined Public and Nonpublic School Students  
Percentage of Students by Achievement Levels  
Type of School

Type of school...	Nonpublic Schools				All Schools			
	Advanced	At or Above Proficient	At or Above Basic	Below Basic	Advanced	At or Above Proficient	At or Above Basic	Below Basic
Achievement level...	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )
<b>JURISDICTIONS</b>								
<b>Nation</b>								
NATION	4 ( 1.2)	33 ( 2.2)	80 ( 2.2)	20 ( 2.2)	2 ( 0.3)	21 ( 0.9)	64 ( 1.2)	36 ( 1.2)
NORTHEAST	4 ( 2.0)	29 ( 3.8)	77 ( 4.3)	23 ( 4.3)	3 ( 0.9)	26 ( 1.6)	70 ( 2.9)	30 ( 2.9)
SOUTHEAST	4 ( 2.9)	36 ( 4.6)	83 ( 3.1)	17 ( 3.1)	2 ( 0.8)	16 ( 2.4)	55 ( 2.9)	45 ( 2.9)
CENTRAL	3 ( 1.0)	35 ( 2.6)	85 ( 2.1)	15 ( 2.1)	2 ( 0.6)	27 ( 2.1)	75 ( 2.6)	25 ( 2.6)
WEST	6 ( 4.0)	35 (10.1)	76 ( 8.1)	24 ( 8.1)	2 ( 0.5)	18 ( 1.7)	58 ( 2.8)	42 ( 2.8)
<b>States</b>								
ALABAMA†	4 ( 1.8)	33 ( 8.0)	79 ( 8.6)	21 ( 8.6)	1 ( 0.3)	13 ( 1.3)	51 ( 2.0)	49 ( 2.0)
ARIZONA†	4 ( 2.6)	35 ( 6.7)	86 ( 6.3)	14 ( 6.3)	2 ( 0.4)	16 ( 1.8)	57 ( 2.9)	43 ( 2.9)
ARKANSAS†	2 ( 0.8)	30 ( 5.9)	85 ( 4.3)	15 ( 4.3)	1 ( 0.3)	14 ( 1.3)	56 ( 2.2)	44 ( 2.2)
CALIFORNIA†	5 ( 2.6)	33 ( 7.6)	77 ( 6.2)	23 ( 6.2)	1 ( 0.4)	13 ( 1.5)	49 ( 2.3)	51 ( 2.3)
COLORADO†	0 ( ... )	19 ( 5.5)	66 ( 9.8)	34 ( 9.8)	2 ( 0.3)	22 ( 1.2)	67 ( 1.6)	33 ( 1.6)
CONNECTICUT†	1 ( 0.6)	20 ( 2.8)	70 ( 3.8)	30 ( 3.8)	3 ( 0.4)	29 ( 1.6)	74 ( 1.5)	26 ( 1.5)
GEORGIA	1 ( ... )	27 ( 7.3)	81 ( 6.1)	19 ( 6.1)	1 ( 0.3)	14 ( 1.4)	55 ( 2.0)	45 ( 2.0)
INDIANA†	4 ( 1.3)	40 ( 4.6)	86 ( 2.9)	14 ( 2.9)	2 ( 0.4)	26 ( 1.5)	74 ( 1.5)	26 ( 1.5)
IOWA†	2 ( ... )	34 ( 4.4)	87 ( 2.8)	13 ( 2.8)	1 ( 0.4)	23 ( 1.3)	75 ( 1.4)	25 ( 1.4)
KENTUCKY	3 ( 1.2)	29 ( 3.7)	80 ( 4.4)	20 ( 4.4)	1 ( 0.3)	17 ( 1.0)	62 ( 1.7)	38 ( 1.7)
LOUISIANA	1 ( 0.6)	16 ( 2.9)	64 ( 6.1)	36 ( 6.1)	0 ( 0.1)	9 ( 0.9)	47 ( 1.7)	53 ( 1.7)
MAINE†	1 ( ... )	32 ( 9.0)	84 ( 8.1)	16 ( 8.1)	3 ( 0.6)	28 ( 1.4)	76 ( 1.5)	24 ( 1.5)
MASSACHUSETTS†	1 ( ... )	22 ( 4.7)	79 ( 4.5)	21 ( 4.5)	2 ( 0.5)	24 ( 1.8)	72 ( 1.6)	28 ( 1.6)
MICHIGAN†	1 ( ... )	18 ( 4.0)	65 ( 7.0)	35 ( 7.0)	2 ( 0.4)	22 ( 1.3)	68 ( 1.7)	32 ( 1.7)
MINNESOTA†	3 ( 1.3)	30 ( 4.1)	81 ( 3.6)	19 ( 3.6)	3 ( 0.5)	29 ( 1.4)	76 ( 1.3)	24 ( 1.3)
MISSISSIPPI†	2 ( ... )	21 ( 5.6)	75 ( 5.9)	25 ( 5.9)	0 ( 0.2)	9 ( 1.1)	45 ( 2.1)	55 ( 2.1)
MISSOURI	4 ( 1.1)	36 ( 3.8)	84 ( 3.8)	16 ( 3.8)	2 ( 0.3)	22 ( 1.2)	68 ( 1.6)	32 ( 1.6)
MONTANA†	3 ( ... )	30 ( 3.6)	84 ( 2.8)	16 ( 2.8)	1 ( 0.4)	23 ( 1.6)	71 ( 1.8)	29 ( 1.8)
NEBRASKA	2 ( 0.7)	28 ( 4.3)	82 ( 3.7)	18 ( 3.7)	2 ( 0.3)	25 ( 1.4)	72 ( 1.4)	28 ( 1.4)
NEVADA†	1 ( ... )	24 ( 6.2)	77 ( 5.8)	23 ( 5.8)	1 ( 0.3)	14 ( 1.2)	58 ( 1.7)	42 ( 1.7)
NEW MEXICO	1 ( ... )	18 ( 6.5)	54 (11.5)	46 (11.5)	1 ( 0.2)	13 ( 1.2)	50 ( 2.2)	50 ( 2.2)
NEW YORK†	1 ( ... )	21 ( 4.2)	65 ( 8.2)	35 ( 8.2)	2 ( 0.4)	20 ( 1.1)	64 ( 1.9)	36 ( 1.9)
UTAH†	4 ( ... )	41 ( 9.0)	85 ( 5.9)	15 ( 5.9)	2 ( 0.4)	23 ( 1.3)	69 ( 1.6)	31 ( 1.6)
VERMONT†	3 ( ... )	30 ( 9.2)	77 ( 6.3)	23 ( 6.3)	3 ( 0.5)	23 ( 1.1)	67 ( 1.9)	33 ( 1.9)
WYOMING	1 ( ... )	25 ( 5.0)	73 ( 6.3)	27 ( 6.3)	1 ( 0.3)	19 ( 1.2)	64 ( 1.7)	36 ( 1.7)
<b>Other Jurisdictions</b>								
GUAM†	2 ( 0.8)	19 ( 3.9)	57 ( 3.9)	43 ( 3.9)	1 ( 0.2)	6 ( 0.9)	28 ( 1.4)	72 ( 1.4)

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).

... Characteristics of the sample do not permit a reliable estimate.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 3.3**

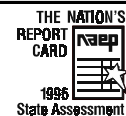
**1990 Mathematics Assessment**

POPULATION:

1990 Grade 8 Public School Students

REPORTED STATISTICS:

Percentage of Students by Achievement Levels



Achievement Level...	Advanced	At or Above Proficient	At or Above Basic	Below Basic
JURISDICTIONS	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )
<b>Nation</b>				
NATION	2 ( 0.4)	15 ( 1.1)	51 ( 1.5)	49 ( 1.5)
NORTHEAST	3 ( 0.9)	21 ( 3.2)	59 ( 4.4)	41 ( 4.4)
SOUTHEAST	1 ( 0.5)	12 ( 2.2)	42 ( 2.7)	58 ( 2.7)
CENTRAL	2 ( 0.5)	15 ( 1.3)	55 ( 2.6)	45 ( 2.6)
WEST	2 ( 0.6)	15 ( 2.2)	50 ( 2.6)	50 ( 2.6)
<b>States</b>				
ALABAMA	1 ( 0.2)	9 ( 0.7)	40 ( 1.7)	60 ( 1.7)
ALASKA	— ( — )	— ( — )	— ( — )	— ( — )
ARIZONA	1 ( 0.4)	13 ( 0.9)	48 ( 1.8)	52 ( 1.8)
ARKANSAS	1 ( 0.2)	9 ( 0.7)	44 ( 1.2)	56 ( 1.2)
CALIFORNIA	2 ( 0.3)	12 ( 1.1)	45 ( 1.7)	55 ( 1.7)
COLORADO	2 ( 0.4)	17 ( 1.0)	57 ( 1.2)	43 ( 1.2)
CONNECTICUT	3 ( 0.4)	22 ( 0.9)	60 ( 1.4)	40 ( 1.4)
DELAWARE	2 ( 0.4)	14 ( 0.8)	48 ( 1.5)	52 ( 1.5)
DISTRICT OF COLUMBIA	1 ( 0.2)	3 ( 0.6)	17 ( 1.0)	83 ( 1.0)
FLORIDA	1 ( 0.3)	12 ( 0.9)	43 ( 1.4)	57 ( 1.4)
GEORGIA	2 ( 0.4)	14 ( 1.2)	47 ( 1.5)	53 ( 1.5)
HAWAII	2 ( 0.3)	12 ( 0.7)	40 ( 1.0)	60 ( 1.0)
INDIANA	3 ( 0.5)	17 ( 1.1)	56 ( 1.5)	44 ( 1.5)
IOWA	3 ( 0.5)	25 ( 1.4)	70 ( 1.2)	30 ( 1.2)
KENTUCKY	1 ( 0.3)	10 ( 0.8)	43 ( 1.7)	57 ( 1.7)
LOUISIANA	1 ( 0.2)	5 ( 0.6)	32 ( 1.6)	68 ( 1.6)
MAINE	— ( — )	— ( — )	— ( — )	— ( — )
MARYLAND	3 ( 0.5)	17 ( 1.2)	50 ( 1.6)	50 ( 1.6)
MASSACHUSETTS	— ( — )	— ( — )	— ( — )	— ( — )
MICHIGAN	2 ( 0.4)	16 ( 1.2)	53 ( 1.7)	47 ( 1.7)
MINNESOTA	3 ( 0.5)	23 ( 1.2)	67 ( 1.1)	33 ( 1.1)
MISSISSIPPI	— ( — )	— ( — )	— ( — )	— ( — )
MISSOURI	— ( — )	— ( — )	— ( — )	— ( — )
MONTANA	4 ( 0.5)	27 ( 1.4)	74 ( 1.5)	26 ( 1.5)
NEBRASKA	3 ( 0.5)	24 ( 1.2)	68 ( 1.3)	32 ( 1.3)
NEW MEXICO	1 ( 0.3)	10 ( 0.9)	43 ( 1.2)	57 ( 1.2)
NEW YORK	3 ( 0.4)	15 ( 0.9)	50 ( 1.7)	50 ( 1.7)
NORTH CAROLINA	1 ( 0.3)	9 ( 0.7)	38 ( 1.4)	62 ( 1.4)
NORTH DAKOTA	4 ( 0.6)	27 ( 1.8)	75 ( 1.6)	25 ( 1.6)
OREGON	3 ( 0.5)	21 ( 1.1)	62 ( 1.4)	38 ( 1.4)
RHODE ISLAND	2 ( 0.3)	15 ( 0.7)	49 ( 1.0)	51 ( 1.0)
SOUTH CAROLINA	— ( — )	— ( — )	— ( — )	— ( — )
TENNESSEE	— ( — )	— ( — )	— ( — )	— ( — )
TEXAS	2 ( 0.3)	13 ( 1.1)	45 ( 1.6)	55 ( 1.6)
UTAH	— ( — )	— ( — )	— ( — )	— ( — )
VERMONT	— ( — )	— ( — )	— ( — )	— ( — )
VIRGINIA	4 ( 0.8)	17 ( 1.6)	52 ( 1.7)	48 ( 1.7)
WASHINGTON	— ( — )	— ( — )	— ( — )	— ( — )
WEST VIRGINIA	1 ( 0.2)	9 ( 0.8)	42 ( 1.1)	58 ( 1.1)
WISCONSIN	3 ( 0.4)	23 ( 1.4)	66 ( 1.6)	34 ( 1.6)
WYOMING	2 ( 0.2)	19 ( 0.9)	64 ( 1.3)	36 ( 1.3)
<b>Other Jurisdictions</b>				
DDESS	— ( — )	— ( — )	— ( — )	— ( — )
DoDDS	— ( — )	— ( — )	— ( — )	— ( — )
GUAM	0 ( 0.2)	4 ( 0.4)	22 ( 1.0)	78 ( 1.0)

— State or other jurisdiction did not participate in the NAEP assessment year presented in this table.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 3.3** (continued)

**1992 Mathematics Assessment**



POPULATION: 1992 Grade 8 Public School Students  
 REPORTED STATISTICS: Percentage of Students by Achievement Levels

Achievement Level...	Advanced	At or Above Proficient	At or Above Basic	Below Basic
JURISDICTIONS	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )
<b>Nation</b>				
NATION	3 ( 0.4)	20 ( 1.0)»	56 ( 1.2)»	44 ( 1.2)«
NORTHEAST	5 ( 1.0)	22 ( 2.6)	54 ( 3.9)	46 ( 3.9)
SOUTHEAST	1 ( 0.3)	13 ( 1.0)	47 ( 1.8)	53 ( 1.8)
CENTRAL	3 ( 0.6)	24 ( 2.8)	65 ( 3.1)	35 ( 3.1)
WEST	3 ( 1.0)	20 ( 2.0)	57 ( 2.6)	43 ( 2.6)
<b>States</b>				
ALABAMA	1 ( 0.3)	10 ( 0.9)	39 ( 1.9)	61 ( 1.9)
ALASKA	— ( — )	— ( — )	— ( — )	— ( — )
ARIZONA	1 ( 0.3)	15 ( 1.3)	55 ( 1.8)»	45 ( 1.8)«
ARKANSAS	1 ( 0.2)	10 ( 0.8)	44 ( 1.8)	56 ( 1.8)
CALIFORNIA	2 ( 0.7)	16 ( 1.3)	50 ( 1.9)	50 ( 1.9)
COLORADO	2 ( 0.4)	22 ( 1.2)»	64 ( 1.4)»	36 ( 1.4)«
CONNECTICUT	3 ( 0.6)	26 ( 1.1)»	64 ( 1.4)	36 ( 1.4)
DELAWARE	2 ( 0.4)	15 ( 1.0)	52 ( 1.2)	48 ( 1.2)
DISTRICT OF COLUMBIA	1 ( 0.2)	4 ( 0.9)	22 ( 1.1)»	78 ( 1.1)«
FLORIDA	1 ( 0.3)	15 ( 1.2)	49 ( 1.9)	51 ( 1.9)
GEORGIA	1 ( 0.3)	13 ( 0.9)	48 ( 1.7)	52 ( 1.7)
HAWAII	2 ( 0.3)	14 ( 0.7)	46 ( 1.1)»	54 ( 1.1)«
INDIANA	3 ( 0.4)	20 ( 1.2)	60 ( 1.5)	40 ( 1.5)
IOWA	4 ( 0.7)	31 ( 1.3)»	76 ( 1.3)»	24 ( 1.3)«
KENTUCKY	2 ( 0.3)	14 ( 1.1)	51 ( 1.5)»	49 ( 1.5)«
LOUISIANA	0 ( 0.2)	7 ( 1.0)	37 ( 1.9)	63 ( 1.9)
MAINE	3 ( 0.6)	25 ( 1.5)	72 ( 1.3)	28 ( 1.3)
MARYLAND	3 ( 0.5)	20 ( 1.2)	54 ( 1.4)	46 ( 1.4)
MASSACHUSETTS	3 ( 0.5)	23 ( 1.3)	63 ( 1.5)	37 ( 1.5)
MICHIGAN	2 ( 0.4)	19 ( 1.5)	58 ( 1.7)	42 ( 1.7)
MINNESOTA	5 ( 0.6)	31 ( 1.2)»	74 ( 1.3)»	26 ( 1.3)«
MISSISSIPPI	0 ( 0.1)	6 ( 0.7)	33 ( 1.6)	67 ( 1.6)
MISSOURI	2 ( 0.4)	20 ( 1.2)	62 ( 1.6)	38 ( 1.6)
MONTANA	— ( — )	— ( — )	— ( — )	— ( — )
NEBRASKA	3 ( 0.5)	26 ( 1.6)	70 ( 1.3)	30 ( 1.3)
NEW MEXICO	1 ( 0.3)	11 ( 0.8)	48 ( 1.3)	52 ( 1.3)
NEW YORK	3 ( 0.5)	20 ( 1.3)»	57 ( 2.2)»	43 ( 2.2)«
NORTH CAROLINA	1 ( 0.3)	12 ( 1.0)»	47 ( 1.4)»	53 ( 1.4)«
NORTH DAKOTA	3 ( 0.5)	29 ( 1.6)	78 ( 1.4)	22 ( 1.4)
OREGON	— ( — )	— ( — )	— ( — )	— ( — )
RHODE ISLAND	1 ( 0.3)	16 ( 1.1)	56 ( 1.2)»	44 ( 1.2)«
SOUTH CAROLINA	2 ( 0.5)	15 ( 1.0)	48 ( 1.3)	52 ( 1.3)
TENNESSEE	1 ( 0.4)	12 ( 1.0)	47 ( 1.9)	53 ( 1.9)
TEXAS	3 ( 0.6)	18 ( 1.2)»	53 ( 1.5)»	47 ( 1.5)«
UTAH	2 ( 0.4)	22 ( 1.0)	67 ( 1.2)	33 ( 1.2)
VERMONT	— ( — )	— ( — )	— ( — )	— ( — )
VIRGINIA	3 ( 0.6)	19 ( 1.1)	57 ( 1.7)	43 ( 1.7)
WASHINGTON	— ( — )	— ( — )	— ( — )	— ( — )
WEST VIRGINIA	1 ( 0.2)	10 ( 0.8)	47 ( 1.6)	53 ( 1.6)
WISCONSIN	3 ( 0.6)	27 ( 1.4)	71 ( 2.1)	29 ( 2.1)
WYOMING	2 ( 0.4)	21 ( 1.1)	67 ( 1.3)	33 ( 1.3)
<b>Other Jurisdictions</b>				
DDESS	— ( — )	— ( — )	— ( — )	— ( — )
DoDDS	— ( — )	— ( — )	— ( — )	— ( — )
GUAM	0 ( 0.1)	6 ( 0.6)	25 ( 1.4)	75 ( 1.4)

— State or other jurisdiction did not participate in the NAEP assessment year presented in this table.  
 » ( « ) The value for the students was significantly higher (lower) than in the 1990 assessment at about the 95% confidence level using appropriate multiple comparison procedures.  
 SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 3.3** (continued)

**1996 Mathematics Assessment**



POPULATION: 1996 Grade 8 Public School Students  
 REPORTED STATISTICS: Percentage of Students by Achievement Levels

Achievement Level...	Advanced	At or Above Proficient	At or Above Basic	Below Basic
JURISDICTIONS	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )
<b>Nation</b>				
NATION	4 ( 0.6)	23 ( 1.2)»	61 ( 1.3)»»	39 ( 1.3)«<
NORTHEAST	5 ( 2.3)	27 ( 4.1)	65 ( 3.6)	35 ( 3.6)
SOUTHEAST	2 ( 0.7)	16 ( 2.2)	54 ( 3.5)	46 ( 3.5)
CENTRAL	5 ( 1.1)	28 ( 2.8)»	68 ( 3.7)	32 ( 3.7)
WEST	3 ( 0.6)	21 ( 2.0)	58 ( 2.4)	42 ( 2.4)
<b>States</b>				
ALABAMA	1 ( 0.4)	12 ( 1.8)	45 ( 2.6)	55 ( 2.6)
ALASKA†	7 ( 1.1)	30 ( 1.6)	68 ( 2.3)	32 ( 2.3)
ARIZONA	2 ( 0.3)	18 ( 1.2)»	57 ( 1.9)»	43 ( 1.9)«
ARKANSAS†	2 ( 0.4)	13 ( 1.0)»	52 ( 1.8)»»	48 ( 1.8)«<
CALIFORNIA	3 ( 0.5)	17 ( 1.5)»	51 ( 2.1)»	49 ( 2.1)«
COLORADO	3 ( 0.5)	25 ( 1.3)»	67 ( 1.3)»	33 ( 1.3)«
CONNECTICUT	5 ( 0.6)»	31 ( 1.5)»	70 ( 1.4)»»	30 ( 1.4)«<
DELAWARE	3 ( 0.6)	19 ( 1.0)»	55 ( 1.3)«	45 ( 1.3)«
DISTRICT OF COLUMBIA	1 ( 0.3)	5 ( 0.8)	20 ( 1.2)	80 ( 1.2)
FLORIDA	2 ( 0.4)	17 ( 1.3)»	54 ( 2.1)»	46 ( 2.1)«
GEORGIA	2 ( 0.5)	16 ( 1.8)	51 ( 2.0)	49 ( 2.0)
HAWAII	2 ( 0.4)	16 ( 0.9)»	51 ( 1.5)»	49 ( 1.5)«
INDIANA	3 ( 0.5)	24 ( 1.7)»	68 ( 2.0)»»	32 ( 2.0)«<
IOWA†	4 ( 0.6)	31 ( 1.8)»	78 ( 1.4)»	22 ( 1.4)«
KENTUCKY	1 ( 0.3)	16 ( 1.2)»	56 ( 1.6)»	44 ( 1.6)«
LOUISIANA	0 ( 0.2)	7 ( 1.1)	38 ( 2.0)»	62 ( 2.0)«
MAINE	6 ( 0.7)	31 ( 1.7)	77 ( 1.5)»	23 ( 1.5)«
MARYLAND†	5 ( 1.0)»	24 ( 2.3)»	57 ( 2.2)»	43 ( 2.2)«
MASSACHUSETTS	5 ( 0.8)	28 ( 1.8)	68 ( 2.3)	32 ( 2.3)
MICHIGAN†	4 ( 0.8)»	28 ( 1.8)»»	67 ( 2.1)»»	33 ( 2.1)«<
MINNESOTA	6 ( 0.8)»	34 ( 1.8)»	75 ( 1.5)»	25 ( 1.5)«
MISSISSIPPI	0 ( 0.2)	7 ( 0.8)	36 ( 1.3)	64 ( 1.3)
MISSOURI	2 ( 0.5)	22 ( 1.4)	64 ( 2.0)	36 ( 2.0)
MONTANA†	5 ( 0.5)»	32 ( 1.5)»	75 ( 1.7)	25 ( 1.7)
NEBRASKA	5 ( 0.7)»	31 ( 1.5)»	76 ( 1.1)»»	24 ( 1.1)«<
NEW MEXICO	2 ( 0.3)	14 ( 1.1)»	51 ( 1.6)»	49 ( 1.6)«
NEW YORK†	3 ( 0.5)	22 ( 1.5)»	61 ( 2.0)»	39 ( 2.0)«
NORTH CAROLINA	3 ( 0.6)»	20 ( 1.3)»»	56 ( 1.8)»»	44 ( 1.8)«<
NORTH DAKOTA	4 ( 0.7)	33 ( 1.5)»	77 ( 1.2)	23 ( 1.2)
OREGON	4 ( 0.7)	26 ( 1.6)»	67 ( 1.7)»	33 ( 1.7)«
RHODE ISLAND	3 ( 0.4)	20 ( 1.3)»»	60 ( 1.6)»	40 ( 1.6)«
SOUTH CAROLINA†	2 ( 0.4)	14 ( 1.2)	48 ( 1.7)	52 ( 1.7)
TENNESSEE	2 ( 0.3)	15 ( 1.3)	53 ( 1.8)	47 ( 1.8)
TEXAS	3 ( 0.4)	21 ( 1.5)»	59 ( 1.8)»»	41 ( 1.8)«<
UTAH	3 ( 0.4)	24 ( 1.3)	70 ( 1.5)	30 ( 1.5)
VERMONT†	4 ( 0.6)	27 ( 1.4)	72 ( 1.7)	28 ( 1.7)
VIRGINIA	3 ( 0.4)	21 ( 1.2)	58 ( 2.0)»	42 ( 2.0)«
WASHINGTON	4 ( 0.7)	26 ( 1.2)	67 ( 1.6)	33 ( 1.6)
WEST VIRGINIA	1 ( 0.4)	14 ( 0.9)»»	54 ( 1.6)»»	46 ( 1.6)«<
WISCONSIN†	5 ( 0.8)»	32 ( 2.0)»	75 ( 2.0)»	25 ( 2.0)«
WYOMING	2 ( 0.6)	22 ( 1.0)»	68 ( 1.2)»	32 ( 1.2)«
<b>Other Jurisdictions</b>				
DDESS	5 ( 1.1)	21 ( 2.4)	57 ( 3.1)	43 ( 3.1)
DoDDS	3 ( 0.6)	23 ( 1.2)	65 ( 1.4)	35 ( 1.4)
GUAM	0 ( ... )	6 ( 0.8)	29 ( 1.6)»	71 ( 1.6)«

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).  
 ... Characteristics of the sample do not permit a reliable estimate.  
 » (») The value for the students was significantly higher (lower) than in the 1990 assessment at about the 95% confidence level using appropriate multiple comparison procedures.  
 < (<) The value for the students was significantly higher (lower) than in the 1992 assessment at about the 95% confidence level using appropriate multiple comparison procedures.  
 SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.



**TABLE 3.4**

**1996 Mathematics Assessment**



POPULATION:  
REPORTED STATISTICS:  
BREAKDOWNS BY:

1996 Grade 8 Combined Public and Nonpublic School Students  
Percentage of Students by Achievement Levels  
Type of School

Type of school...	Nonpublic Schools				All Schools			
	Advanced	At or Above Proficient	At or Above Basic	Below Basic	Advanced	At or Above Proficient	At or Above Basic	Below Basic
Achievement Level...	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )
<b>JURISDICTIONS</b>								
<b>Nation</b>								
NATION	6 ( 1.2)	33 ( 2.9)	75 ( 2.8)	25 ( 2.8)	4 ( 0.5)	24 ( 1.1)	62 ( 1.1)	38 ( 1.1)
NORTHEAST	3 ( 2.1)	28 ( 5.6)	73 ( 7.0)	27 ( 7.0)	5 ( 1.9)	27 ( 3.7)	67 ( 3.1)	33 ( 3.1)
SOUTHEAST	6 ( 2.8)	32 ( 5.7)	77 ( 5.2)	23 ( 5.2)	3 ( 0.6)	18 ( 1.8)	56 ( 3.2)	44 ( 3.2)
CENTRAL	7 ( 2.2)	37 ( 5.4)	77 ( 4.2)	23 ( 4.2)	5 ( 1.0)	29 ( 2.5)	69 ( 3.4)	31 ( 3.4)
WEST	8 ( 2.6)	36 ( 6.4)	72 ( 6.7)	28 ( 6.7)	3 ( 0.6)	22 ( 1.9)	59 ( 2.2)	41 ( 2.2)
<b>States</b>								
CALIFORNIA†	3 ( 1.8)	29 ( 4.3)	79 ( 4.6)	21 ( 4.6)	3 ( 0.4)	18 ( 1.5)	54 ( 2.0)	46 ( 2.0)
GEORGIA	8 ( 4.5)	39 (10.3)	85 ( 6.4)	15 ( 6.4)	2 ( 0.5)	17 ( 1.8)	53 ( 1.9)	47 ( 1.9)
IOWA†	7 ( 1.7)	45 ( 5.5)	88 ( 2.4)	12 ( 2.4)	4 ( 0.5)	33 ( 1.8)	79 ( 1.3)	21 ( 1.3)
LOUISIANA†	2 ( 1.1)	19 ( 3.6)	71 ( 5.1)	29 ( 5.1)	1 ( 0.2)	9 ( 1.1)	44 ( 2.0)	56 ( 2.0)
MASSACHUSETTS†	4 ( 1.7)	28 ( 6.8)	75 ( 5.3)	25 ( 5.3)	5 ( 0.8)	28 ( 1.9)	69 ( 2.0)	31 ( 2.0)
MICHIGAN†	7 ( 2.1)	34 ( 5.7)	79 ( 5.3)	21 ( 5.3)	5 ( 0.7)	29 ( 1.7)	68 ( 2.0)	32 ( 2.0)
MINNESOTA†	7 ( 3.8)	42 ( 5.1)	87 ( 3.8)	13 ( 3.8)	6 ( 0.8)	35 ( 1.7)	76 ( 1.4)	24 ( 1.4)
MISSOURI	8 ( 3.3)	42 ( 7.8)	85 ( 4.1)	15 ( 4.1)	3 ( 0.7)	24 ( 1.7)	66 ( 2.0)	34 ( 2.0)
MONTANA†	7 ( 2.3)	39 ( 8.0)	80 (10.7)	20 (10.7)	5 ( 0.5)	33 ( 1.5)	75 ( 1.8)	25 ( 1.8)
NEBRASKA†	4 ( 1.4)	34 ( 5.4)	82 ( 4.8)	18 ( 4.8)	5 ( 0.6)	31 ( 1.5)	77 ( 1.1)	23 ( 1.1)
NEVADA†	5 ( 2.3)	31 ( 8.1)	78 ( 5.8)	22 ( 5.8)	— ( —)□	— ( —)□	— ( —)□	— ( —)□
NEW HAMPSHIRE†	8 ( 3.3)	43 ( 6.5)	86 ( 3.2)	14 ( 3.2)	— ( —)□	— ( —)□	— ( —)□	— ( —)□
NEW MEXICO†	4 ( 2.5)	26 ( 6.4)	76 ( 5.2)	24 ( 5.2)	2 ( 0.3)	15 ( 1.3)	52 ( 2.0)	48 ( 2.0)
NEW YORK†	3 ( 1.3)	25 ( 4.7)	68 ( 4.4)	32 ( 4.4)	3 ( 0.4)	23 ( 1.3)	62 ( 1.7)	38 ( 1.7)
NORTH DAKOTA	8 ( 3.6)	47 ( 7.4)	90 ( 3.6)	10 ( 3.6)	5 ( 0.8)	34 ( 1.5)	78 ( 1.2)	22 ( 1.2)
RHODE ISLAND†	3 ( 1.2)	22 ( 4.3)	68 ( 4.6)	32 ( 4.6)	3 ( 0.4)	21 ( 1.2)	61 ( 1.6)	39 ( 1.6)
SOUTH CAROLINA†	2 ( 1.2)	29 ( 7.4)	76 ( 6.4)	24 ( 6.4)	2 ( 0.3)	15 ( 1.2)	50 ( 1.6)	50 ( 1.6)
TEXAS	12 ( 5.1)	53 ( 8.2)	94 ( 2.5)	6 ( 2.5)	3 ( 0.5)	23 ( 1.5)	62 ( 1.6)	38 ( 1.6)
VERMONT†	5 ( 2.2)	35 ( 6.3)	81 ( 6.4)	19 ( 6.4)	4 ( 0.6)	28 ( 1.3)	72 ( 1.8)	28 ( 1.8)
WASHINGTON	10 ( 3.8)	53 ( 7.9)	92 ( 3.5)	8 ( 3.5)	4 ( 0.7)	28 ( 1.3)	68 ( 1.5)	32 ( 1.5)
<b>Other Jurisdictions</b>								
GUAM†	7 ( 1.4)	24 ( 3.3)	63 ( 3.4)	37 ( 3.4)	2 ( 0.4)	9 ( 1.0)	36 ( 1.5)	64 ( 1.5)

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).

□ Nevada and New Hampshire did not satisfy the 1996 public school participation rates necessary for reporting results (see Appendix A).

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.



## Chapter 4

# *Achievement Level Results by Population Subgroups*

### *Overview*

Tables in this chapter show the achievement-level results for the same six demographic population subgroups found in Chapter 2. Tables for gender are presented first; tables for the type of location are presented last. There is one table per grade for each of these demographic categories. However, many of the tables extend across multiple pages. Only 1996 data are available for Title I participation and free/reduced-price lunch eligibility.

The reader is cautioned against making simple or causal inferences related to the performances of various subgroups of students or the impact of Title I and free/reduced-price lunch programs.

**TABLE 4.1**

**1992 Mathematics Assessment**



POPULATION:  
REPORTED STATISTICS:  
BREAKDOWNS BY:

1992 Grade 4 Public School Students  
Percentage of Students by Achievement Levels  
Gender

Achievement Level...	Advanced		At or Above Proficient		At or Above Basic		Below Basic	
	Male	Female	Male	Female	Male	Female	Male	Female
What is your gender?								
JURISDICTIONS	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )
<b>Nation</b>								
NATION	2 ( 0.4)	1 ( 0.3)	19 ( 1.2)	16 ( 1.4)	59 ( 1.3)	56 ( 1.8)	41 ( 1.3)	44 ( 1.8)
NORTHEAST	3 ( 1.0)	2 ( 0.8)	26 ( 3.2)	19 ( 3.4)	65 ( 2.7)	60 ( 4.5)	35 ( 2.7)	40 ( 4.5)
SOUTHEAST	1 ( 0.4)	1 ( 0.6)	11 ( 1.2)	11 ( 2.3)	47 ( 2.3)	46 ( 3.7)	53 ( 2.3)	54 ( 3.7)
CENTRAL	2 ( 0.9)	1 ( 0.5)	23 ( 2.7)	17 ( 2.8)	67 ( 4.1)	61 ( 4.5)	33 ( 4.1)	39 ( 4.5)
WEST	2 ( 0.7)	1 ( 0.7)	17 ( 2.5)	16 ( 2.6)	57 ( 2.5)	58 ( 2.6)	43 ( 2.5)	42 ( 2.6)
<b>States</b>								
ALABAMA	1 ( 0.3)	0 ( 0.2)	10 ( 1.3)	10 ( 1.4)	44 ( 2.5)	42 ( 2.3)	56 ( 2.5)	58 ( 2.3)
ALASKA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
ARIZONA	1 ( 0.4)	1 ( 0.3)	13 ( 1.2)	13 ( 1.2)	53 ( 1.9)	54 ( 1.7)	47 ( 1.9)	46 ( 1.7)
ARKANSAS	0 ( 0.2)	0 ( ... )	10 ( 1.0)	9 ( 1.1)	48 ( 1.7)	46 ( 2.4)	52 ( 1.7)	54 ( 2.4)
CALIFORNIA	2 ( 0.6)	1 ( 0.4)	13 ( 1.5)	12 ( 1.2)	47 ( 2.4)	46 ( 1.9)	53 ( 2.4)	54 ( 1.9)
COLORADO	2 ( 0.7)	1 ( 0.4)	19 ( 1.3)	16 ( 1.3)	63 ( 1.7)	59 ( 1.7)	37 ( 1.7)	41 ( 1.7)
CONNECTICUT	3 ( 0.7)	3 ( 0.7)	26 ( 1.7)	23 ( 1.8)	69 ( 2.0)	66 ( 1.7)	31 ( 2.0)	34 ( 1.7)
DELAWARE	2 ( 0.5)	1 ( 0.5)	18 ( 1.5)	15 ( 1.6)	56 ( 2.1)	53 ( 1.8)	44 ( 2.1)	47 ( 1.8)
DISTRICT OF COLUMBIA	1 ( 0.2)	1 ( 0.3)	6 ( 0.7)	5 ( 0.7)	23 ( 1.4)	23 ( 1.3)	77 ( 1.4)	77 ( 1.3)
FLORIDA	1 ( 0.4)	1 ( 0.5)	15 ( 1.9)	12 ( 1.4)	53 ( 2.0)	50 ( 2.3)	47 ( 2.0)	50 ( 2.3)
GEORGIA	1 ( 0.4)	1 ( 0.4)	16 ( 1.5)	14 ( 1.2)	52 ( 2.2)	54 ( 2.3)	48 ( 2.2)	46 ( 2.3)
HAWAII	1 ( 0.4)	1 ( 0.3)	16 ( 1.3)	14 ( 1.0)	50 ( 2.2)	54 ( 1.9)	50 ( 2.2)	46 ( 1.9)
INDIANA	1 ( 0.4)	1 ( 0.3)	17 ( 1.5)	15 ( 1.1)	63 ( 2.2)	57 ( 2.0)	37 ( 2.2)	43 ( 2.0)
IOWA	3 ( 0.6)	2 ( 0.5)	27 ( 1.6)	25 ( 1.4)	73 ( 1.6)	72 ( 1.9)	27 ( 1.6)	28 ( 1.9)
KENTUCKY	1 ( 0.5)	1 ( 0.3)	14 ( 1.6)	12 ( 1.2)	51 ( 2.1)	51 ( 1.6)	49 ( 2.1)	49 ( 1.6)
LOUISIANA	1 ( 0.2)	0 ( ... )	8 ( 0.9)	7 ( 1.0)	40 ( 2.4)	38 ( 2.2)	60 ( 2.4)	62 ( 2.2)
MAINE	3 ( 0.7)	2 ( 0.6)	28 ( 1.8)	27 ( 1.9)	75 ( 1.8)	75 ( 2.2)	25 ( 1.8)	25 ( 2.2)
MARYLAND	3 ( 0.6)	2 ( 0.4)	20 ( 1.6)	17 ( 1.5)	57 ( 1.7)	53 ( 2.1)	43 ( 1.7)	47 ( 2.1)
MASSACHUSETTS	3 ( 0.7)	2 ( 0.5)	25 ( 1.7)	21 ( 1.6)	70 ( 1.6)	67 ( 2.1)	30 ( 1.6)	33 ( 2.1)
MICHIGAN	2 ( 0.7)	1 ( 0.3)	21 ( 2.1)	15 ( 1.8)	64 ( 2.5)	57 ( 2.5)	36 ( 2.5)	43 ( 2.5)
MINNESOTA	3 ( 0.6)	2 ( 0.5)	28 ( 1.5)	24 ( 1.6)	71 ( 1.8)	70 ( 2.1)	29 ( 1.8)	30 ( 2.1)
MISSISSIPPI	0 ( 0.2)	0 ( 0.2)	6 ( 0.9)	6 ( 0.8)	34 ( 1.7)	38 ( 1.7)	66 ( 1.7)	62 ( 1.7)
MISSOURI	2 ( 0.4)	1 ( 0.4)	19 ( 1.6)	18 ( 2.0)	61 ( 2.2)	63 ( 1.8)	39 ( 2.2)	37 ( 1.8)
MONTANA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
NEBRASKA	2 ( 0.7)	1 ( 0.5)	24 ( 1.7)	20 ( 2.1)	67 ( 1.9)	66 ( 2.6)	33 ( 1.9)	34 ( 2.6)
NEVADA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
NEW JERSEY	3 ( 0.9)	2 ( 0.6)	26 ( 1.9)	23 ( 2.0)	69 ( 2.5)	67 ( 2.4)	31 ( 2.5)	33 ( 2.4)
NEW MEXICO	1 ( 0.2)	1 ( 0.3)	11 ( 1.1)	11 ( 2.0)	50 ( 2.5)	49 ( 2.2)	50 ( 2.5)	51 ( 2.2)
NEW YORK	2 ( 0.3)	1 ( 0.4)	20 ( 1.6)	13 ( 1.4)	61 ( 1.8)	53 ( 2.4)	39 ( 1.8)	47 ( 2.4)
NORTH CAROLINA	2 ( 0.4)	1 ( 0.3)	13 ( 1.1)	12 ( 1.2)	50 ( 1.9)	51 ( 2.0)	50 ( 1.9)	49 ( 2.0)
NORTH DAKOTA	2 ( 0.6)	0 ( ... )	24 ( 1.6)	20 ( 1.9)	73 ( 1.7)	72 ( 1.7)	27 ( 1.7)	28 ( 1.7)
OREGON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
PENNSYLVANIA	2 ( 0.5)	2 ( 0.6)	23 ( 1.9)	21 ( 1.5)	66 ( 2.6)	64 ( 2.3)	34 ( 2.6)	36 ( 2.3)
RHODE ISLAND	2 ( 0.5)	1 ( ... )	15 ( 1.5)	12 ( 1.2)	55 ( 2.6)	53 ( 2.4)	45 ( 2.6)	47 ( 2.4)
SOUTH CAROLINA	1 ( 0.3)	1 ( 0.4)	14 ( 1.5)	12 ( 1.1)	48 ( 2.0)	47 ( 2.1)	52 ( 2.0)	53 ( 2.1)
TENNESSEE	0 ( 0.2)	0 ( 0.3)	10 ( 1.3)	10 ( 1.1)	47 ( 2.3)	48 ( 2.5)	53 ( 2.3)	52 ( 2.5)
TEXAS	1 ( 0.4)	1 ( 0.4)	17 ( 1.7)	13 ( 1.5)	57 ( 1.9)	55 ( 2.0)	43 ( 1.9)	45 ( 2.0)
UTAH	2 ( 0.5)	1 ( 0.3)	19 ( 1.5)	19 ( 1.4)	65 ( 1.8)	66 ( 2.3)	35 ( 1.8)	34 ( 2.3)
VERMONT	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
VIRGINIA	3 ( 0.7)	2 ( 0.5)	20 ( 1.9)	17 ( 1.6)	60 ( 1.8)	57 ( 1.7)	40 ( 1.8)	43 ( 1.7)
WASHINGTON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
WEST VIRGINIA	1 ( 0.5)	1 ( 0.3)	14 ( 1.5)	11 ( 1.0)	54 ( 2.1)	51 ( 1.9)	46 ( 2.1)	49 ( 1.9)
WISCONSIN	3 ( 0.7)	2 ( 0.5)	26 ( 1.8)	23 ( 1.8)	72 ( 1.6)	70 ( 1.7)	28 ( 1.6)	30 ( 1.7)
WYOMING	1 ( 0.5)	1 ( 0.3)	21 ( 1.5)	17 ( 1.3)	70 ( 1.7)	67 ( 1.9)	30 ( 1.7)	33 ( 1.9)
<b>Other Jurisdictions</b>								
DDESS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
DoDDS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
GUAM	0 ( 0.1)	0 ( ... )	4 ( 0.7)	5 ( 0.8)	24 ( 2.0)	29 ( 1.6)	76 ( 2.0)	71 ( 1.6)

— State or other jurisdiction did not participate in the NAEP assessment year presented in this table.

... Characteristics of the sample do not permit a reliable estimate.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 4.1** (continued)

**1996 Mathematics Assessment**



POPULATION: 1996 Grade 4 Public School Students  
 REPORTED STATISTICS: Percentage of Students by Achievement Levels  
 BREAKDOWNS BY: Gender

Achievement Level...	Advanced		At or Above Proficient		At or Above Basic		Below Basic	
	Male	Female	Male	Female	Male	Female	Male	Female
What is your gender?								
<b>JURISDICTIONS</b>	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )
<b>Nation</b>								
NATION	3 ( 0.5)	1 ( 0.4)	22 ( 1.2)	17 ( 1.2)	63 ( 1.8)	61 ( 1.7)	37 ( 1.8)	39 ( 1.7)
NORTHEAST	4 ( 1.5)	2 ( 0.9)	28 ( 2.1)	23 ( 1.9)	69 ( 4.0)	67 ( 4.2)	31 ( 4.0)	33 ( 4.2)
SOUTHEAST	2 ( 1.1)	1 ( 0.7)	15 ( 2.9)	12 ( 3.1)	53 ( 4.2)	53 ( 3.7)	47 ( 4.2)	47 ( 3.7)
CENTRAL	3 ( 0.8)	1 ( 0.8)	28 ( 3.0)	23 ( 3.6)	74 ( 3.4)	72 ( 3.2)	26 ( 3.4)	28 ( 3.2)
WEST	3 ( 0.9)	1 ( 0.4)	19 ( 2.0)	13 ( 1.7)	58 ( 3.6)	56 ( 3.4)	42 ( 3.6)	44 ( 3.4)
<b>States</b>								
ALABAMA	1 ( 0.4)	1 ( 0.2)	11 ( 1.3)	10 ( 1.2)	48 ( 2.2)	47 ( 2.2)	52 ( 2.2)	53 ( 2.2)
ALASKA†	2 ( 0.7)	2 ( 0.5)	22 ( 1.6)	20 ( 1.5)	64 ( 2.6)	65 ( 2.2)	36 ( 2.6)	35 ( 2.2)
ARIZONA	2 ( 0.5)	1 ( 0.5)	17 ( 2.2)	13 ( 1.5)	57 ( 2.8)	56 ( 2.7)	43 ( 2.8)	44 ( 2.7)
ARKANSAS†	1 ( 0.4)	1 ( 0.4)	14 ( 1.7)	12 ( 1.6)	54 ( 2.4)	54 ( 2.7)	46 ( 2.4)	46 ( 2.7)
CALIFORNIA	1 ( 0.5)	1 ( 0.3)	12 ( 1.9)	9 ( 1.3)	47 ( 2.8)	44 ( 2.4)	53 ( 2.8)	56 ( 2.4)
COLORADO	2 ( 0.5)	1 ( 0.4)	24 ( 1.5)>	20 ( 1.9)	68 ( 1.7)	66 ( 2.2)	32 ( 1.7)	34 ( 2.2)
CONNECTICUT	4 ( 0.8)	2 ( 0.5)	34 ( 2.2)	27 ( 2.0)	76 ( 1.7)>	73 ( 1.8)>	24 ( 1.7)<	27 ( 1.8)<
DELAWARE	2 ( 0.6)	1 ( 0.5)	17 ( 1.6)	15 ( 1.6)	54 ( 2.2)	53 ( 1.4)	46 ( 2.2)	47 ( 1.4)
DISTRICT OF COLUMBIA	1 ( 0.6)	1 ( 0.3)	6 ( 0.6)	4 ( 0.5)	21 ( 1.3)	19 ( 1.3)	79 ( 1.3)	81 ( 1.3)
FLORIDA	1 ( 0.3)	1 ( 0.3)	15 ( 1.3)	14 ( 1.3)	53 ( 1.8)	56 ( 2.2)	47 ( 1.8)	44 ( 2.2)
GEORGIA	2 ( 0.6)	0 ( 0.3)	15 ( 1.7)	11 ( 1.6)	53 ( 2.7)	52 ( 2.2)	47 ( 2.7)	48 ( 2.2)
HAWAII	2 ( 0.5)	1 ( 0.6)	18 ( 1.3)	15 ( 1.4)	52 ( 1.9)	53 ( 2.3)	48 ( 1.9)	47 ( 2.3)
INDIANA	2 ( 0.8)	2 ( 0.6)	26 ( 2.2)>	21 ( 1.9)>	75 ( 1.8)>	70 ( 2.3)>	25 ( 1.8)<	30 ( 2.3)<
IOWA†	2 ( 0.6)	1 ( ... )	24 ( 1.7)	20 ( 1.9)	74 ( 1.7)	73 ( 1.9)	26 ( 1.7)	27 ( 1.9)
KENTUCKY	2 ( 0.5)	1 ( 0.3)	17 ( 1.8)	14 ( 1.2)	60 ( 2.1)>	60 ( 2.3)>	40 ( 2.1)<	40 ( 2.3)<
LOUISIANA	1 ( 0.2)	0 ( ... )	8 ( 1.4)	7 ( 0.9)	44 ( 2.4)	44 ( 2.0)	56 ( 2.4)	56 ( 2.0)
MAINE	4 ( 1.0)	2 ( 0.5)	29 ( 2.0)	26 ( 1.5)	76 ( 1.5)	75 ( 2.0)	24 ( 1.5)	25 ( 2.0)
MARYLAND	3 ( 0.8)	3 ( 0.8)	22 ( 2.0)	21 ( 2.1)	59 ( 2.1)	58 ( 2.1)	41 ( 2.1)	42 ( 2.1)
MASSACHUSETTS	2 ( 0.8)	2 ( 0.5)	27 ( 2.4)	22 ( 1.9)	73 ( 2.0)	70 ( 2.1)	27 ( 2.0)	30 ( 2.1)
MICHIGAN†	3 ( 0.7)	2 ( 0.6)	25 ( 1.7)	21 ( 1.8)	69 ( 2.1)	67 ( 2.1)>	31 ( 2.1)	33 ( 2.1)<
MINNESOTA	4 ( 0.7)	3 ( 0.7)	32 ( 1.9)	27 ( 1.6)	76 ( 1.7)	75 ( 1.9)	24 ( 1.7)	25 ( 1.9)
MISSISSIPPI	0 ( 0.2)	0 ( 0.2)	9 ( 1.0)	7 ( 1.2)	42 ( 2.7)	42 ( 2.1)	58 ( 2.7)	58 ( 2.1)
MISSOURI	1 ( 0.5)	1 ( 0.3)	22 ( 1.5)	18 ( 1.7)	65 ( 2.1)	67 ( 2.0)	35 ( 2.1)	33 ( 2.0)
MONTANA†	2 ( 0.5)	1 ( ... )	25 ( 1.8)	19 ( 2.3)	72 ( 2.5)	69 ( 2.4)	28 ( 2.5)	31 ( 2.4)
NEBRASKA	3 ( 0.5)	2 ( 0.4)	26 ( 1.7)	22 ( 1.6)	70 ( 1.9)	70 ( 2.1)	30 ( 1.9)	30 ( 2.1)
NEVADA†	1 ( 0.5)	0 ( 0.2)	16 ( 1.8)	12 ( 1.1)	59 ( 2.4)	55 ( 2.3)	41 ( 2.4)	45 ( 2.3)
NEW JERSEY†	3 ( 1.0)	2 ( 0.7)	30 ( 2.6)	20 ( 1.9)	72 ( 2.7)	64 ( 2.4)	28 ( 2.7)	36 ( 2.4)
NEW MEXICO	1 ( 0.5)	1 ( 0.2)	14 ( 1.6)	11 ( 1.3)	52 ( 2.7)	50 ( 2.7)	48 ( 2.7)	50 ( 2.7)
NEW YORK†	2 ( 0.7)	1 ( 0.3)	21 ( 1.6)	18 ( 1.6)	66 ( 2.2)	63 ( 2.0)>	34 ( 2.2)	37 ( 2.0)<
NORTH CAROLINA	3 ( 0.7)	2 ( 0.4)	22 ( 1.5)>	20 ( 1.6)>	64 ( 1.9)>	65 ( 1.9)>	36 ( 1.9)<	35 ( 1.9)<
NORTH DAKOTA	2 ( 0.6)	1 ( 0.5)	26 ( 1.9)	22 ( 1.7)	76 ( 2.5)	75 ( 2.1)	24 ( 2.5)	25 ( 2.1)
OREGON	2 ( 0.6)	2 ( 0.5)	22 ( 1.7)	20 ( 1.6)	65 ( 2.5)	65 ( 2.4)	35 ( 2.5)	35 ( 2.4)
PENNSYLVANIA†	2 ( 0.5)	1 ( 0.4)	21 ( 2.0)	20 ( 1.7)	69 ( 2.1)	68 ( 2.3)	31 ( 2.1)	32 ( 2.3)
RHODE ISLAND	2 ( 0.4)	1 ( 0.3)	20 ( 1.7)	14 ( 1.5)	63 ( 2.1)	59 ( 2.6)	37 ( 2.1)	41 ( 2.6)
SOUTH CAROLINA†	1 ( 0.4)	1 ( 0.4)	13 ( 1.6)	11 ( 1.5)	49 ( 2.4)	47 ( 2.5)	51 ( 2.4)	53 ( 2.5)
TENNESSEE	1 ( 0.4)	1 ( 0.4)	18 ( 1.9)>	15 ( 1.4)	59 ( 2.1)>	58 ( 2.4)>	41 ( 2.1)<	42 ( 2.4)<
TEXAS	3 ( 0.6)	2 ( 0.7)	27 ( 2.0)>	24 ( 1.9)>	69 ( 1.9)>	70 ( 2.5)>	31 ( 1.9)<	30 ( 2.5)<
UTAH	3 ( 0.6)	1 ( 0.4)	26 ( 1.7)>	20 ( 1.6)	69 ( 1.8)	68 ( 2.4)	31 ( 1.8)	32 ( 2.4)
VERMONT†	3 ( 0.6)	2 ( 0.6)	24 ( 1.5)	21 ( 1.5)	68 ( 2.5)	66 ( 2.4)	32 ( 2.5)	34 ( 2.4)
VIRGINIA	2 ( 0.7)	1 ( 0.4)	21 ( 2.0)	17 ( 1.4)	64 ( 2.6)	60 ( 2.2)	36 ( 2.6)	40 ( 2.2)
WASHINGTON	2 ( 0.4)	1 ( 0.3)	23 ( 1.4)	18 ( 1.6)	68 ( 2.5)	66 ( 2.1)	32 ( 2.5)	34 ( 2.1)
WEST VIRGINIA	2 ( 0.7)	1 ( 0.4)	20 ( 1.6)	18 ( 1.5)>	64 ( 1.9)>	62 ( 2.0)>	36 ( 1.9)<	38 ( 2.0)<
WISCONSIN	3 ( 0.7)	2 ( 0.7)	30 ( 1.6)	25 ( 1.8)	75 ( 1.6)	73 ( 1.6)	25 ( 1.6)	27 ( 1.6)
WYOMING	2 ( 0.4)	1 ( 0.5)	20 ( 1.8)	18 ( 1.2)	64 ( 2.1)	64 ( 2.1)	36 ( 2.1)	36 ( 2.1)
<b>Other Jurisdictions</b>								
DDESS	3 ( 1.2)	2 ( 0.6)	24 ( 2.1)	17 ( 1.6)	66 ( 1.8)	61 ( 2.6)	34 ( 1.8)	39 ( 2.6)
D <sub>0</sub> DDS	2 ( 0.5)	1 ( 0.3)	21 ( 1.5)	17 ( 1.2)	65 ( 1.5)	63 ( 1.6)	35 ( 1.5)	37 ( 1.6)
GUAM	0 ( ... )	0 ( ... )	4 ( 0.7)	3 ( 0.8)	23 ( 2.2)	23 ( 1.7)	77 ( 2.2)	77 ( 1.7)

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).  
 ... Characteristics of the sample do not permit a reliable estimate.  
 > (<) The value for the students was significantly higher (lower) than in the 1992 assessment at about the 95% confidence level using appropriate multiple comparison procedures.  
 SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 4.2**

**1992 Mathematics Assessment**



POPULATION:  
REPORTED STATISTICS:  
BREAKDOWNS BY:

1992 Grade 4 Public School Students  
Percentage of Students by Achievement Levels  
Race/Ethnicity

Achievement Level... Which best describes your race or your ethnic background?	Advanced				
	White	Black	Hispanic	Asian/ Pacific Islander	American Indian
JURISDICTIONS	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )
<b>Nation</b>					
NATION	2 ( 0.4)	0 ( ... )	0 ( ... )	4 ( 2.0)	2 ( 1.0)
NORTHEAST	3 ( 1.1)	0 ( ... )	0 ( ... )	... ( ... )	... ( ... )
SOUTHEAST	2 ( 0.6)	0 ( ... )	0 ( ... )	... ( ... )	... ( ... )
CENTRAL	2 ( 0.7)	0 ( ... )	0 ( ... )	... ( ... )	... ( ... )
WEST	2 ( 0.8)	0 ( ... )	0 ( ... )	5 ( 2.5)	... ( ... )
<b>States</b>					
ALABAMA	1 ( 0.2)	0 ( ... )	0 ( ... )	... ( ... )	... ( ... )
ALASKA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
ARIZONA	1 ( 0.4)	0 ( ... )	0 ( ... )	... ( ... )	0 ( ... )
ARKANSAS	1 ( 0.3)	0 ( ... )	0 ( ... )	... ( ... )	0 ( ... )
CALIFORNIA	2 ( 0.6)	0 ( ... )	0 ( ... )	3 ( 1.7)	1 ( ... )
COLORADO	2 ( 0.6)	0 ( ... )	0 ( ... )	0 ( ... )	1 ( ... )
CONNECTICUT	4 ( 0.6)	0 ( ... )	1 ( ... )	... ( ... )	... ( ... )
DELAWARE	3 ( 0.4)	0 ( ... )	0 ( ... )	... ( ... )	... ( ... )
DISTRICT OF COLUMBIA	13 ( 3.1)	0 ( ... )	0 ( ... )	... ( ... )	... ( ... )
FLORIDA	2 ( 0.5)	0 ( ... )	1 ( ... )	... ( ... )	... ( ... )
GEORGIA	2 ( 0.5)	0 ( ... )	0 ( ... )	... ( ... )	... ( ... )
HAWAII	1 ( 0.6)	0 ( ... )	0 ( ... )	1 ( 0.3)	... ( ... )
INDIANA	1 ( 0.3)	0 ( ... )	0 ( ... )	... ( ... )	... ( ... )
IOWA	2 ( 0.4)	0 ( ... )	0 ( ... )	... ( ... )	... ( ... )
KENTUCKY	1 ( 0.3)	0 ( ... )	0 ( ... )	... ( ... )	... ( ... )
LOUISIANA	1 ( 0.3)	0 ( ... )	0 ( ... )	... ( ... )	... ( ... )
MAINE	3 ( 0.5)	... ( ... )	1 ( ... )	... ( ... )	... ( ... )
MARYLAND	3 ( 0.5)	0 ( ... )	0 ( ... )	5 ( 2.3)	... ( ... )
MASSACHUSETTS	3 ( 0.5)	0 ( ... )	1 ( ... )	6 ( 4.4)	... ( ... )
MICHIGAN	2 ( 0.4)	0 ( ... )	1 ( ... )	... ( ... )	0 ( ... )
MINNESOTA	3 ( 0.5)	1 ( 0.6)	0 ( ... )	... ( ... )	... ( ... )
MISSISSIPPI	1 ( 0.3)	0 ( ... )	0 ( ... )	... ( ... )	... ( ... )
MISSOURI	2 ( 0.3)	0 ( ... )	1 ( ... )	... ( ... )	... ( ... )
MONTANA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
NEBRASKA	2 ( 0.5)	0 ( ... )	1 ( 0.8)	... ( ... )	... ( ... )
NEVADA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
NEW JERSEY	3 ( 0.9)	0 ( 0.1)	0 ( ... )	6 ( 2.9)	... ( ... )
NEW MEXICO	1 ( 0.4)	0 ( ... )	0 ( ... )	... ( ... )	0 ( ... )
NEW YORK	2 ( 0.4)	0 ( ... )	0 ( ... )	9 ( 3.3)	... ( ... )
NORTH CAROLINA	2 ( 0.5)	0 ( ... )	0 ( ... )	... ( ... )	0 ( ... )
NORTH DAKOTA	1 ( 0.3)	... ( ... )	0 ( ... )	... ( ... )	0 ( ... )
OREGON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
PENNSYLVANIA	2 ( 0.5)	0 ( ... )	1 ( ... )	... ( ... )	... ( ... )
RHODE ISLAND	2 ( 0.5)	0 ( ... )	0 ( ... )	0 ( ... )	... ( ... )
SOUTH CAROLINA	1 ( 0.5)	0 ( ... )	0 ( ... )	... ( ... )	... ( ... )
TENNESSEE	1 ( 0.3)	0 ( ... )	0 ( ... )	... ( ... )	... ( ... )
TEXAS	2 ( 0.7)	0 ( ... )	0 ( ... )	4 ( 2.1)	... ( ... )
UTAH	2 ( 0.4)	... ( ... )	0 ( ... )	... ( ... )	... ( ... )
VERMONT	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
VIRGINIA	3 ( 0.7)	0 ( ... )	0 ( ... )	6 ( ... )	... ( ... )
WASHINGTON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
WEST VIRGINIA	1 ( 0.3)	0 ( ... )	0 ( ... )	... ( ... )	... ( ... )
WISCONSIN	3 ( 0.4)	0 ( ... )	1 ( ... )	... ( ... )	0 ( ... )
WYOMING	1 ( 0.4)	... ( ... )	0 ( ... )	... ( ... )	0 ( ... )
<b>Other Jurisdictions</b>					
DDESS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
DoDDS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
GUAM	1 ( ... )	1 ( ... )	0 ( ... )	0 ( ... )	... ( ... )

— State or other jurisdiction did not participate in the NAEP assessment year presented in this table.

... Characteristics of the sample do not permit a reliable estimate.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 4.2** (continued)

**1992 Mathematics Assessment**



POPULATION: 1992 Grade 4 Public School Students  
 REPORTED STATISTICS: Percentage of Students by Achievement Levels  
 BREAKDOWNS BY: Race/Ethnicity

Achievement Level...	At or Above Proficient				
	White	Black	Hispanic	Asian/ Pacific Islander	American Indian
Which best describes your race or your ethnic background?	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )
<b>JURISDICTIONS</b>					
<b>Nation</b>					
NATION	22 ( 1.5)	2 ( 0.7)	5 ( 1.0)	30 ( 4.9)	10 ( 3.8)
NORTHEAST	30 ( 3.6)	4 ( 1.5)	5 ( 1.5)	... ( ... )	... ( ... )
SOUTHEAST	15 ( 2.1)	2 ( 0.9)	5 ( 1.9)	... ( ... )	... ( ... )
CENTRAL	23 ( 2.3)	3 ( ... )	5 ( 3.2)	... ( ... )	... ( ... )
WEST	21 ( 3.1)	2 ( 1.4)	5 ( 1.5)	30 ( 5.5)	... ( ... )
<b>States</b>					
ALABAMA	15 ( 1.6)	1 ( 0.5)	2 ( 1.4)	... ( ... )	... ( ... )
ALASKA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
ARIZONA	20 ( 1.2)	3 ( ... )	4 ( 0.8)	... ( ... )	3 ( 1.8)
ARKANSAS	13 ( 1.0)	1 ( 0.6)	1 ( ... )	... ( ... )	9 ( 4.0)
CALIFORNIA	19 ( 1.8)	2 ( 1.1)	4 ( 0.8)	21 ( 3.7)	11 ( 6.9)
COLORADO	22 ( 1.3)	3 ( 1.4)	6 ( 1.5)	23 ( 5.9)	10 ( 4.7)
CONNECTICUT	31 ( 1.7)	2 ( 1.3)	8 ( 1.9)	... ( ... )	... ( ... )
DELAWARE	23 ( 1.4)	3 ( 1.0)	4 ( ... )	... ( ... )	... ( ... )
DISTRICT OF COLUMBIA	52 ( 6.5)	3 ( 0.4)	2 ( 1.3)	... ( ... )	... ( ... )
FLORIDA	19 ( 1.9)	2 ( 0.7)	7 ( 1.5)	... ( ... )	... ( ... )
GEORGIA	24 ( 1.6)	3 ( 0.8)	4 ( 1.6)	... ( ... )	... ( ... )
HAWAII	20 ( 2.2)	5 ( 2.3)	6 ( 1.3)	15 ( 1.3)	... ( ... )
INDIANA	18 ( 1.3)	2 ( 0.7)	3 ( 1.6)	... ( ... )	... ( ... )
IOWA	28 ( 1.3)	2 ( ... )	14 ( 3.3)	... ( ... )	... ( ... )
KENTUCKY	14 ( 1.3)	4 ( 2.0)	4 ( 2.6)	... ( ... )	... ( ... )
LOUISIANA	13 ( 1.4)	2 ( 0.5)	5 ( 1.9)	... ( ... )	... ( ... )
MAINE	28 ( 1.7)	... ( ... )	14 ( 5.0)	... ( ... )	... ( ... )
MARYLAND	26 ( 1.6)	3 ( 0.7)	10 ( 3.2)	32 ( 5.5)	... ( ... )
MASSACHUSETTS	27 ( 1.6)	2 ( ... )	9 ( 2.5)	29 ( 8.1)	... ( ... )
MICHIGAN	23 ( 1.9)	2 ( 1.3)	8 ( 2.3)	... ( ... )	9 ( 3.7)
MINNESOTA	28 ( 1.4)	4 ( 1.9)	11 ( 2.5)	... ( ... )	... ( ... )
MISSISSIPPI	13 ( 1.3)	1 ( 0.4)	2 ( 1.3)	... ( ... )	... ( ... )
MISSOURI	22 ( 1.5)	1 ( 0.8)	10 ( 3.2)	... ( ... )	... ( ... )
MONTANA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
NEBRASKA	24 ( 1.7)	4 ( 2.3)	8 ( 3.4)	... ( ... )	... ( ... )
NEVADA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
NEW JERSEY	32 ( 2.0)	3 ( 1.1)	6 ( 2.0)	40 ( 4.5)	... ( ... )
NEW MEXICO	19 ( 2.0)	3 ( ... )	5 ( 1.2)	... ( ... )	4 ( 2.6)
NEW YORK	23 ( 1.9)	4 ( 1.4)	5 ( 1.2)	37 ( 6.3)	... ( ... )
NORTH CAROLINA	18 ( 1.2)	2 ( 0.6)	7 ( 2.8)	... ( ... )	8 ( 4.2)
NORTH DAKOTA	23 ( 1.2)	... ( ... )	7 ( 3.0)	... ( ... )	8 ( 3.6)
OREGON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
PENNSYLVANIA	26 ( 1.6)	2 ( 0.9)	7 ( 2.4)	... ( ... )	... ( ... )
RHODE ISLAND	17 ( 1.3)	2 ( ... )	2 ( 0.8)	1 ( ... )	... ( ... )
SOUTH CAROLINA	21 ( 1.7)	2 ( 0.5)	6 ( 2.0)	... ( ... )	... ( ... )
TENNESSEE	13 ( 1.2)	1 ( 0.6)	3 ( ... )	... ( ... )	... ( ... )
TEXAS	23 ( 2.0)	3 ( 1.1)	7 ( 1.3)	34 ( 9.5)	... ( ... )
UTAH	21 ( 1.1)	... ( ... )	7 ( 2.2)	... ( ... )	... ( ... )
VERMONT	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
VIRGINIA	25 ( 2.0)	3 ( 0.9)	9 ( 3.3)	26 ( 6.8)	... ( ... )
WASHINGTON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
WEST VIRGINIA	13 ( 1.0)	2 ( ... )	5 ( 2.8)	... ( ... )	... ( ... )
WISCONSIN	29 ( 1.5)	2 ( 1.0)	10 ( 2.7)	... ( ... )	6 ( 2.5)
WYOMING	21 ( 1.3)	... ( ... )	8 ( 1.7)	... ( ... )	9 ( 3.3)
<b>Other Jurisdictions</b>					
DDESS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
DoDDS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
GUAM	11 ( 1.9)	2 ( ... )	2 ( 0.9)	4 ( 0.8)	... ( ... )

— State or other jurisdiction did not participate in the NAEP assessment year presented in this table.

... Characteristics of the sample do not permit a reliable estimate.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 4.2** (continued)

**1992 Mathematics Assessment**



POPULATION: 1992 Grade 4 Public School Students  
 REPORTED STATISTICS: Percentage of Students by Achievement Levels  
 BREAKDOWNS BY: Race/Ethnicity

Achievement Level... Which best describes your race or your ethnic background?	At or Above Basic				
	White	Black	Hispanic	Asian/ Pacific Islander	American Indian
JURISDICTIONS	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )
<b>Nation</b>					
NATION	69 ( 1.4)	22 ( 1.9)	33 ( 2.3)	75 ( 3.5)	42 ( 5.3)
NORTHEAST	75 ( 3.1)	26 ( 3.9)	30 ( 5.3)	... ( ... )	... ( ... )
SOUTHEAST	60 ( 2.9)	20 ( 2.6)	34 ( 6.2)	... ( ... )	... ( ... )
CENTRAL	72 ( 2.8)	22 ( 6.3)	32 ( 6.0)	... ( ... )	... ( ... )
WEST	69 ( 2.8)	21 ( 5.6)	33 ( 3.1)	74 ( 4.5)	... ( ... )
<b>States</b>					
ALABAMA	57 ( 2.3)	16 ( 1.4)	26 ( 5.1)	... ( ... )	... ( ... )
ALASKA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
ARIZONA	69 ( 1.7)	28 ( 6.1)	36 ( 2.1)	... ( ... )	25 ( 4.0)
ARKANSAS	57 ( 1.6)	18 ( 2.8)	29 ( 3.8)	... ( ... )	52 ( 7.0)
CALIFORNIA	61 ( 2.6)	21 ( 2.6)	27 ( 2.1)	64 ( 3.2)	50 ( 9.3)
COLORADO	70 ( 1.5)	32 ( 4.6)	42 ( 2.4)	63 ( 6.9)	50 ( 7.3)
CONNECTICUT	79 ( 1.2)	24 ( 3.2)	37 ( 4.3)	... ( ... )	... ( ... )
DELAWARE	67 ( 1.3)	26 ( 2.8)	30 ( 3.6)	... ( ... )	... ( ... )
DISTRICT OF COLUMBIA	79 ( 4.6)	20 ( 1.0)	14 ( 2.2)	... ( ... )	... ( ... )
FLORIDA	66 ( 1.7)	22 ( 2.4)	41 ( 3.2)	... ( ... )	... ( ... )
GEORGIA	72 ( 1.8)	27 ( 2.3)	30 ( 4.3)	... ( ... )	... ( ... )
HAWAII	60 ( 2.4)	33 ( 5.9)	33 ( 3.5)	54 ( 2.1)	... ( ... )
INDIANA	66 ( 1.5)	22 ( 3.7)	42 ( 3.5)	... ( ... )	... ( ... )
IOWA	74 ( 1.4)	29 ( 6.2)	61 ( 5.7)	... ( ... )	... ( ... )
KENTUCKY	54 ( 1.5)	32 ( 3.9)	31 ( 5.1)	... ( ... )	... ( ... )
LOUISIANA	57 ( 2.6)	18 ( 1.7)	33 ( 6.5)	... ( ... )	... ( ... )
MAINE	76 ( 1.4)	... ( ... )	63 ( 6.3)	... ( ... )	... ( ... )
MARYLAND	70 ( 1.7)	26 ( 1.9)	45 ( 4.6)	78 ( 4.2)	... ( ... )
MASSACHUSETTS	76 ( 1.4)	24 ( 5.4)	41 ( 4.5)	65 ( 8.8)	... ( ... )
MICHIGAN	70 ( 2.1)	19 ( 3.5)	43 ( 3.6)	... ( ... )	51 ( 7.0)
MINNESOTA	75 ( 1.6)	28 ( 7.0)	44 ( 5.0)	... ( ... )	... ( ... )
MISSISSIPPI	58 ( 1.8)	20 ( 1.5)	19 ( 3.5)	... ( ... )	... ( ... )
MISSOURI	70 ( 1.6)	26 ( 3.7)	44 ( 4.8)	... ( ... )	... ( ... )
MONTANA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
NEBRASKA	72 ( 1.7)	18 ( 3.8)	47 ( 6.0)	... ( ... )	... ( ... )
NEVADA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
NEW JERSEY	81 ( 1.8)	29 ( 3.6)	42 ( 4.4)	83 ( 5.5)	... ( ... )
NEW MEXICO	66 ( 2.3)	34 ( 8.4)	36 ( 2.6)	... ( ... )	42 ( 9.6)
NEW YORK	71 ( 2.0)	31 ( 4.0)	33 ( 2.6)	72 ( 6.4)	... ( ... )
NORTH CAROLINA	65 ( 1.6)	24 ( 2.3)	35 ( 5.8)	... ( ... )	40 ( 9.8)
NORTH DAKOTA	75 ( 1.2)	... ( ... )	49 ( 7.4)	... ( ... )	47 ( 6.9)
OREGON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
PENNSYLVANIA	74 ( 1.8)	23 ( 2.6)	38 ( 4.0)	... ( ... )	... ( ... )
RHODE ISLAND	63 ( 2.0)	20 ( 4.1)	23 ( 3.3)	24 ( 5.4)	... ( ... )
SOUTH CAROLINA	66 ( 1.8)	23 ( 1.9)	33 ( 4.2)	... ( ... )	... ( ... )
TENNESSEE	58 ( 2.1)	21 ( 2.6)	22 ( 5.1)	... ( ... )	... ( ... )
TEXAS	72 ( 2.1)	29 ( 4.0)	43 ( 2.7)	79 ( 4.5)	... ( ... )
UTAH	69 ( 1.7)	... ( ... )	47 ( 3.3)	... ( ... )	... ( ... )
VERMONT	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
VIRGINIA	70 ( 1.9)	25 ( 2.1)	48 ( 5.6)	82 ( 4.8)	... ( ... )
WASHINGTON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
WEST VIRGINIA	54 ( 1.5)	40 ( 5.6)	37 ( 4.4)	... ( ... )	... ( ... )
WISCONSIN	78 ( 1.2)	26 ( 4.1)	50 ( 4.2)	... ( ... )	40 ( 9.0)
WYOMING	72 ( 1.5)	... ( ... )	54 ( 3.9)	... ( ... )	49 ( 7.0)
<b>Other Jurisdictions</b>					
DDESS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
DoDDS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
GUAM	43 ( 3.8)	23 ( 5.8)	16 ( 2.3)	27 ( 1.7)	... ( ... )

— State or other jurisdiction did not participate in the NAEP assessment year presented in this table.  
 ... Characteristics of the sample do not permit a reliable estimate.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.



**TABLE 4.2** (continued)

**1992 Mathematics Assessment**



POPULATION: 1992 Grade 4 Public School Students  
 REPORTED STATISTICS: Percentage of Students by Achievement Levels  
 BREAKDOWNS BY: Race/Ethnicity

Achievement Level... Which best describes your race or your ethnic background?	Below Basic				
	White	Black	Hispanic	Asian/ Pacific Islander	American Indian
JURISDICTIONS	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )
<b>Nation</b>					
NATION	31 ( 1.4)	78 ( 1.9)	67 ( 2.3)	25 ( 3.5)	58 ( 5.3)
NORTHEAST	25 ( 3.1)	74 ( 3.9)	70 ( 5.3)	... ( ... )	... ( ... )
SOUTHEAST	40 ( 2.9)	80 ( 2.6)	66 ( 6.2)	... ( ... )	... ( ... )
CENTRAL	28 ( 2.8)	78 ( 6.3)	68 ( 6.0)	... ( ... )	... ( ... )
WEST	31 ( 2.8)	79 ( 5.6)	67 ( 3.1)	26 ( 4.5)	... ( ... )
<b>States</b>					
ALABAMA	43 ( 2.3)	84 ( 1.4)	74 ( 5.1)	... ( ... )	... ( ... )
ALASKA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
ARIZONA	31 ( 1.7)	72 ( 6.1)	64 ( 2.1)	... ( ... )	75 ( 4.0)
ARKANSAS	43 ( 1.6)	82 ( 2.8)	71 ( 3.8)	... ( ... )	48 ( 7.0)
CALIFORNIA	39 ( 2.6)	79 ( 2.6)	73 ( 2.1)	36 ( 3.2)	50 ( 9.3)
COLORADO	30 ( 1.5)	68 ( 4.6)	58 ( 2.4)	37 ( 6.9)	50 ( 7.3)
CONNECTICUT	21 ( 1.2)	76 ( 3.2)	63 ( 4.3)	... ( ... )	... ( ... )
DELAWARE	33 ( 1.3)	74 ( 2.8)	70 ( 3.6)	... ( ... )	... ( ... )
DISTRICT OF COLUMBIA	21 ( 4.6)	80 ( 1.0)	86 ( 2.2)	... ( ... )	... ( ... )
FLORIDA	34 ( 1.7)	78 ( 2.4)	59 ( 3.2)	... ( ... )	... ( ... )
GEORGIA	28 ( 1.8)	73 ( 2.3)	70 ( 4.3)	... ( ... )	... ( ... )
HAWAII	40 ( 2.4)	67 ( 5.9)	67 ( 3.5)	46 ( 2.1)	... ( ... )
INDIANA	34 ( 1.5)	78 ( 3.7)	58 ( 3.5)	... ( ... )	... ( ... )
IOWA	26 ( 1.4)	71 ( 6.2)	39 ( 5.7)	... ( ... )	... ( ... )
KENTUCKY	46 ( 1.5)	68 ( 3.9)	69 ( 5.1)	... ( ... )	... ( ... )
LOUISIANA	43 ( 2.6)	82 ( 1.7)	67 ( 6.5)	... ( ... )	... ( ... )
MAINE	24 ( 1.4)	... ( ... )	37 ( 6.3)	... ( ... )	... ( ... )
MARYLAND	30 ( 1.7)	74 ( 1.9)	55 ( 4.6)	22 ( 4.2)	... ( ... )
MASSACHUSETTS	24 ( 1.4)	76 ( 5.4)	59 ( 4.5)	35 ( 8.8)	... ( ... )
MICHIGAN	30 ( 2.1)	81 ( 3.5)	57 ( 3.6)	... ( ... )	49 ( 7.0)
MINNESOTA	25 ( 1.6)	72 ( 7.0)	56 ( 5.0)	... ( ... )	... ( ... )
MISSISSIPPI	42 ( 1.8)	80 ( 1.5)	81 ( 3.5)	... ( ... )	... ( ... )
MISSOURI	30 ( 1.6)	74 ( 3.7)	56 ( 4.8)	... ( ... )	... ( ... )
MONTANA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
NEBRASKA	28 ( 1.7)	82 ( 3.8)	53 ( 6.0)	... ( ... )	... ( ... )
NEVADA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
NEW JERSEY	19 ( 1.8)	71 ( 3.6)	58 ( 4.4)	17 ( 5.5)	... ( ... )
NEW MEXICO	34 ( 2.3)	66 ( 8.4)	64 ( 2.6)	... ( ... )	58 ( 9.6)
NEW YORK	29 ( 2.0)	69 ( 4.0)	67 ( 2.6)	28 ( 6.4)	... ( ... )
NORTH CAROLINA	35 ( 1.6)	76 ( 2.3)	65 ( 5.8)	... ( ... )	60 ( 9.8)
NORTH DAKOTA	25 ( 1.2)	... ( ... )	51 ( 7.4)	... ( ... )	53 ( 6.9)
OREGON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
PENNSYLVANIA	26 ( 1.8)	77 ( 2.6)	63 ( 4.0)	... ( ... )	... ( ... )
RHODE ISLAND	37 ( 2.0)	80 ( 4.1)	77 ( 3.3)	76 ( 5.4)	... ( ... )
SOUTH CAROLINA	34 ( 1.8)	77 ( 1.9)	67 ( 4.2)	... ( ... )	... ( ... )
TENNESSEE	42 ( 2.1)	79 ( 2.6)	78 ( 5.1)	... ( ... )	... ( ... )
TEXAS	28 ( 2.1)	71 ( 4.0)	57 ( 2.7)	21 ( 4.5)	... ( ... )
UTAH	31 ( 1.7)	... ( ... )	53 ( 3.3)	... ( ... )	... ( ... )
VERMONT	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
VIRGINIA	30 ( 1.9)	75 ( 2.1)	52 ( 5.6)	18 ( 4.8)	... ( ... )
WASHINGTON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
WEST VIRGINIA	46 ( 1.5)	60 ( 5.6)	63 ( 4.4)	... ( ... )	... ( ... )
WISCONSIN	22 ( 1.2)	74 ( 4.1)	50 ( 4.2)	... ( ... )	60 ( 9.0)
WYOMING	28 ( 1.5)	... ( ... )	46 ( 3.9)	... ( ... )	51 ( 7.0)
<b>Other Jurisdictions</b>					
DDESS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
DoDDS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
GUAM	57 ( 3.8)	77 ( 5.8)	84 ( 2.3)	73 ( 1.7)	... ( ... )

— State or other jurisdiction did not participate in the NAEP assessment year presented in this table.  
 ... Characteristics of the sample do not permit a reliable estimate.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 4.2** (continued)

**1996 Mathematics Assessment**



POPULATION: 1996 Grade 4 Public School Students  
 REPORTED STATISTICS: Percentage of Students by Achievement Levels  
 BREAKDOWNS BY: Race/Ethnicity

Achievement Level... Which best describes your race or your ethnic background?	Advanced				
	White	Black	Hispanic	Asian/ Pacific Islander	American Indian
JURISDICTIONS	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )
<b>Nation</b>					
NATION	3 ( 0.5)	0 ( 0.1)	0 ( ... )	5 ( 2.8)	1 ( ... )
NORTHEAST	4 ( 1.4)	0 ( ... )	0 ( ... )	... ( ... )	... ( ... )
SOUTHEAST	3 ( 1.4)	0 ( ... )	0 ( ... )	... ( ... )	... ( ... )
CENTRAL	2 ( 0.6)	0 ( ... )	0 ( ... )	... ( ... )	... ( ... )
WEST	3 ( 0.7)	0 ( ... )	0 ( ... )	5 ( 3.2)	1 ( ... )
<b>States</b>					
ALABAMA	1 ( 0.4)	0 ( ... )	0 ( ... )	... ( ... )	... ( ... )
ALASKA†	3 ( 0.7)	0 ( ... )	1 ( ... )	2 ( ... )	1 ( 0.5)
ARIZONA	2 ( 0.6)	0 ( ... )	0 ( ... )	... ( ... )	0 ( ... )
ARKANSAS†	1 ( 0.4)	0 ( ... )	0 ( ... )	... ( ... )	1 ( ... )
CALIFORNIA	1 ( 0.7)	0 ( ... )	0 ( ... )	2 ( 1.2)	... ( ... )
COLORADO	2 ( 0.5)	0 ( ... )	0 ( ... )	3 ( 2.0)	0 ( ... )
CONNECTICUT	4 ( 0.6)	0 ( ... )	1 ( ... )	... ( ... )	... ( ... )
DELAWARE	2 ( 0.5)	0 ( ... )	0 ( ... )	... ( ... )	... ( ... )
DISTRICT OF COLUMBIA	12 ( 6.8)	0 ( ... )	0 ( ... )	... ( ... )	... ( ... )
FLORIDA	1 ( 0.3)	0 ( ... )	0 ( ... )	... ( ... )	... ( ... )
GEORGIA	2 ( 0.5)	0 ( ... )	1 ( ... )	... ( ... )	... ( ... )
HAWAII	3 ( 0.8)	0 ( ... )	0 ( ... )	2 ( 0.7)	0 ( ... )
INDIANA	2 ( 0.6)	0 ( ... )	1 ( ... )	... ( ... )	... ( ... )
IOWA†	1 ( 0.4)	0 ( ... )	1 ( ... )	... ( ... )	... ( ... )
KENTUCKY	1 ( 0.3)	0 ( 0.2)	0 ( ... )	... ( ... )	... ( ... )
LOUISIANA	1 ( 0.4)	0 ( ... )	0 ( ... )	... ( ... )	0 ( ... )
MAINE	3 ( 0.6)	... ( ... )	0 ( ... )	... ( ... )	... ( ... )
MARYLAND	4 ( 0.9)	0 ( 0.1)	2 ( 1.1)	15 ( 5.8)	... ( ... )
MASSACHUSETTS	2 ( 0.5)	0 ( ... )	0 ( ... )	7 ( ... )	... ( ... )
MICHIGAN†	3 ( 0.6)	0 ( ... )	1 ( ... )	... ( ... )	0 ( ... )
MINNESOTA	4 ( 0.6)	0 ( ... )	0 ( ... )	3 ( ... )	0 ( ... )
MISSISSIPPI	1 ( 0.3)	0 ( ... )	0 ( ... )	... ( ... )	... ( ... )
MISSOURI	1 ( 0.3)	0 ( ... )	1 ( ... )	... ( ... )	... ( ... )
MONTANA†	2 ( 0.5)	... ( ... )	0 ( ... )	... ( ... )	1 ( 0.4)
NEBRASKA	3 ( 0.4)	0 ( ... )	0 ( ... )	... ( ... )	0 ( ... )
NEVADA†	1 ( 0.4)	0 ( ... )	0 ( ... )	1 ( ... )	0 ( ... )
NEW JERSEY†	4 ( 1.0)	0 ( ... )	0 ( ... )	8 ( 3.3)	... ( ... )
NEW MEXICO	2 ( 0.6)	0 ( ... )	0 ( ... )	... ( ... )	0 ( ... )
NEW YORK†	3 ( 0.6)	0 ( ... )	1 ( ... )	1 ( ... )	... ( ... )
NORTH CAROLINA	3 ( 0.6)	0 ( ... )	0 ( ... )	... ( ... )	... ( ... )
NORTH DAKOTA	2 ( 0.5)	... ( ... )	0 ( ... )	... ( ... )	0 ( ... )
OREGON	2 ( 0.5)	... ( ... )	0 ( ... )	4 ( 2.3)	0 ( ... )
PENNSYLVANIA†	2 ( 0.4)	0 ( ... )	0 ( ... )	... ( ... )	... ( ... )
RHODE ISLAND	1 ( 0.3)	0 ( ... )	0 ( ... )	5 ( 2.8)	... ( ... )
SOUTH CAROLINA†	2 ( 0.5)	0 ( ... )	0 ( ... )	... ( ... )	... ( ... )
TENNESSEE	2 ( 0.4)	0 ( ... )	1 ( ... )	... ( ... )	... ( ... )
TEXAS	5 ( 0.7)	0 ( ... )	1 ( ... )	... ( ... )	... ( ... )
UTAH	2 ( 0.5)	... ( ... )	0 ( ... )	... ( ... )	1 ( ... )
VERMONT†	3 ( 0.5)	... ( ... )	2 ( ... )	... ( ... )	... ( ... )
VIRGINIA	2 ( 0.6)	0 ( ... )	0 ( ... )	8 ( 4.0)	... ( ... )
WASHINGTON	2 ( 0.3)	0 ( ... )	0 ( ... )	0 ( ... )	0 ( ... )
WEST VIRGINIA	2 ( 0.5)	0 ( ... )	1 ( ... )	... ( ... )	... ( ... )
WISCONSIN	3 ( 0.7)	0 ( ... )	1 ( ... )	... ( ... )	... ( ... )
WYOMING	2 ( 0.4)	... ( ... )	1 ( ... )	... ( ... )	0 ( ... )
<b>Other Jurisdictions</b>					
DDESS	3 ( 1.2)	0 ( ... )	1 ( ... )	... ( ... )	... ( ... )
DoDDS	2 ( 0.4)	0 ( ... )	0 ( ... )	2 ( 0.8)	0 ( ... )
GUAM	1 ( ... )	... ( ... )	0 ( ... )	0 ( ... )	... ( ... )

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).

... Characteristics of the sample do not permit a reliable estimate.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 4.2** (continued)

**1996 Mathematics Assessment**



POPULATION: 1996 Grade 4 Public School Students  
 REPORTED STATISTICS: Percentage of Students by Achievement Levels  
 BREAKDOWNS BY: Race/Ethnicity

Achievement Level...	At or Above Proficient				
	White	Black	Hispanic	Asian/ Pacific Islander	American Indian
Which best describes your race or your ethnic background?					
JURISDICTIONS	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )
<b>Nation</b>					
NATION	26 ( 1.3)	5 ( 1.5)	7 ( 1.0)	24 ( 6.0)	8 ( 2.5)
NORTHEAST	33 ( 1.8)	6 ( ... )	12 ( 3.8)	... ( ... )	... ( ... )
SOUTHEAST	20 ( 3.7)	3 ( 1.2)	3 ( 1.5)	... ( ... )	... ( ... )
CENTRAL	29 ( 2.6)	7 ( 2.3)	9 ( 3.0)	... ( ... )	... ( ... )
WEST	22 ( 2.3)	4 ( 2.1)	6 ( 1.5)	20 ( 8.8)	9 ( 3.5)
<b>States</b>					
ALABAMA	16 ( 1.6)	2 ( 0.6)	5 ( 1.9)	... ( ... )	... ( ... )
ALASKA†	28 ( 1.7)	5 ( 2.2)	11 ( 2.4)	16 ( 4.3)	10 ( 1.7)
ARIZONA	22 ( 2.1)	4 ( ... )	6 ( 1.3)	... ( ... )	4 ( 2.7)
ARKANSAS†	18 ( 1.8)	2 ( 0.9)	3 ( 1.6)	... ( ... )	6 ( 2.5)
CALIFORNIA	17 ( 2.4)	2 ( ... )	4 ( 1.3)	17 ( 3.0)	... ( ... )
COLORADO	28 ( 1.5)	4 ( 2.6)	8 ( 1.3)	20 ( 5.3)	12 ( 4.0)
CONNECTICUT	38 ( 1.8)>	5 ( 1.7)	8 ( 2.0)	... ( ... )	... ( ... )
DELAWARE	22 ( 1.8)	4 ( 1.0)	6 ( 1.9)	... ( ... )	... ( ... )
DISTRICT OF COLUMBIA	49 ( 3.2)	2 ( 0.4)	4 ( 2.2)	... ( ... )	... ( ... )
FLORIDA	21 ( 1.4)	3 ( 1.0)	8 ( 1.4)	... ( ... )	... ( ... )
GEORGIA	20 ( 1.9)	2 ( 0.6)	5 ( 1.9)	... ( ... )	... ( ... )
HAWAII	22 ( 2.3)	7 ( 2.5)	7 ( 1.2)	19 ( 1.8)	13 ( 5.0)
INDIANA	27 ( 1.7)>	4 ( 1.4)	9 ( 2.7)	... ( ... )	... ( ... )
IOWA†	24 ( 1.5)	4 ( 2.5)	9 ( 2.5)	... ( ... )	... ( ... )
KENTUCKY	17 ( 1.3)	4 ( 1.4)	7 ( 2.4)	... ( ... )	... ( ... )
LOUISIANA	13 ( 1.6)	2 ( 0.8)	3 ( 1.9)	... ( ... )	3 ( ... )
MAINE	29 ( 1.5)	... ( ... )	9 ( 4.5)	... ( ... )	... ( ... )
MARYLAND	32 ( 2.5)	4 ( 0.9)	12 ( 3.1)	49 ( 6.2)	... ( ... )
MASSACHUSETTS	28 ( 2.1)	6 ( 2.7)	10 ( 2.8)	35 ( 8.2)	... ( ... )
MICHIGAN†	28 ( 1.6)	3 ( 1.1)	7 ( 1.9)	... ( ... )	11 ( 4.5)
MINNESOTA	33 ( 1.7)	3 ( ... )	17 ( 3.7)	19 ( 4.7)	16 ( 5.4)
MISSISSIPPI	14 ( 1.4)	2 ( 0.6)	3 ( 1.7)	... ( ... )	... ( ... )
MISSOURI	24 ( 1.4)	2 ( 0.8)	10 ( 3.1)	... ( ... )	... ( ... )
MONTANA†	25 ( 1.9)	... ( ... )	13 ( 3.4)	... ( ... )	10 ( 2.2)
NEBRASKA	27 ( 1.5)	5 ( 1.9)	13 ( 2.6)	... ( ... )	14 ( 6.0)
NEVADA†	18 ( 1.5)	2 ( 1.3)	7 ( 1.2)	21 ( 5.7)	8 ( 2.9)
NEW JERSEY†	36 ( 2.1)	3 ( 1.8)	5 ( 2.0)	48 ( 5.0)	... ( ... )
NEW MEXICO	23 ( 1.8)	3 ( 1.9)	6 ( 1.0)	... ( ... )	2 ( ... )
NEW YORK†	27 ( 1.7)	5 ( 1.6)	8 ( 1.7)	32 ( 4.1)	... ( ... )
NORTH CAROLINA	29 ( 1.7)>	4 ( 0.7)	10 ( 3.6)	... ( ... )	... ( ... )
NORTH DAKOTA	26 ( 1.4)	... ( ... )	15 ( 6.2)	... ( ... )	7 ( 3.1)
OREGON	23 ( 1.5)	... ( ... )	6 ( 1.6)	23 ( 5.2)	9 ( 3.9)
PENNSYLVANIA†	24 ( 1.8)	2 ( 1.2)	7 ( 2.1)	... ( ... )	... ( ... )
RHODE ISLAND	20 ( 1.4)	3 ( 1.7)	7 ( 2.0)	16 ( 4.6)	... ( ... )
SOUTH CAROLINA†	19 ( 2.1)	2 ( 0.7)	5 ( 1.7)	... ( ... )	... ( ... )
TENNESSEE	21 ( 1.9)>	3 ( 1.0)	12 ( 4.2)	... ( ... )	... ( ... )
TEXAS	40 ( 2.2)>	7 ( 2.0)	11 ( 1.4)	... ( ... )	... ( ... )
UTAH	26 ( 1.4)	... ( ... )	7 ( 2.4)	... ( ... )	10 ( 4.9)
VERMONT†	24 ( 1.2)	... ( ... )	14 ( 4.1)	... ( ... )	... ( ... )
VIRGINIA	25 ( 1.9)	4 ( 0.8)	9 ( 3.1)	39 ( 6.1)	... ( ... )
WASHINGTON	24 ( 1.3)	6 ( 2.8)	9 ( 2.2)	21 ( 3.5)	14 ( 3.0)
WEST VIRGINIA	20 ( 1.3)>	7 ( 3.4)	9 ( 2.9)	... ( ... )	... ( ... )
WISCONSIN	32 ( 1.5)	5 ( 1.4)	10 ( 3.5)	... ( ... )	... ( ... )
WYOMING	21 ( 1.3)	... ( ... )	7 ( 2.1)	... ( ... )	7 ( 3.2)
<b>Other Jurisdictions</b>					
DDESS	29 ( 2.4)	8 ( 2.2)	13 ( 2.9)	... ( ... )	... ( ... )
DoDDS	26 ( 1.8)	6 ( 1.3)	11 ( 2.2)	24 ( 3.2)	13 ( 4.2)
GUAM	11 ( 4.3)	... ( ... )	1 ( 0.8)	3 ( 0.7)	... ( ... )

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).  
 ... Characteristics of the sample do not permit a reliable estimate.  
 > (<) The value for the students was significantly higher (lower) than in the 1992 assessment at about the 95% confidence level using appropriate multiple comparison procedures.  
 SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 4.2** (continued)

**1996 Mathematics Assessment**



POPULATION: 1996 Grade 4 Public School Students  
 REPORTED STATISTICS: Percentage of Students by Achievement Levels  
 BREAKDOWNS BY: Race/Ethnicity

Achievement Level... Which best describes your race or your ethnic background?	At or Above Basic				
	White	Black	Hispanic	Asian/ Pacific Islander	American Indian
JURISDICTIONS	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )
<b>Nation</b>					
NATION	74 ( 1.6)	32 ( 3.4)	40 ( 2.6)	72 ( 5.5)	52 ( 6.1)
NORTHEAST	81 ( 2.9)	29 ( 9.7)	48 ( 6.3)	... ( ... )	... ( ... )
SOUTHEAST	67 ( 3.5)	32 ( 4.0)	24 ( 4.2)	... ( ... )	... ( ... )
CENTRAL	80 ( 2.9)	35 ( 7.2)	48 ( 6.3)	... ( ... )	... ( ... )
WEST	68 ( 3.5)	30 ( 9.3)	38 ( 4.2)	66 ( 6.9)	54 ( 6.8)
<b>States</b>					
ALABAMA	64 ( 2.2)	21 ( 2.0)	29 ( 4.2)	... ( ... )	... ( ... )
ALASKA†	76 ( 2.3)	36 ( 7.7)	56 ( 3.9)	66 ( 6.3)	46 ( 4.0)
ARIZONA	72 ( 2.3)	28 ( 5.6)	37 ( 3.2)	... ( ... )	32 ( 4.9)
ARKANSAS†	66 ( 2.3)>	21 ( 3.0)	36 ( 5.6)	... ( ... )	45 ( 7.4)
CALIFORNIA	63 ( 2.4)	18 ( 4.0)	29 ( 2.9)	58 ( 6.8)	... ( ... )
COLORADO	76 ( 1.4)>	26 ( 6.9)	46 ( 2.7)	68 ( 5.5)	58 ( 7.0)
CONNECTICUT	86 ( 1.5)>	40 ( 5.0)	42 ( 4.5)	... ( ... )	... ( ... )
DELAWARE	68 ( 1.2)	28 ( 2.6)	28 ( 4.4)	... ( ... )	... ( ... )
DISTRICT OF COLUMBIA	77 ( 3.0)	16 ( 0.8)<	18 ( 3.7)	... ( ... )	... ( ... )
FLORIDA	70 ( 1.9)	26 ( 1.9)	43 ( 3.7)	... ( ... )	... ( ... )
GEORGIA	67 ( 2.0)	31 ( 2.7)	36 ( 4.8)	... ( ... )	... ( ... )
HAWAII	66 ( 2.8)	38 ( 5.5)	37 ( 2.5)	56 ( 2.4)	50 ( 8.4)
INDIANA	78 ( 1.5)>	36 ( 5.6)	52 ( 5.1)	... ( ... )	... ( ... )
IOWA†	77 ( 1.4)	34 ( 5.6)	48 ( 5.7)	... ( ... )	... ( ... )
KENTUCKY	64 ( 1.9)>	39 ( 4.1)	33 ( 7.2)	... ( ... )	... ( ... )
LOUISIANA	63 ( 2.3)	24 ( 2.2)	26 ( 3.8)	... ( ... )	35 ( 6.4)
MAINE	77 ( 1.6)	... ( ... )	57 ( 5.6)	... ( ... )	... ( ... )
MARYLAND	77 ( 1.8)	30 ( 1.9)	43 ( 5.5)	84 ( 5.7)	... ( ... )
MASSACHUSETTS	78 ( 1.6)	39 ( 6.5)	46 ( 4.5)	77 ( 7.9)	... ( ... )
MICHIGAN†	78 ( 1.7)	30 ( 4.5)	42 ( 5.4)	... ( ... )	54 ( 7.0)
MINNESOTA	81 ( 1.5)	28 ( 6.2)	55 ( 5.6)	61 ( 5.2)	54 ( 7.6)
MISSISSIPPI	63 ( 2.4)	24 ( 2.0)	24 ( 4.5)	... ( ... )	... ( ... )
MISSOURI	74 ( 1.5)	31 ( 3.0)	50 ( 5.3)	... ( ... )	... ( ... )
MONTANA†	76 ( 1.7)	... ( ... )	58 ( 5.3)	... ( ... )	43 ( 4.1)
NEBRASKA	77 ( 1.6)	32 ( 3.4)	43 ( 4.5)	... ( ... )	54 ( 8.5)
NEVADA†	67 ( 2.1)	30 ( 4.1)	40 ( 3.2)	64 ( 7.5)	52 ( 5.3)
NEW JERSEY†	84 ( 1.8)	35 ( 3.7)	40 ( 4.6)	92 ( 2.4)	... ( ... )
NEW MEXICO	69 ( 2.0)	40 ( 10.0)	38 ( 2.2)	... ( ... )	27 ( 4.7)
NEW YORK†	80 ( 1.6)>	37 ( 4.3)	40 ( 3.3)	78 ( 5.0)	... ( ... )
NORTH CAROLINA	77 ( 1.4)>	37 ( 2.4)>	43 ( 5.6)	... ( ... )	... ( ... )
NORTH DAKOTA	77 ( 1.5)	... ( ... )	66 ( 8.9)	... ( ... )	48 ( 8.9)
OREGON	70 ( 2.2)	... ( ... )	34 ( 4.3)	73 ( 6.4)	50 ( 6.5)
PENNSYLVANIA†	77 ( 2.0)	27 ( 3.3)	39 ( 4.2)	... ( ... )	... ( ... )
RHODE ISLAND	68 ( 2.1)	25 ( 4.6)	35 ( 4.6)	48 ( 8.8)	... ( ... )
SOUTH CAROLINA†	66 ( 2.2)	27 ( 2.5)	27 ( 5.4)	... ( ... )	... ( ... )
TENNESSEE	68 ( 1.9)>	28 ( 3.2)	45 ( 6.0)	... ( ... )	... ( ... )
TEXAS	85 ( 1.8)>	47 ( 3.0)>	55 ( 3.1)	... ( ... )	... ( ... )
UTAH	73 ( 1.6)	... ( ... )	46 ( 4.3)	... ( ... )	46 ( 8.6)
VERMONT†	69 ( 2.2)	... ( ... )	53 ( 6.4)	... ( ... )	... ( ... )
VIRGINIA	73 ( 2.1)	34 ( 2.7)	52 ( 6.4)	80 ( 4.9)	... ( ... )
WASHINGTON	72 ( 1.9)	35 ( 5.0)	44 ( 3.6)	72 ( 4.5)	62 ( 5.2)
WEST VIRGINIA	66 ( 1.7)>	36 ( 7.6)	47 ( 4.8)	... ( ... )	... ( ... )
WISCONSIN	81 ( 1.0)	31 ( 2.8)	50 ( 5.5)	... ( ... )	... ( ... )
WYOMING	68 ( 1.6)	... ( ... )	44 ( 3.9)	... ( ... )	47 ( 7.5)
<b>Other Jurisdictions</b>					
DDESS	77 ( 1.9)	46 ( 4.8)	52 ( 4.5)	... ( ... )	... ( ... )
DoDDS	74 ( 1.6)	45 ( 2.7)	51 ( 3.3)	69 ( 4.2)	58 ( 9.2)
GUAM	35 ( 6.2)	... ( ... )	13 ( 4.3)	26 ( 1.5)	... ( ... )

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).  
 ... Characteristics of the sample do not permit a reliable estimate.  
 > (<) The value for the students was significantly higher (lower) than in the 1992 assessment at about the 95% confidence level using appropriate multiple comparison procedures.  
 SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 4.2** (continued)

**1996 Mathematics Assessment**



POPULATION: 1996 Grade 4 Public School Students  
 REPORTED STATISTICS: Percentage of Students by Achievement Levels  
 BREAKDOWNS BY: Race/Ethnicity

Achievement Level...	Below Basic				
	White	Black	Hispanic	Asian/ Pacific Islander	American Indian
Which best describes your race or your ethnic background?					
JURISDICTIONS	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )
<b>Nation</b>					
NATION	26 ( 1.6)	68 ( 3.4)	60 ( 2.6)	28 ( 5.5)	48 ( 6.1)
NORTHEAST	19 ( 2.9)	71 ( 9.7)	52 ( 6.3)	... ( ... )	... ( ... )
SOUTHEAST	33 ( 3.5)	68 ( 4.0)	76 ( 4.2)	... ( ... )	... ( ... )
CENTRAL	20 ( 2.9)	65 ( 7.2)	52 ( 6.3)	... ( ... )	... ( ... )
WEST	32 ( 3.5)	70 ( 9.3)	62 ( 4.2)	34 ( 6.9)	46 ( 6.8)
<b>States</b>					
ALABAMA	36 ( 2.2)	79 ( 2.0)	71 ( 4.2)	... ( ... )	... ( ... )
ALASKA†	24 ( 2.3)	64 ( 7.7)	44 ( 3.9)	34 ( 6.3)	54 ( 4.0)
ARIZONA	28 ( 2.3)	72 ( 5.6)	63 ( 3.2)	... ( ... )	68 ( 4.9)
ARKANSAS†	34 ( 2.3)<	79 ( 3.0)	64 ( 5.6)	... ( ... )	55 ( 7.4)
CALIFORNIA	37 ( 2.4)	82 ( 4.0)	71 ( 2.9)	42 ( 6.8)	... ( ... )
COLORADO	24 ( 1.4)<	74 ( 6.9)	54 ( 2.7)	32 ( 5.5)	42 ( 7.0)
CONNECTICUT	14 ( 1.5)<	60 ( 5.0)	58 ( 4.5)	... ( ... )	... ( ... )
DELAWARE	32 ( 1.2)	72 ( 2.6)	72 ( 4.4)	... ( ... )	... ( ... )
DISTRICT OF COLUMBIA	23 ( 3.0)	84 ( 0.8)>	82 ( 3.7)	... ( ... )	... ( ... )
FLORIDA	30 ( 1.9)	74 ( 1.9)	57 ( 3.7)	... ( ... )	... ( ... )
GEORGIA	33 ( 2.0)	69 ( 2.7)	64 ( 4.8)	... ( ... )	... ( ... )
HAWAII	34 ( 2.8)	62 ( 5.5)	63 ( 2.5)	44 ( 2.4)	50 ( 8.4)
INDIANA	22 ( 1.5)<	64 ( 5.6)	48 ( 5.1)	... ( ... )	... ( ... )
IOWA†	23 ( 1.4)	66 ( 5.6)	52 ( 5.7)	... ( ... )	... ( ... )
KENTUCKY	36 ( 1.9)<	61 ( 4.1)	67 ( 7.2)	... ( ... )	... ( ... )
LOUISIANA	37 ( 2.3)	76 ( 2.2)	74 ( 3.8)	... ( ... )	65 ( 6.4)
MAINE	23 ( 1.6)	... ( ... )	43 ( 5.6)	... ( ... )	... ( ... )
MARYLAND	23 ( 1.8)	70 ( 1.9)	57 ( 5.5)	16 ( 5.7)	... ( ... )
MASSACHUSETTS	22 ( 1.6)	61 ( 6.5)	54 ( 4.5)	23 ( 7.9)	... ( ... )
MICHIGAN†	22 ( 1.7)	70 ( 4.5)	58 ( 5.4)	... ( ... )	46 ( 7.0)
MINNESOTA	19 ( 1.5)	72 ( 6.2)	45 ( 5.6)	39 ( 5.2)	46 ( 7.6)
MISSISSIPPI	37 ( 2.4)	76 ( 2.0)	76 ( 4.5)	... ( ... )	... ( ... )
MISSOURI	26 ( 1.5)	69 ( 3.0)	50 ( 5.3)	... ( ... )	... ( ... )
MONTANA†	24 ( 1.7)	... ( ... )	42 ( 5.3)	... ( ... )	57 ( 4.1)
NEBRASKA	23 ( 1.6)	68 ( 3.4)	57 ( 4.5)	... ( ... )	46 ( 8.5)
NEVADA†	33 ( 2.1)	70 ( 4.1)	60 ( 3.2)	36 ( 7.5)	48 ( 5.3)
NEW JERSEY†	16 ( 1.8)	65 ( 3.7)	60 ( 4.6)	8 ( 2.4)	... ( ... )
NEW MEXICO	31 ( 2.0)	60 (10.0)	62 ( 2.2)	... ( ... )	73 ( 4.7)
NEW YORK†	20 ( 1.6)<	63 ( 4.3)	60 ( 3.3)	22 ( 5.0)	... ( ... )
NORTH CAROLINA	23 ( 1.4)<	63 ( 2.4)<	57 ( 5.6)	... ( ... )	... ( ... )
NORTH DAKOTA	23 ( 1.5)	... ( ... )	34 ( 8.9)	... ( ... )	52 ( 8.9)
OREGON	30 ( 2.2)	... ( ... )	66 ( 4.3)	27 ( 6.4)	50 ( 6.5)
PENNSYLVANIA†	23 ( 2.0)	73 ( 3.3)	61 ( 4.2)	... ( ... )	... ( ... )
RHODE ISLAND	32 ( 2.1)	75 ( 4.6)	65 ( 4.6)	52 ( 8.8)	... ( ... )
SOUTH CAROLINA†	34 ( 2.2)	73 ( 2.5)	73 ( 5.4)	... ( ... )	... ( ... )
TENNESSEE	32 ( 1.9)<	72 ( 3.2)	55 ( 6.0)	... ( ... )	... ( ... )
TEXAS	15 ( 1.8)<	53 ( 3.0)<	45 ( 3.1)	... ( ... )	... ( ... )
UTAH	27 ( 1.6)	... ( ... )	54 ( 4.3)	... ( ... )	54 ( 8.6)
VERMONT†	31 ( 2.2)	... ( ... )	47 ( 6.4)	... ( ... )	... ( ... )
VIRGINIA	27 ( 2.1)	66 ( 2.7)	48 ( 6.4)	20 ( 4.9)	... ( ... )
WASHINGTON	28 ( 1.9)	65 ( 5.0)	56 ( 3.6)	28 ( 4.5)	38 ( 5.2)
WEST VIRGINIA	34 ( 1.7)<	64 ( 7.6)	53 ( 4.8)	... ( ... )	... ( ... )
WISCONSIN	19 ( 1.0)	69 ( 2.8)	50 ( 5.5)	... ( ... )	... ( ... )
WYOMING	32 ( 1.6)	... ( ... )	56 ( 3.9)	... ( ... )	53 ( 7.5)
<b>Other Jurisdictions</b>					
DDESS	23 ( 1.9)	54 ( 4.8)	48 ( 4.5)	... ( ... )	... ( ... )
DoDDS	26 ( 1.6)	55 ( 2.7)	49 ( 3.3)	31 ( 4.2)	42 ( 9.2)
GUAM	65 ( 6.2)	... ( ... )	87 ( 4.3)	74 ( 1.5)	... ( ... )

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).  
 ... Characteristics of the sample do not permit a reliable estimate.  
 > (<) The value for the students was significantly higher (lower) than in the 1992 assessment at about the 95% confidence level using appropriate multiple comparison procedures.  
 SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 4.3**

**1992 Mathematics Assessment**



POPULATION:  
REPORTED STATISTICS:  
BREAKDOWNS BY:

1992 Grade 4 Public School Students  
Percentage of Students by Achievement Levels  
Parents' Education Level

Achievement Level... <i>What is the highest level of education either your mother or father obtained?</i>	Advanced				
	Did Not Finish High School	High School Graduate	Some Education After High School	College Graduate	I Don't Know
JURISDICTIONS	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )
<b>Nation</b>					
NATION	0 ( ... )	0 ( ... )	2 ( 0.8)	3 ( 0.6)	1 ( 0.3)
NORTHEAST	... ( ... )	0 ( ... )	6 ( 2.9)	5 ( 1.7)	0 ( ... )
SOUTHEAST	1 ( ... )	0 ( ... )	0 ( ... )	2 ( 0.7)	0 ( ... )
CENTRAL	... ( ... )	0 ( ... )	1 ( ... )	3 ( 1.2)	1 ( ... )
WEST	0 ( ... )	0 ( ... )	1 ( ... )	3 ( 1.4)	1 ( 0.5)
<b>States</b>					
ALABAMA	0 ( ... )	0 ( ... )	1 ( ... )	1 ( 0.4)	0 ( ... )
ALASKA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
ARIZONA	0 ( ... )	1 ( ... )	2 ( 1.3)	1 ( 0.4)	1 ( 0.3)
ARKANSAS	0 ( ... )	0 ( ... )	1 ( ... )	1 ( 0.5)	0 ( ... )
CALIFORNIA	0 ( ... )	0 ( ... )	1 ( ... )	2 ( 0.9)	1 ( 0.3)
COLORADO	0 ( ... )	0 ( ... )	2 ( 1.3)	3 ( 0.8)	0 ( 0.2)
CONNECTICUT	1 ( ... )	1 ( 0.8)	2 ( 1.4)	4 ( 0.8)	2 ( 0.6)
DELAWARE	0 ( ... )	0 ( 0.2)	0 ( ... )	4 ( 0.7)	0 ( ... )
DISTRICT OF COLUMBIA	0 ( ... )	0 ( ... )	1 ( ... )	2 ( 0.4)	0 ( ... )
FLORIDA	0 ( ... )	0 ( ... )	2 ( 1.1)	2 ( 0.9)	0 ( 0.2)
GEORGIA	0 ( ... )	0 ( ... )	2 ( 0.9)	2 ( 0.7)	0 ( 0.2)
HAWAII	0 ( ... )	1 ( ... )	1 ( ... )	2 ( 0.5)	1 ( 0.3)
INDIANA	0 ( ... )	0 ( ... )	2 ( ... )	2 ( 0.6)	1 ( ... )
IOWA	0 ( ... )	1 ( 0.8)	3 ( 1.2)	4 ( 0.8)	1 ( 0.4)
KENTUCKY	0 ( ... )	0 ( ... )	1 ( ... )	2 ( 0.7)	1 ( ... )
LOUISIANA	0 ( ... )	0 ( ... )	1 ( ... )	1 ( 0.4)	0 ( ... )
MAINE	0 ( ... )	1 ( 0.7)	3 ( 1.5)	4 ( 0.8)	2 ( 0.7)
MARYLAND	0 ( ... )	1 ( ... )	3 ( 2.0)	4 ( 0.6)	1 ( 0.4)
MASSACHUSETTS	0 ( ... )	1 ( ... )	2 ( 1.3)	4 ( 1.0)	0 ( 0.2)
MICHIGAN	0 ( ... )	0 ( ... )	1 ( 0.6)	2 ( 0.9)	1 ( 0.3)
MINNESOTA	... ( ... )	1 ( 0.6)	2 ( 1.1)	5 ( 0.8)	1 ( 0.5)
MISSISSIPPI	0 ( ... )	0 ( ... )	0 ( ... )	1 ( 0.3)	0 ( ... )
MISSOURI	0 ( ... )	1 ( ... )	2 ( 1.0)	2 ( 0.6)	1 ( ... )
MONTANA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
NEBRASKA	... ( ... )	2 ( 1.0)	3 ( 1.6)	3 ( 1.0)	1 ( ... )
NEVADA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
NEW JERSEY	0 ( ... )	1 ( 1.0)	2 ( ... )	4 ( 0.9)	1 ( ... )
NEW MEXICO	0 ( ... )	0 ( ... )	1 ( ... )	2 ( 0.7)	0 ( ... )
NEW YORK	0 ( ... )	0 ( ... )	1 ( ... )	3 ( 0.5)	1 ( 0.4)
NORTH CAROLINA	0 ( ... )	0 ( ... )	1 ( 0.6)	3 ( 0.7)	0 ( 0.2)
NORTH DAKOTA	... ( ... )	1 ( 0.9)	2 ( ... )	2 ( 0.6)	0 ( ... )
OREGON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
PENNSYLVANIA	0 ( ... )	1 ( ... )	4 ( 1.8)	3 ( 0.8)	1 ( 0.5)
RHODE ISLAND	0 ( ... )	0 ( ... )	1 ( ... )	2 ( 0.8)	1 ( 0.5)
SOUTH CAROLINA	0 ( ... )	0 ( ... )	2 ( ... )	2 ( 0.6)	0 ( ... )
TENNESSEE	0 ( ... )	0 ( ... )	1 ( ... )	1 ( 0.6)	0 ( ... )
TEXAS	0 ( ... )	0 ( ... )	2 ( ... )	2 ( 0.7)	1 ( 0.4)
UTAH	0 ( ... )	1 ( ... )	1 ( 0.7)	3 ( 0.6)	1 ( 0.3)
VERMONT	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
VIRGINIA	0 ( ... )	1 ( ... )	1 ( ... )	4 ( 0.9)	1 ( 0.5)
WASHINGTON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
WEST VIRGINIA	0 ( ... )	0 ( ... )	1 ( ... )	2 ( 0.8)	1 ( 0.3)
WISCONSIN	5 ( ... )	2 ( 0.9)	1 ( ... )	4 ( 0.7)	1 ( 0.5)
WYOMING	0 ( ... )	1 ( 0.6)	0 ( ... )	1 ( 0.5)	1 ( 0.3)
<b>Other Jurisdictions</b>					
DDESS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
DoDDS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
GUAM	0 ( ... )	0 ( ... )	2 ( ... )	0 ( ... )	0 ( ... )

— State or other jurisdiction did not participate in the NAEP assessment year presented in this table.  
... Characteristics of the sample do not permit a reliable estimate.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 4.3** (continued)

**1992 Mathematics Assessment**



POPULATION: 1992 Grade 4 Public School Students  
 REPORTED STATISTICS: Percentage of Students by Achievement Levels  
 BREAKDOWNS BY: Parents' Education Level

Achievement Level... <i>What is the highest level of education either your mother or father obtained?</i>	At or Above Proficient				
	Did Not Finish High School	High School Graduate	Some Education After High School	College Graduate	I Don't Know
JURISDICTIONS	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )
<b>Nation</b>					
NATION	5 ( 1.9 )	12 ( 1.9 )	21 ( 2.5 )	25 ( 2.0 )	12 ( 1.1 )
NORTHEAST	... ( ... )	12 ( 4.9 )	29 ( 4.7 )	33 ( 4.6 )	15 ( 2.3 )
SOUTHEAST	5 ( 2.7 )	6 ( 2.6 )	16 ( 5.2 )	16 ( 1.7 )	7 ( 0.9 )
CENTRAL	... ( ... )	17 ( 4.0 )	21 ( 5.0 )	27 ( 2.7 )	14 ( 1.9 )
WEST	5 ( 2.6 )	13 ( 4.5 )	19 ( 3.5 )	23 ( 4.0 )	12 ( 2.7 )
<b>States</b>					
ALABAMA	6 ( 1.9 )	7 ( 1.4 )	14 ( 2.4 )	13 ( 2.2 )	8 ( 1.3 )
ALASKA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
ARIZONA	5 ( 2.0 )	10 ( 2.0 )	21 ( 3.0 )	19 ( 1.5 )	9 ( 1.2 )
ARKANSAS	4 ( 2.0 )	7 ( 1.4 )	13 ( 2.4 )	14 ( 1.7 )	7 ( 1.0 )
CALIFORNIA	5 ( 2.0 )	7 ( 2.0 )	17 ( 3.2 )	18 ( 1.8 )	9 ( 1.5 )
COLORADO	5 ( 2.0 )	9 ( 2.1 )	22 ( 3.4 )	25 ( 1.5 )	12 ( 1.4 )
CONNECTICUT	7 ( 3.7 )	14 ( 2.5 )	24 ( 3.9 )	33 ( 2.2 )	18 ( 1.6 )
DELAWARE	2 ( ... )	11 ( 1.9 )	14 ( 4.9 )	27 ( 2.1 )	10 ( 1.6 )
DISTRICT OF COLUMBIA	1 ( ... )	2 ( 0.9 )	7 ( 2.6 )	9 ( 0.8 )	3 ( 0.6 )
FLORIDA	3 ( 2.1 )	7 ( 1.8 )	22 ( 3.4 )	19 ( 2.5 )	9 ( 1.1 )
GEORGIA	6 ( 2.7 )	8 ( 1.9 )	19 ( 3.1 )	23 ( 2.2 )	10 ( 1.4 )
HAWAII	7 ( ... )	8 ( 1.7 )	20 ( 3.4 )	19 ( 1.6 )	13 ( 1.1 )
INDIANA	6 ( 2.7 )	12 ( 1.9 )	24 ( 4.1 )	23 ( 2.0 )	9 ( 1.2 )
IOWA	9 ( 4.3 )	18 ( 2.5 )	33 ( 3.4 )	34 ( 1.9 )	20 ( 1.7 )
KENTUCKY	6 ( 1.6 )	10 ( 1.3 )	20 ( 3.3 )	20 ( 2.1 )	8 ( 1.4 )
LOUISIANA	2 ( 1.5 )	5 ( 1.6 )	13 ( 3.6 )	11 ( 1.6 )	5 ( 0.9 )
MAINE	10 ( 5.0 )	20 ( 3.1 )	39 ( 4.3 )	39 ( 2.5 )	18 ( 1.9 )
MARYLAND	5 ( 1.9 )	11 ( 1.7 )	25 ( 3.6 )	25 ( 1.8 )	13 ( 1.4 )
MASSACHUSETTS	4 ( ... )	15 ( 2.4 )	26 ( 4.8 )	33 ( 2.0 )	14 ( 1.4 )
MICHIGAN	6 ( 3.2 )	8 ( 1.6 )	21 ( 3.3 )	28 ( 2.4 )	13 ( 2.1 )
MINNESOTA	... ( ... )	17 ( 3.2 )	29 ( 3.6 )	36 ( 2.2 )	20 ( 1.4 )
MISSISSIPPI	2 ( 1.2 )	6 ( 1.3 )	9 ( 3.2 )	9 ( 1.2 )	4 ( 0.7 )
MISSOURI	9 ( 2.8 )	14 ( 2.1 )	22 ( 3.7 )	27 ( 2.3 )	12 ( 1.8 )
MONTANA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
NEBRASKA	... ( ... )	20 ( 2.9 )	28 ( 3.4 )	28 ( 2.8 )	15 ( 1.5 )
NEVADA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
NEW JERSEY	7 ( ... )	14 ( 2.4 )	27 ( 5.7 )	34 ( 2.4 )	16 ( 2.0 )
NEW MEXICO	4 ( 1.6 )	9 ( 1.8 )	16 ( 4.6 )	18 ( 2.0 )	6 ( 1.1 )
NEW YORK	9 ( 4.8 )	8 ( 2.1 )	21 ( 5.2 )	25 ( 2.5 )	11 ( 1.6 )
NORTH CAROLINA	4 ( 2.2 )	7 ( 1.4 )	19 ( 2.7 )	19 ( 1.5 )	8 ( 1.0 )
NORTH DAKOTA	... ( ... )	18 ( 2.8 )	31 ( 4.1 )	29 ( 1.8 )	14 ( 1.6 )
OREGON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
PENNSYLVANIA	7 ( 2.9 )	16 ( 2.0 )	37 ( 4.0 )	30 ( 2.5 )	14 ( 1.7 )
RHODE ISLAND	2 ( 1.5 )	6 ( 1.8 )	15 ( 3.6 )	21 ( 2.0 )	9 ( 1.2 )
SOUTH CAROLINA	6 ( 2.7 )	5 ( 1.2 )	15 ( 3.1 )	21 ( 1.8 )	8 ( 1.5 )
TENNESSEE	3 ( 1.5 )	5 ( 1.2 )	10 ( 2.4 )	18 ( 2.1 )	6 ( 1.0 )
TEXAS	9 ( 2.2 )	11 ( 2.6 )	22 ( 3.4 )	21 ( 2.6 )	11 ( 1.6 )
UTAH	6 ( 2.9 )	13 ( 2.3 )	22 ( 3.5 )	26 ( 1.9 )	13 ( 1.1 )
VERMONT	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
VIRGINIA	4 ( 1.8 )	10 ( 1.7 )	15 ( 2.4 )	29 ( 2.5 )	13 ( 1.5 )
WASHINGTON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
WEST VIRGINIA	4 ( 1.3 )	8 ( 1.5 )	16 ( 2.6 )	20 ( 1.9 )	8 ( 1.2 )
WISCONSIN	15 ( 5.9 )	21 ( 2.6 )	37 ( 4.7 )	32 ( 2.8 )	16 ( 1.6 )
WYOMING	8 ( 2.6 )	16 ( 2.3 )	27 ( 3.4 )	24 ( 2.0 )	12 ( 1.1 )
<b>Other Jurisdictions</b>					
DDESS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
DoDDS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
GUAM	3 ( ... )	2 ( 1.1 )	14 ( 3.3 )	5 ( 1.1 )	4 ( 0.8 )

— State or other jurisdiction did not participate in the NAEP assessment year presented in this table.  
 ... Characteristics of the sample do not permit a reliable estimate.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 4.3** (continued)

**1992 Mathematics Assessment**



POPULATION: 1992 Grade 4 Public School Students  
 REPORTED STATISTICS: Percentage of Students by Achievement Levels  
 BREAKDOWNS BY: Parents' Education Level

Achievement Level... <i>What is the highest level of education either your mother or father obtained?</i>	At or Above Basic				
	Did Not Finish High School	High School Graduate	Some Education After High School	College Graduate	I Don't Know
JURISDICTIONS	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )
<b>Nation</b>					
NATION	38 ( 5.4)	52 ( 2.9)	67 ( 3.0)	66 ( 1.5)	50 ( 1.5)
NORTHEAST	... ( ... )	55 ( 7.5)	73 ( 7.2)	72 ( 3.4)	54 ( 3.4)
SOUTHEAST	33 ( 8.8)	41 ( 4.6)	56 ( 6.1)	54 ( 3.3)	40 ( 2.3)
CENTRAL	... ( ... )	59 ( 5.3)	78 ( 8.2)	72 ( 3.3)	55 ( 4.3)
WEST	37 ( 10.5)	58 ( 5.8)	61 ( 4.7)	65 ( 2.7)	51 ( 3.0)
<b>States</b>					
ALABAMA	35 ( 4.0)	39 ( 3.1)	54 ( 3.7)	48 ( 3.4)	38 ( 2.8)
ALASKA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
ARIZONA	39 ( 5.4)	49 ( 4.2)	68 ( 3.1)	61 ( 2.2)	47 ( 2.1)
ARKANSAS	31 ( 4.1)	46 ( 2.9)	55 ( 4.0)	52 ( 2.7)	44 ( 2.2)
CALIFORNIA	28 ( 6.6)	38 ( 4.1)	60 ( 4.6)	57 ( 2.7)	39 ( 2.4)
COLORADO	35 ( 4.6)	52 ( 3.5)	73 ( 2.5)	71 ( 1.9)	52 ( 1.8)
CONNECTICUT	39 ( 4.2)	60 ( 3.7)	68 ( 4.5)	78 ( 1.4)	59 ( 2.8)
DELAWARE	29 ( 4.5)	51 ( 2.9)	61 ( 3.8)	64 ( 2.0)	48 ( 2.1)
DISTRICT OF COLUMBIA	18 ( 4.7)	16 ( 2.5)	29 ( 3.9)	29 ( 1.3)	18 ( 1.4)
FLORIDA	31 ( 3.3)	43 ( 3.1)	63 ( 3.9)	60 ( 2.7)	46 ( 2.2)
GEORGIA	35 ( 5.2)	43 ( 2.8)	67 ( 4.7)	61 ( 2.5)	49 ( 2.5)
HAWAII	36 ( 6.4)	37 ( 3.0)	64 ( 3.8)	60 ( 2.8)	50 ( 1.9)
INDIANA	45 ( 4.3)	55 ( 3.3)	74 ( 4.6)	69 ( 2.2)	53 ( 2.3)
IOWA	54 ( 5.5)	66 ( 3.0)	81 ( 3.4)	79 ( 1.7)	66 ( 2.1)
KENTUCKY	36 ( 3.3)	46 ( 2.6)	62 ( 3.9)	63 ( 2.6)	46 ( 2.0)
LOUISIANA	24 ( 5.3)	31 ( 3.3)	56 ( 3.9)	45 ( 3.0)	36 ( 2.5)
MAINE	57 ( 7.4)	70 ( 2.9)	86 ( 3.6)	85 ( 1.8)	66 ( 2.6)
MARYLAND	35 ( 5.4)	45 ( 3.5)	67 ( 4.2)	64 ( 2.1)	48 ( 2.5)
MASSACHUSETTS	28 ( 7.5)	61 ( 3.0)	76 ( 3.6)	78 ( 1.8)	59 ( 2.3)
MICHIGAN	41 ( 7.9)	55 ( 3.7)	69 ( 4.4)	69 ( 2.7)	52 ( 2.4)
MINNESOTA	... ( ... )	63 ( 2.6)	77 ( 3.9)	80 ( 1.8)	64 ( 2.5)
MISSISSIPPI	26 ( 4.0)	33 ( 2.9)	51 ( 4.2)	41 ( 2.1)	31 ( 2.2)
MISSOURI	46 ( 3.7)	55 ( 3.7)	70 ( 3.1)	71 ( 2.3)	56 ( 2.1)
MONTANA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
NEBRASKA	... ( ... )	62 ( 3.9)	76 ( 3.1)	73 ( 2.1)	60 ( 2.3)
NEVADA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
NEW JERSEY	48 ( 7.7)	60 ( 3.8)	75 ( 3.8)	77 ( 2.2)	58 ( 3.1)
NEW MEXICO	35 ( 5.6)	44 ( 3.7)	67 ( 5.2)	61 ( 2.9)	42 ( 2.4)
NEW YORK	44 ( 5.4)	53 ( 4.1)	69 ( 4.6)	68 ( 2.3)	46 ( 2.1)
NORTH CAROLINA	33 ( 4.0)	41 ( 3.1)	63 ( 3.8)	59 ( 2.1)	45 ( 2.5)
NORTH DAKOTA	... ( ... )	67 ( 3.2)	81 ( 4.7)	80 ( 1.7)	65 ( 2.1)
OREGON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
PENNSYLVANIA	51 ( 6.7)	64 ( 3.0)	79 ( 2.7)	73 ( 2.5)	54 ( 2.7)
RHODE ISLAND	32 ( 5.7)	47 ( 4.9)	63 ( 4.2)	67 ( 2.7)	46 ( 2.8)
SOUTH CAROLINA	36 ( 4.5)	41 ( 3.3)	60 ( 4.4)	58 ( 2.1)	39 ( 2.5)
TENNESSEE	37 ( 4.2)	40 ( 3.0)	52 ( 4.4)	58 ( 3.0)	41 ( 2.1)
TEXAS	49 ( 4.8)	52 ( 3.5)	69 ( 4.5)	64 ( 2.7)	49 ( 2.1)
UTAH	39 ( 7.9)	59 ( 4.2)	74 ( 3.6)	75 ( 1.7)	58 ( 2.2)
VERMONT	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
VIRGINIA	38 ( 5.6)	47 ( 3.0)	62 ( 3.9)	70 ( 2.2)	50 ( 2.4)
WASHINGTON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
WEST VIRGINIA	33 ( 4.1)	48 ( 2.6)	66 ( 3.6)	64 ( 2.1)	46 ( 2.5)
WISCONSIN	59 ( 5.8)	69 ( 3.5)	82 ( 2.5)	78 ( 2.0)	64 ( 1.8)
WYOMING	57 ( 6.4)	66 ( 3.4)	81 ( 3.2)	75 ( 1.9)	61 ( 2.0)
<b>Other Jurisdictions</b>					
DDESS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
DoDDS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
GUAM	18 ( 4.8)	21 ( 2.8)	46 ( 5.8)	27 ( 1.9)	26 ( 2.2)

— State or other jurisdiction did not participate in the NAEP assessment year presented in this table.  
 ... Characteristics of the sample do not permit a reliable estimate.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.



**TABLE 4.3** (continued)

**1992 Mathematics Assessment**



POPULATION: 1992 Grade 4 Public School Students  
 REPORTED STATISTICS: Percentage of Students by Achievement Levels  
 BREAKDOWNS BY: Parents' Education Level

Achievement Level... <i>What is the highest level of education either your mother or father obtained?</i>	Below Basic				
	Did Not Finish High School	High School Graduate	Some Education After High School	College Graduate	I Don't Know
JURISDICTIONS	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )
<b>Nation</b>					
NATION	62 ( 5.4)	48 ( 2.9)	33 ( 3.0)	34 ( 1.5)	50 ( 1.5)
NORTHEAST	... ( ... )	45 ( 7.5)	27 ( 7.2)	28 ( 3.4)	46 ( 3.4)
SOUTHEAST	67 ( 8.8)	59 ( 4.6)	44 ( 6.1)	46 ( 3.3)	60 ( 2.3)
CENTRAL	... ( ... )	41 ( 5.3)	22 ( 8.2)	28 ( 3.3)	45 ( 4.3)
WEST	63 ( 10.5)	42 ( 5.8)	39 ( 4.7)	35 ( 2.7)	49 ( 3.0)
<b>States</b>					
ALABAMA	65 ( 4.0)	61 ( 3.1)	46 ( 3.7)	52 ( 3.4)	62 ( 2.8)
ALASKA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
ARIZONA	61 ( 5.4)	51 ( 4.2)	32 ( 3.1)	39 ( 2.2)	53 ( 2.1)
ARKANSAS	69 ( 4.1)	54 ( 2.9)	45 ( 4.0)	48 ( 2.7)	56 ( 2.2)
CALIFORNIA	72 ( 6.6)	62 ( 4.1)	40 ( 4.6)	43 ( 2.7)	61 ( 2.4)
COLORADO	65 ( 4.6)	48 ( 3.5)	27 ( 2.5)	29 ( 1.9)	48 ( 1.8)
CONNECTICUT	61 ( 4.2)	40 ( 3.7)	32 ( 4.5)	22 ( 1.4)	41 ( 2.8)
DELAWARE	71 ( 4.5)	49 ( 2.9)	39 ( 3.8)	36 ( 2.0)	52 ( 2.1)
DISTRICT OF COLUMBIA	82 ( 4.7)	84 ( 2.5)	71 ( 3.9)	71 ( 1.3)	82 ( 1.4)
FLORIDA	69 ( 3.3)	57 ( 3.1)	37 ( 3.9)	40 ( 2.7)	54 ( 2.2)
GEORGIA	65 ( 5.2)	57 ( 2.8)	33 ( 4.7)	39 ( 2.5)	51 ( 2.5)
HAWAII	64 ( 6.4)	63 ( 3.0)	36 ( 3.8)	40 ( 2.8)	50 ( 1.9)
INDIANA	55 ( 4.3)	45 ( 3.3)	26 ( 4.6)	31 ( 2.2)	47 ( 2.3)
IOWA	46 ( 5.5)	34 ( 3.0)	19 ( 3.4)	21 ( 1.7)	34 ( 2.1)
KENTUCKY	64 ( 3.3)	54 ( 2.6)	38 ( 3.9)	37 ( 2.6)	54 ( 2.0)
LOUISIANA	76 ( 5.3)	69 ( 3.3)	44 ( 3.9)	55 ( 3.0)	64 ( 2.5)
MAINE	43 ( 7.4)	30 ( 2.9)	14 ( 3.6)	15 ( 1.8)	34 ( 2.6)
MARYLAND	65 ( 5.4)	55 ( 3.5)	33 ( 4.2)	36 ( 2.1)	52 ( 2.5)
MASSACHUSETTS	72 ( 7.5)	39 ( 3.0)	24 ( 3.6)	22 ( 1.8)	41 ( 2.3)
MICHIGAN	59 ( 7.9)	45 ( 3.7)	31 ( 4.4)	31 ( 2.7)	48 ( 2.4)
MINNESOTA	... ( ... )	37 ( 2.6)	23 ( 3.9)	20 ( 1.8)	36 ( 2.5)
MISSISSIPPI	74 ( 4.0)	67 ( 2.9)	49 ( 4.2)	59 ( 2.1)	69 ( 2.2)
MISSOURI	54 ( 3.7)	45 ( 3.7)	30 ( 3.1)	29 ( 2.3)	44 ( 2.1)
MONTANA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
NEBRASKA	... ( ... )	38 ( 3.9)	24 ( 3.1)	27 ( 2.1)	40 ( 2.3)
NEVADA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
NEW JERSEY	52 ( 7.7)	40 ( 3.8)	25 ( 3.8)	23 ( 2.2)	42 ( 3.1)
NEW MEXICO	65 ( 5.6)	56 ( 3.7)	33 ( 5.2)	39 ( 2.9)	58 ( 2.4)
NEW YORK	56 ( 5.4)	47 ( 4.1)	31 ( 4.6)	32 ( 2.3)	54 ( 2.1)
NORTH CAROLINA	67 ( 4.0)	59 ( 3.1)	37 ( 3.8)	41 ( 2.1)	55 ( 2.5)
NORTH DAKOTA	... ( ... )	33 ( 3.2)	19 ( 4.7)	20 ( 1.7)	35 ( 2.1)
OREGON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
PENNSYLVANIA	49 ( 6.7)	36 ( 3.0)	21 ( 2.7)	27 ( 2.5)	46 ( 2.7)
RHODE ISLAND	68 ( 5.7)	53 ( 4.9)	37 ( 4.2)	33 ( 2.7)	54 ( 2.8)
SOUTH CAROLINA	64 ( 4.5)	59 ( 3.3)	40 ( 4.4)	42 ( 2.1)	61 ( 2.5)
TENNESSEE	63 ( 4.2)	60 ( 3.0)	48 ( 4.4)	42 ( 3.0)	59 ( 2.1)
TEXAS	51 ( 4.8)	48 ( 3.5)	31 ( 4.5)	36 ( 2.7)	51 ( 2.1)
UTAH	61 ( 7.9)	41 ( 4.2)	26 ( 3.6)	25 ( 1.7)	42 ( 2.2)
VERMONT	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
VIRGINIA	62 ( 5.6)	53 ( 3.0)	38 ( 3.9)	30 ( 2.2)	50 ( 2.4)
WASHINGTON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
WEST VIRGINIA	67 ( 4.1)	52 ( 2.6)	34 ( 3.6)	36 ( 2.1)	54 ( 2.5)
WISCONSIN	41 ( 5.8)	31 ( 3.5)	18 ( 2.5)	22 ( 2.0)	36 ( 1.8)
WYOMING	43 ( 6.4)	34 ( 3.4)	19 ( 3.2)	25 ( 1.9)	39 ( 2.0)
<b>Other Jurisdictions</b>					
DDESS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
DoDDS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
GUAM	82 ( 4.8)	79 ( 2.8)	54 ( 5.8)	73 ( 1.9)	74 ( 2.2)

— State or other jurisdiction did not participate in the NAEP assessment year presented in this table.  
 ... Characteristics of the sample do not permit a reliable estimate.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 4.3** (continued)

**1996 Mathematics Assessment**



POPULATION: 1996 Grade 4 Public School Students  
 REPORTED STATISTICS: Percentage of Students by Achievement Levels  
 BREAKDOWNS BY: Parents' Education Level

Achievement Level... <i>What is the highest level of education either your mother or father obtained?</i>	Advanced				
	Did Not Finish High School	High School Graduate	Some Education After High School	College Graduate	I Don't Know
JURISDICTIONS	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )
<b>Nation</b>					
NATION	0 ( ... )	1 ( ... )	2 ( 1.1 )	4 ( 0.7 )	1 ( 0.4 )
NORTHEAST	... ( ... )	1 ( ... )	4 ( ... )	4 ( 1.4 )	2 ( ... )
SOUTHEAST	0 ( ... )	0 ( ... )	1 ( ... )	3 ( 2.0 )	1 ( 0.3 )
CENTRAL	... ( ... )	1 ( ... )	3 ( 1.4 )	4 ( 1.2 )	1 ( ... )
WEST	... ( ... )	1 ( ... )	1 ( ... )	4 ( 1.2 )	1 ( ... )
<b>States</b>					
ALABAMA	0 ( ... )	0 ( ... )	1 ( ... )	2 ( 0.7 )	1 ( 0.4 )
ALASKA†	2 ( ... )	1 ( ... )	2 ( ... )	4 ( 0.8 )	1 ( 0.4 )
ARIZONA	0 ( ... )	0 ( ... )	1 ( ... )	3 ( 1.0 )	1 ( 0.3 )
ARKANSAS†	0 ( ... )	0 ( ... )	1 ( ... )	1 ( 0.6 )	1 ( ... )
CALIFORNIA	0 ( ... )	0 ( ... )	0 ( ... )	2 ( 0.8 )	0 ( 0.2 )
COLORADO	0 ( ... )	1 ( ... )	2 ( 1.0 )	3 ( 0.7 )	1 ( 0.5 )
CONNECTICUT	1 ( ... )	0 ( ... )	1 ( 0.7 )	5 ( 1.0 )	2 ( 0.6 )
DELAWARE	... ( ... )	1 ( ... )	3 ( 2.0 )	2 ( 0.8 )	1 ( ... )
DISTRICT OF COLUMBIA	0 ( ... )	0 ( ... )	0 ( ... )	2 ( 0.8 )	0 ( ... )
FLORIDA	0 ( ... )	0 ( ... )	1 ( ... )	2 ( 0.6 )	0 ( 0.2 )
GEORGIA	0 ( ... )	0 ( ... )	2 ( 0.8 )	2 ( 0.7 )	0 ( 0.3 )
HAWAII	... ( ... )	0 ( ... )	3 ( 1.6 )	3 ( 0.8 )	1 ( ... )
INDIANA	2 ( ... )	1 ( 0.4 )	3 ( 1.3 )	4 ( 1.2 )	0 ( ... )
IOWA†	... ( ... )	1 ( ... )	1 ( ... )	3 ( 0.8 )	1 ( 0.3 )
KENTUCKY	0 ( ... )	0 ( ... )	1 ( ... )	3 ( 0.6 )	0 ( ... )
LOUISIANA	0 ( ... )	0 ( ... )	0 ( ... )	1 ( 0.4 )	0 ( ... )
MAINE	0 ( ... )	1 ( 0.9 )	3 ( 1.6 )	4 ( 1.4 )	2 ( 0.6 )
MARYLAND	0 ( ... )	0 ( ... )	1 ( ... )	5 ( 1.2 )	2 ( 0.8 )
MASSACHUSETTS	0 ( ... )	1 ( ... )	1 ( ... )	3 ( 1.0 )	1 ( 0.4 )
MICHIGAN†	0 ( ... )	1 ( 0.5 )	3 ( 1.4 )	4 ( 1.1 )	1 ( 0.3 )
MINNESOTA	... ( ... )	3 ( 1.3 )	4 ( 1.5 )	5 ( 1.0 )	1 ( 0.5 )
MISSISSIPPI	0 ( ... )	0 ( ... )	0 ( ... )	1 ( 0.4 )	0 ( ... )
MISSOURI	0 ( ... )	0 ( ... )	2 ( 1.1 )	2 ( 0.6 )	0 ( ... )
MONTANA†	0 ( ... )	0 ( ... )	1 ( 0.7 )	2 ( 0.8 )	1 ( 0.2 )
NEBRASKA	0 ( ... )	1 ( 0.5 )	3 ( 1.4 )	4 ( 0.6 )	1 ( 0.5 )
NEVADA†	0 ( ... )	0 ( ... )	2 ( 1.3 )	1 ( 0.7 )	0 ( ... )
NEW JERSEY†	0 ( ... )	1 ( ... )	1 ( ... )	4 ( 1.3 )	1 ( 0.6 )
NEW MEXICO	0 ( ... )	0 ( ... )	1 ( ... )	2 ( 0.6 )	0 ( ... )
NEW YORK†	0 ( ... )	0 ( ... )	2 ( ... )	3 ( 1.0 )	0 ( ... )
NORTH CAROLINA	1 ( ... )	0 ( ... )	3 ( 1.7 )	4 ( 0.7 )	1 ( 0.4 )
NORTH DAKOTA	... ( ... )	1 ( ... )	2 ( ... )	3 ( 0.8 )	1 ( 0.6 )
OREGON	0 ( ... )	0 ( ... )	2 ( ... )	4 ( 1.0 )	1 ( 0.4 )
PENNSYLVANIA‡	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
RHODE ISLAND	0 ( ... )	0 ( ... )	1 ( ... )	2 ( 0.5 )	1 ( 0.4 )
SOUTH CAROLINA†	0 ( ... )	0 ( ... )	2 ( 1.2 )	2 ( 0.5 )	1 ( ... )
TENNESSEE	0 ( ... )	0 ( ... )	1 ( ... )	2 ( 0.6 )	1 ( 0.5 )
TEXAS	0 ( ... )	1 ( ... )	2 ( 1.2 )	6 ( 1.1 )	1 ( 0.4 )
UTAH	... ( ... )	1 ( 0.7 )	2 ( 0.9 )	3 ( 0.8 )	1 ( 0.3 )
VERMONT†	... ( ... )	2 ( 1.0 )	1 ( ... )	5 ( 1.0 )	1 ( 0.5 )
VIRGINIA	0 ( ... )	0 ( ... )	0 ( ... )	4 ( 1.1 )	1 ( 0.4 )
WASHINGTON	0 ( ... )	1 ( ... )	3 ( 1.5 )	2 ( 0.4 )	1 ( 0.5 )
WEST VIRGINIA	1 ( ... )	1 ( 0.6 )	2 ( ... )	3 ( 1.0 )	1 ( 0.5 )
WISCONSIN	... ( ... )	1 ( ... )	3 ( 1.6 )	5 ( 1.2 )	1 ( 0.8 )
WYOMING	0 ( ... )	0 ( ... )	3 ( 1.4 )	2 ( 0.7 )	1 ( ... )
<b>Other Jurisdictions</b>					
DDESS	... ( ... )	2 ( ... )	4 ( 2.4 )	3 ( 1.3 )	1 ( 0.6 )
DoDDS	... ( ... )	1 ( ... )	2 ( 0.8 )	2 ( 0.6 )	1 ( 0.3 )
GUAM	... ( ... )	0 ( ... )	1 ( ... )	0 ( ... )	0 ( ... )

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).  
 — State or other jurisdiction did not participate in the NAEP assessment year presented in this table.  
 ... Characteristics of the sample do not permit a reliable estimate.  
 ‡ 1996 results for Pennsylvania are not reported for this table; the PA Department of Education requested that students refrain from answering this home environment background question.  
 SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 4.3** (continued)

**1996 Mathematics Assessment**



POPULATION: 1996 Grade 4 Public School Students  
 REPORTED STATISTICS: Percentage of Students by Achievement Levels  
 BREAKDOWNS BY: Parents' Education Level

Achievement Level... <i>What is the highest level of education either your mother or father obtained?</i>	At or Above Proficient				
	Did Not Finish High School	High School Graduate	Some Education After High School	College Graduate	I Don't Know
JURISDICTIONS	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )
<b>Nation</b>					
NATION	5 ( 1.8)	15 ( 2.0)	27 ( 3.1)	27 ( 1.9)	14 ( 1.2)
NORTHEAST	... ( ... )	27 ( 4.7)	36 ( 6.2)	33 ( 3.3)	17 ( 2.8)
SOUTHEAST	2 ( 1.4)	7 ( 1.7)	26 ( 7.3)	20 ( 4.1)	10 ( 2.3)
CENTRAL	... ( ... )	15 ( 5.3)	29 ( 7.9)	34 ( 3.1)	19 ( 3.0)
WEST	... ( ... )	16 ( 3.9)	18 ( 4.7)	23 ( 4.5)	11 ( 1.8)
<b>States</b>					
ALABAMA	3 ( 1.3)	6 ( 1.4)	12 ( 2.7)	18 ( 2.1)	7 ( 1.1)
ALASKA†	12 ( 4.1)	13 ( 3.0)	25 ( 3.8)	29 ( 2.1)	16 ( 1.7)
ARIZONA	3 ( 1.7)	9 ( 2.7)	21 ( 4.3)	25 ( 2.9)	10 ( 1.4)
ARKANSAS†	5 ( 2.6)	12 ( 2.2)	19 ( 3.9)	18 ( 2.5)	10 ( 1.5)
CALIFORNIA	0 ( ... )	6 ( 2.1)	17 ( 4.1)	17 ( 2.5)	7 ( 1.2)
COLORADO	11 ( 3.9)	12 ( 1.9)	27 ( 3.1)	32 ( 1.8)	13 ( 1.5)
CONNECTICUT	9 ( 3.6)	19 ( 2.9)	29 ( 4.1)	41 ( 2.3)	21 ( 2.1)
DELAWARE	... ( ... )	12 ( 2.5)	25 ( 5.4)	21 ( 2.2)	12 ( 1.4)
DISTRICT OF COLUMBIA	0 ( ... )	1 ( 0.6)	3 ( 1.8)	10 ( 0.9)	2 ( 0.8)
FLORIDA	8 ( 2.8)	10 ( 2.6)	25 ( 3.6)	19 ( 1.9)	11 ( 1.4)
GEORGIA	4 ( 2.0)	9 ( 2.0)	14 ( 3.2)	19 ( 2.5)	10 ( 1.3)
HAWAII	... ( ... )	11 ( 2.0)	22 ( 4.0)	22 ( 1.9)	12 ( 1.5)
INDIANA	17 ( 5.8)	16 ( 2.4)	30 ( 3.4)	34 ( 2.6)	16 ( 1.8)
IOWA†	... ( ... )	18 ( 2.6)	26 ( 3.6)	32 ( 2.0)	14 ( 1.7)
KENTUCKY	5 ( 1.8)	10 ( 1.2)	22 ( 3.8)	26 ( 2.2)	11 ( 1.3)
LOUISIANA	3 ( 1.4)	5 ( 1.0)	10 ( 2.3)	10 ( 1.6)	7 ( 1.4)
MAINE	13 ( 6.3)	21 ( 4.0)	33 ( 4.4)	37 ( 1.8)	20 ( 1.9)
MARYLAND	5 ( 2.3)	11 ( 2.5)	24 ( 3.4)	31 ( 2.8)	15 ( 1.9)
MASSACHUSETTS	10 ( 4.1)	16 ( 2.7)	25 ( 3.5)	33 ( 2.9)	14 ( 2.1)
MICHIGAN†	7 ( 3.6)	16 ( 2.8)	28 ( 4.5)	32 ( 2.5)	17 ( 1.4)
MINNESOTA	... ( ... )	24 ( 3.4)	35 ( 4.1)	38 ( 2.0)	21 ( 2.1)
MISSISSIPPI	4 ( 2.1)	6 ( 1.2)	12 ( 3.0)	11 ( 1.8)	6 ( 0.9)
MISSOURI	8 ( 3.1)	14 ( 2.1)	25 ( 3.2)	29 ( 2.0)	13 ( 1.6)
MONTANA†	9 ( 4.1)	16 ( 3.6)	26 ( 3.9)	30 ( 2.3)	16 ( 2.7)
NEBRASKA	7 ( 3.1)	18 ( 2.7)	33 ( 3.3)	31 ( 2.2)	18 ( 1.8)
NEVADA†	4 ( 2.3)	11 ( 2.2)	30 ( 4.6)	19 ( 1.9)	9 ( 1.2)
NEW JERSEY†	8 ( 5.2)	18 ( 3.7)	25 ( 5.1)	34 ( 2.6)	16 ( 1.6)
NEW MEXICO	3 ( 2.2)	7 ( 1.7)	19 ( 3.3)	21 ( 2.1)	7 ( 1.2)
NEW YORK†	2 ( ... )	12 ( 2.7)	24 ( 4.1)	29 ( 2.0)	11 ( 1.1)
NORTH CAROLINA	8 ( 2.5)	12 ( 2.4)	29 ( 4.2)	30 ( 2.3)>	14 ( 1.3)>
NORTH DAKOTA	... ( ... )	18 ( 3.4)	27 ( 3.9)	32 ( 2.0)	16 ( 1.9)
OREGON	5 ( 2.6)	14 ( 3.0)	27 ( 4.3)	30 ( 2.2)	14 ( 1.4)
PENNSYLVANIA‡	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
RHODE ISLAND	5 ( 3.1)	11 ( 1.8)	21 ( 4.9)	26 ( 2.0)	11 ( 1.8)
SOUTH CAROLINA†	8 ( 3.1)	7 ( 1.6)	16 ( 4.4)	17 ( 2.1)	9 ( 1.3)
TENNESSEE	4 ( 1.7)	9 ( 1.9)	17 ( 4.0)	26 ( 2.5)	12 ( 1.5)>
TEXAS	7 ( 2.7)	20 ( 3.1)	30 ( 3.3)	39 ( 2.7)>	16 ( 1.4)
UTAH	... ( ... )	19 ( 2.7)	25 ( 3.4)	31 ( 2.2)	15 ( 1.4)
VERMONT†	... ( ... )	16 ( 2.5)	22 ( 3.8)	33 ( 1.8)	13 ( 1.5)
VIRGINIA	7 ( 3.0)	9 ( 1.8)	19 ( 4.1)	29 ( 2.3)	14 ( 1.8)
WASHINGTON	15 ( 5.0)	14 ( 3.1)	29 ( 4.0)	28 ( 1.8)	15 ( 1.4)
WEST VIRGINIA	6 ( 2.3)	14 ( 2.1)	27 ( 3.6)	27 ( 1.8)	14 ( 1.9)
WISCONSIN	... ( ... )	21 ( 2.6)	35 ( 3.6)	37 ( 2.0)	20 ( 1.6)
WYOMING	8 ( 4.6)	13 ( 2.3)	29 ( 6.5)	27 ( 1.8)	12 ( 1.6)
<b>Other Jurisdictions</b>					
DDESS	... ( ... )	23 ( 4.8)	27 ( 5.8)	23 ( 2.3)	17 ( 2.2)
DoDDS	... ( ... )	10 ( 2.7)	27 ( 4.6)	23 ( 1.9)	16 ( 1.5)
GUAM	... ( ... )	2 ( 1.4)	7 ( 3.3)	3 ( 1.0)	4 ( 0.9)

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).  
 — State or other jurisdiction did not participate in the NAEP assessment year presented in this table.  
 ... Characteristics of the sample do not permit a reliable estimate.  
 > (<) The value for the students was significantly higher (lower) than in the 1992 assessment at about the 95% confidence level using appropriate multiple comparison procedures.  
 ‡ 1996 results for Pennsylvania are not reported for this table; the PA Department of Education requested that students refrain from answering this home environment background question.  
 SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 4.3** (continued)

**1996 Mathematics Assessment**



POPULATION: 1996 Grade 4 Public School Students  
 REPORTED STATISTICS: Percentage of Students by Achievement Levels  
 BREAKDOWNS BY: Parents' Education Level

Achievement Level... <i>What is the highest level of education either your mother or father obtained?</i>	At or Above Basic				
	Did Not Finish High School	High School Graduate	Some Education After High School	College Graduate	I Don't Know
JURISDICTIONS	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )
<b>Nation</b>					
NATION	36 ( 4.4)	58 ( 3.0)	76 ( 3.0)	70 ( 1.9)	55 ( 2.1)
NORTHEAST	... ( ... )	66 ( 7.3)	81 ( 4.9)	74 ( 4.2)	62 ( 4.8)
SOUTHEAST	28 ( 7.5)	48 ( 5.4)	66 ( 4.7)	60 ( 4.2)	48 ( 4.1)
CENTRAL	... ( ... )	68 ( 5.4)	85 ( 4.4)	80 ( 3.8)	67 ( 3.7)
WEST	... ( ... )	56 ( 6.6)	74 ( 6.8)	66 ( 3.6)	47 ( 4.5)
<b>States</b>					
ALABAMA	34 ( 4.2)	43 ( 3.2)	57 ( 4.3)	55 ( 2.7)	43 ( 3.2)
ALASKA†	43 ( 8.0)	57 ( 4.6)	70 ( 4.6)	73 ( 2.7)	60 ( 2.4)
ARIZONA	35 ( 5.2)	47 ( 4.3)	64 ( 4.1)	68 ( 2.9)	51 ( 2.9)
ARKANSAS†	44 ( 6.2)	53 ( 3.1)	66 ( 3.9)	60 ( 2.8)	48 ( 3.1)
CALIFORNIA	24 ( 6.8)	40 ( 4.8)	55 ( 5.0)	61 ( 3.1)	37 ( 2.8)
COLORADO	45 ( 6.1)	56 ( 3.8)	80 ( 3.9)	76 ( 1.9)	57 ( 2.4)
CONNECTICUT	49 ( 6.8)	59 ( 4.3)	79 ( 3.9)	83 ( 1.8)	68 ( 2.3)
DELAWARE	... ( ... )	44 ( 3.4)	69 ( 4.6)	60 ( 2.8)	50 ( 2.0)
DISTRICT OF COLUMBIA	11 ( 4.7)	12 ( 2.1)	20 ( 4.4)	28 ( 2.0)	15 ( 1.9)
FLORIDA	40 ( 6.3)	51 ( 3.8)	73 ( 4.0)	59 ( 2.2)	50 ( 2.2)
GEORGIA	41 ( 5.7)	48 ( 3.1)	57 ( 4.7)	61 ( 3.2)	47 ( 2.2)
HAWAII	... ( ... )	45 ( 3.1)	59 ( 5.5)	60 ( 2.3)	49 ( 2.2)
INDIANA	65 ( 5.1)	67 ( 4.3)	81 ( 3.1)	80 ( 2.2)>	64 ( 2.3)>
IOWA†	... ( ... )	70 ( 2.5)	81 ( 2.9)	83 ( 2.0)	66 ( 2.7)
KENTUCKY	41 ( 3.8)	55 ( 3.3)	73 ( 4.0)	73 ( 2.2)	54 ( 2.6)
LOUISIANA	28 ( 4.6)	41 ( 3.5)	56 ( 3.8)	47 ( 2.6)	42 ( 2.1)
MAINE	59 ( 8.3)	71 ( 3.4)	79 ( 3.9)	82 ( 1.7)	70 ( 2.1)
MARYLAND	36 ( 5.4)	47 ( 5.1)	67 ( 4.4)	68 ( 2.3)	51 ( 2.3)
MASSACHUSETTS	38 ( 6.5)	64 ( 4.7)	83 ( 3.6)	78 ( 2.3)	63 ( 2.5)
MICHIGAN†	42 ( 6.1)	61 ( 4.7)	82 ( 3.4)	75 ( 2.8)	63 ( 2.3)>
MINNESOTA	... ( ... )	69 ( 2.9)	83 ( 4.2)	83 ( 1.7)	67 ( 2.3)
MISSISSIPPI	35 ( 3.6)	38 ( 3.7)	53 ( 4.1)	48 ( 2.4)	36 ( 2.6)
MISSOURI	51 ( 6.7)	59 ( 3.6)	73 ( 4.7)	76 ( 1.9)	59 ( 2.4)
MONTANA†	51 ( 7.8)	67 ( 3.9)	75 ( 3.5)	79 ( 2.3)	63 ( 2.7)
NEBRASKA	48 ( 8.1)	62 ( 4.9)	80 ( 3.5)	78 ( 1.8)	64 ( 2.1)
NEVADA†	36 ( 6.4)	51 ( 4.3)	81 ( 2.7)	65 ( 2.6)	51 ( 2.5)
NEW JERSEY†	41 ( 8.1)	65 ( 4.6)	81 ( 4.6)	74 ( 2.7)	60 ( 3.1)
NEW MEXICO	30 ( 6.6)	41 ( 3.3)	62 ( 4.6)	64 ( 2.6)	42 ( 2.7)
NEW YORK†	40 ( 6.6)	57 ( 3.9)	73 ( 5.3)	74 ( 2.1)	56 ( 2.3)
NORTH CAROLINA	51 ( 6.3)	58 ( 3.5)>	81 ( 4.1)>	72 ( 2.3)>	56 ( 2.6)
NORTH DAKOTA	... ( ... )	70 ( 4.9)	80 ( 4.2)	83 ( 2.1)	67 ( 2.8)
OREGON	41 ( 8.2)	54 ( 4.9)	76 ( 3.7)	76 ( 2.5)	58 ( 2.4)
PENNSYLVANIA‡	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
RHODE ISLAND	46 ( 6.2)	52 ( 4.1)	68 ( 4.0)	72 ( 2.3)	52 ( 3.4)
SOUTH CAROLINA†	37 ( 5.7)	42 ( 3.9)	61 ( 5.1)	56 ( 2.7)	42 ( 2.9)
TENNESSEE	42 ( 4.5)	48 ( 2.9)	68 ( 4.2)	70 ( 2.2)	53 ( 3.0)
TEXAS	51 ( 6.5)	61 ( 4.9)	78 ( 3.1)	80 ( 2.3)>	63 ( 2.7)>
UTAH	... ( ... )	61 ( 4.0)	71 ( 4.4)	78 ( 1.8)	62 ( 2.0)
VERMONT†	... ( ... )	61 ( 3.8)	73 ( 6.3)	78 ( 1.7)	57 ( 3.5)
VIRGINIA	39 ( 5.7)	53 ( 3.5)	67 ( 4.6)	71 ( 2.3)	57 ( 2.8)
WASHINGTON	52 ( 8.9)	58 ( 4.1)	78 ( 3.5)	75 ( 2.0)	60 ( 2.4)
WEST VIRGINIA	47 ( 4.6)	56 ( 2.5)	76 ( 3.7)	73 ( 1.8)	58 ( 2.3)>
WISCONSIN	... ( ... )	70 ( 3.2)	81 ( 3.4)	80 ( 1.6)	70 ( 1.7)
WYOMING	42 ( 7.8)	59 ( 4.1)	75 ( 4.2)	74 ( 2.1)	55 ( 2.4)
<b>Other Jurisdictions</b>					
DDESS	... ( ... )	67 ( 5.7)	73 ( 6.1)	67 ( 2.5)	59 ( 2.8)
DoDDS	... ( ... )	53 ( 3.8)	75 ( 4.4)	69 ( 2.4)	60 ( 2.5)
GUAM	... ( ... )	22 ( 2.8)	33 ( 6.6)	24 ( 1.9)	23 ( 2.2)

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).  
 — State or other jurisdiction did not participate in the NAEP assessment year presented in this table.  
 ... Characteristics of the sample do not permit a reliable estimate.  
 > (<) The value for the students was significantly higher (lower) than in the 1992 assessment at about the 95% confidence level using appropriate multiple comparison procedures.  
 ‡ 1996 results for Pennsylvania are not reported for this table; the PA Department of Education requested that students refrain from answering this home environment background question.  
 SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 4.3** (continued)

**1996 Mathematics Assessment**



POPULATION: 1996 Grade 4 Public School Students  
 REPORTED STATISTICS: Percentage of Students by Achievement Levels  
 BREAKDOWNS BY: Parents' Education Level

Achievement Level... <i>What is the highest level of education either your mother or father obtained?</i>	Below Basic				
	Did Not Finish High School	High School Graduate	Some Education After High School	College Graduate	I Don't Know
JURISDICTIONS	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )
<b>Nation</b>					
NATION	64 ( 4.4)	42 ( 3.0)	24 ( 3.0)	30 ( 1.9)	45 ( 2.1)
NORTHEAST	... ( ... )	34 ( 7.3)	19 ( 4.9)	26 ( 4.2)	38 ( 4.8)
SOUTHEAST	72 ( 7.5)	52 ( 5.4)	34 ( 4.7)	40 ( 4.2)	52 ( 4.1)
CENTRAL	... ( ... )	32 ( 5.4)	15 ( 4.4)	20 ( 3.8)	33 ( 3.7)
WEST	... ( ... )	44 ( 6.6)	26 ( 6.8)	34 ( 3.6)	53 ( 4.5)
<b>States</b>					
ALABAMA	66 ( 4.2)	57 ( 3.2)	43 ( 4.3)	45 ( 2.7)	57 ( 3.2)
ALASKA†	57 ( 8.0)	43 ( 4.6)	30 ( 4.6)	27 ( 2.7)	40 ( 2.4)
ARIZONA	65 ( 5.2)	53 ( 4.3)	36 ( 4.1)	32 ( 2.9)	49 ( 2.9)
ARKANSAS†	56 ( 6.2)	47 ( 3.1)	34 ( 3.9)	40 ( 2.8)	52 ( 3.1)
CALIFORNIA	76 ( 6.8)	60 ( 4.8)	45 ( 5.0)	39 ( 3.1)	63 ( 2.8)
COLORADO	55 ( 6.1)	44 ( 3.8)	20 ( 3.9)	24 ( 1.9)	43 ( 2.4)
CONNECTICUT	51 ( 6.8)	41 ( 4.3)	21 ( 3.9)	17 ( 1.8)	32 ( 2.3)
DELAWARE	... ( ... )	56 ( 3.4)	31 ( 4.6)	40 ( 2.8)	50 ( 2.0)
DISTRICT OF COLUMBIA	89 ( 4.7)	88 ( 2.1)	80 ( 4.4)	72 ( 2.0)	85 ( 1.9)
FLORIDA	60 ( 6.3)	49 ( 3.8)	27 ( 4.0)	41 ( 2.2)	50 ( 2.2)
GEORGIA	59 ( 5.7)	52 ( 3.1)	43 ( 4.7)	39 ( 3.2)	53 ( 2.2)
HAWAII	... ( ... )	55 ( 3.1)	41 ( 5.5)	40 ( 2.3)	51 ( 2.2)
INDIANA	35 ( 5.1)	33 ( 4.3)	19 ( 3.1)	20 ( 2.2)<	36 ( 2.3)<
IOWA†	... ( ... )	30 ( 2.5)	19 ( 2.9)	17 ( 2.0)	34 ( 2.7)
KENTUCKY	59 ( 3.8)	45 ( 3.3)	27 ( 4.0)	27 ( 2.2)	46 ( 2.6)
LOUISIANA	72 ( 4.6)	59 ( 3.5)	44 ( 3.8)	53 ( 2.6)	58 ( 2.1)
MAINE	41 ( 8.3)	29 ( 3.4)	21 ( 3.9)	18 ( 1.7)	30 ( 2.1)
MARYLAND	64 ( 5.4)	53 ( 5.1)	33 ( 4.4)	32 ( 2.3)	49 ( 2.3)
MASSACHUSETTS	62 ( 6.5)	36 ( 4.7)	17 ( 3.6)	22 ( 2.3)	37 ( 2.5)
MICHIGAN†	58 ( 6.1)	39 ( 4.7)	18 ( 3.4)	25 ( 2.8)	37 ( 2.3)<
MINNESOTA	... ( ... )	31 ( 2.9)	17 ( 4.2)	17 ( 1.7)	33 ( 2.3)
MISSISSIPPI	65 ( 3.6)	62 ( 3.7)	47 ( 4.1)	52 ( 2.4)	64 ( 2.6)
MISSOURI	49 ( 6.7)	41 ( 3.6)	27 ( 4.7)	24 ( 1.9)	41 ( 2.4)
MONTANA†	49 ( 7.8)	33 ( 3.9)	25 ( 3.5)	21 ( 2.3)	37 ( 2.7)
NEBRASKA	52 ( 8.1)	38 ( 4.9)	20 ( 3.5)	22 ( 1.8)	36 ( 2.1)
NEVADA†	64 ( 6.4)	49 ( 4.3)	19 ( 2.7)	35 ( 2.6)	49 ( 2.5)
NEW JERSEY†	59 ( 8.1)	35 ( 4.6)	19 ( 4.6)	26 ( 2.7)	40 ( 3.1)
NEW MEXICO	70 ( 6.6)	59 ( 3.3)	38 ( 4.6)	36 ( 2.6)	58 ( 2.7)
NEW YORK†	60 ( 6.6)	43 ( 3.9)	27 ( 5.3)	26 ( 2.1)	44 ( 2.3)
NORTH CAROLINA	49 ( 6.3)	42 ( 3.5)<	19 ( 4.1)<	28 ( 2.3)<	44 ( 2.6)
NORTH DAKOTA	... ( ... )	30 ( 4.9)	20 ( 4.2)	17 ( 2.1)	33 ( 2.8)
OREGON	59 ( 8.2)	46 ( 4.9)	24 ( 3.7)	24 ( 2.5)	42 ( 2.4)
PENNSYLVANIA‡	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
RHODE ISLAND	54 ( 6.2)	48 ( 4.1)	32 ( 4.0)	28 ( 2.3)	48 ( 3.4)
SOUTH CAROLINA†	63 ( 5.7)	58 ( 3.9)	39 ( 5.1)	44 ( 2.7)	58 ( 2.9)
TENNESSEE	58 ( 4.5)	52 ( 2.9)	32 ( 4.2)	30 ( 2.2)	47 ( 3.0)
TEXAS	49 ( 6.5)	39 ( 4.9)	22 ( 3.1)	20 ( 2.3)<	37 ( 2.7)<
UTAH	... ( ... )	39 ( 4.0)	29 ( 4.4)	22 ( 1.8)	38 ( 2.0)
VERMONT†	... ( ... )	39 ( 3.8)	27 ( 6.3)	22 ( 1.7)	43 ( 3.5)
VIRGINIA	61 ( 5.7)	47 ( 3.5)	33 ( 4.6)	29 ( 2.3)	43 ( 2.8)
WASHINGTON	48 ( 8.9)	42 ( 4.1)	22 ( 3.5)	25 ( 2.0)	40 ( 2.4)
WEST VIRGINIA	53 ( 4.6)	44 ( 2.5)	24 ( 3.7)	27 ( 1.8)	42 ( 2.3)<
WISCONSIN	... ( ... )	30 ( 3.2)	19 ( 3.4)	20 ( 1.6)	30 ( 1.7)
WYOMING	58 ( 7.8)	41 ( 4.1)	25 ( 4.2)	26 ( 2.1)	45 ( 2.4)
<b>Other Jurisdictions</b>					
DDESS	... ( ... )	33 ( 5.7)	27 ( 6.1)	33 ( 2.5)	41 ( 2.8)
DoDDS	... ( ... )	47 ( 3.8)	25 ( 4.4)	31 ( 2.4)	40 ( 2.5)
GUAM	... ( ... )	78 ( 2.8)	67 ( 6.6)	76 ( 1.9)	77 ( 2.2)

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).  
 — State or other jurisdiction did not participate in the NAEP assessment year presented in this table.  
 ... Characteristics of the sample do not permit a reliable estimate.  
 > (<) The value for the students was significantly higher (lower) than in the 1992 assessment at about the 95% confidence level using appropriate multiple comparison procedures.  
 ‡ 1996 results for Pennsylvania are not reported for this table; the PA Department of Education requested that students refrain from answering this home environment background question.  
 SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 4.4**

**1996 Mathematics Assessment**



POPULATION:  
REPORTED STATISTICS:  
BREAKDOWNS BY:

1996 Grade 4 Public School Students  
Percentage of Students by Achievement Levels  
Title I Participation

Achievement Level...	Advanced		At or Above Proficient		At or Above Basic		Below Basic	
	Participated	Did Not Participate	Participated	Did Not Participate	Participated	Did Not Participate	Participated	Did Not Participate
Title I participation...	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )
<b>JURISDICTIONS</b>								
<b>Nation</b>								
NATION	0 ( ... )	3 ( 0.4 )	3 ( 0.9 )	25 ( 1.3 )	31 ( 2.7 )	72 ( 1.6 )	69 ( 2.7 )	28 ( 1.6 )
NORTHEAST	0 ( ... )	3 ( 1.3 )	3 ( 1.3 )	31 ( 2.1 )	29 ( 5.2 )	77 ( 3.4 )	71 ( 5.2 )	23 ( 3.4 )
SOUTHEAST	0 ( ... )	2 ( 1.2 )	1 ( 0.6 )	19 ( 3.8 )	26 ( 4.2 )	64 ( 4.0 )	74 ( 4.2 )	36 ( 4.0 )
CENTRAL	0 ( ... )	3 ( 0.8 )	6 ( 2.5 )	30 ( 2.8 )	35 ( 5.7 )	81 ( 2.8 )	65 ( 5.7 )	19 ( 2.8 )
WEST	0 ( ... )	3 ( 0.7 )	4 ( 1.8 )	21 ( 2.2 )	33 ( 4.9 )	67 ( 3.1 )	67 ( 4.9 )	33 ( 3.1 )
<b>States</b>								
ALABAMA	0 ( ... )	1 ( 0.3 )	2 ( 0.6 )	14 ( 1.4 )	23 ( 2.7 )	58 ( 2.2 )	77 ( 2.7 )	42 ( 2.2 )
ALASKA†	0 ( ... )	2 ( 0.5 )	6 ( 2.0 )	22 ( 1.3 )	42 ( 5.1 )	67 ( 2.3 )	58 ( 5.1 )	33 ( 2.3 )
ARIZONA	0 ( ... )	2 ( 0.5 )	3 ( 0.7 )	19 ( 2.0 )	22 ( 2.9 )	67 ( 2.4 )	78 ( 2.9 )	33 ( 2.4 )
ARKANSAS†	0 ( ... )	1 ( 0.4 )	1 ( 0.5 )	19 ( 1.7 )	23 ( 2.9 )	69 ( 1.8 )	77 ( 2.9 )	31 ( 1.8 )
CALIFORNIA	0 ( ... )	1 ( 0.5 )	1 ( 0.4 )	15 ( 2.1 )	16 ( 2.3 )	59 ( 2.5 )	84 ( 2.3 )	41 ( 2.5 )
COLORADO	0 ( ... )	2 ( 0.3 )	1 ( 0.9 )	24 ( 1.4 )	21 ( 5.2 )	70 ( 1.6 )	79 ( 5.2 )	30 ( 1.6 )
CONNECTICUT	1 ( ... )	3 ( 0.5 )	8 ( 3.4 )	34 ( 1.9 )	40 ( 6.3 )	79 ( 1.5 )	60 ( 6.3 )	21 ( 1.5 )
DELAWARE	0 ( ... )	2 ( 0.4 )	1 ( ... )	18 ( 1.3 )	17 ( 3.7 )	58 ( 1.5 )	83 ( 3.7 )	42 ( 1.5 )
DISTRICT OF COLUMBIA	0 ( ... )	2 ( 0.9 )	1 ( 0.3 )	10 ( 0.9 )	10 ( 1.2 )	31 ( 1.3 )	90 ( 1.2 )	69 ( 1.3 )
FLORIDA	0 ( 0.3 )	1 ( 0.3 )	6 ( 1.4 )	17 ( 1.3 )	31 ( 3.5 )	61 ( 1.9 )	69 ( 3.5 )	39 ( 1.9 )
GEORGIA	0 ( ... )	1 ( 0.4 )	0 ( ... )	17 ( 1.6 )	17 ( 2.4 )	63 ( 2.1 )	83 ( 2.4 )	37 ( 2.1 )
HAWAII	0 ( ... )	2 ( 0.5 )	1 ( 0.9 )	18 ( 1.2 )	14 ( 2.9 )	58 ( 1.6 )	86 ( 2.9 )	42 ( 1.6 )
INDIANA	0 ( ... )	2 ( 0.5 )	2 ( 1.0 )	26 ( 1.7 )	29 ( 3.7 )	76 ( 1.6 )	71 ( 3.7 )	24 ( 1.6 )
IOWA†	0 ( ... )	2 ( 0.5 )	3 ( 1.4 )	25 ( 1.6 )	46 ( 4.4 )	78 ( 1.5 )	54 ( 4.4 )	22 ( 1.5 )
KENTUCKY	0 ( ... )	2 ( 0.4 )	5 ( 1.1 )	22 ( 1.5 )	37 ( 2.4 )	73 ( 1.8 )	63 ( 2.4 )	27 ( 1.8 )
LOUISIANA	0 ( ... )	1 ( 0.3 )	3 ( 0.8 )	10 ( 1.3 )	28 ( 2.5 )	53 ( 2.4 )	72 ( 2.5 )	47 ( 2.4 )
MAINE	0 ( ... )	3 ( 0.7 )	3 ( 1.3 )	31 ( 1.5 )	42 ( 3.8 )	81 ( 1.3 )	58 ( 3.8 )	19 ( 1.3 )
MARYLAND	0 ( ... )	3 ( 0.8 )	3 ( 1.8 )	24 ( 1.9 )	22 ( 5.2 )	63 ( 2.0 )	78 ( 5.2 )	37 ( 2.0 )
MASSACHUSETTS	0 ( ... )	2 ( 0.6 )	7 ( 3.4 )	27 ( 2.0 )	40 ( 5.5 )	76 ( 1.8 )	60 ( 5.5 )	24 ( 1.8 )
MICHIGAN†	0 ( ... )	3 ( 0.6 )	4 ( 1.3 )	29 ( 1.8 )	35 ( 3.8 )	78 ( 1.9 )	65 ( 3.8 )	22 ( 1.9 )
MINNESOTA	0 ( ... )	4 ( 0.6 )	3 ( 1.2 )	33 ( 1.7 )	36 ( 4.9 )	81 ( 1.7 )	64 ( 4.9 )	19 ( 1.7 )
MISSISSIPPI	0 ( ... )	1 ( 0.4 )	2 ( 0.5 )	15 ( 1.7 )	25 ( 2.4 )	63 ( 2.4 )	75 ( 2.4 )	37 ( 2.4 )
MISSOURI	0 ( ... )	1 ( 0.3 )	2 ( 1.1 )	24 ( 1.4 )	33 ( 3.8 )	73 ( 1.9 )	67 ( 3.8 )	27 ( 1.9 )
MONTANA†	0 ( ... )	2 ( 0.5 )	4 ( 1.6 )	25 ( 1.9 )	36 ( 5.1 )	76 ( 2.1 )	64 ( 5.1 )	24 ( 2.1 )
NEBRASKA	0 ( ... )	3 ( 0.4 )	1 ( 0.8 )	27 ( 1.6 )	30 ( 3.5 )	75 ( 1.7 )	70 ( 3.5 )	25 ( 1.7 )
NEVADA†	0 ( ... )	1 ( 0.4 )	1 ( 0.6 )	16 ( 1.3 )	23 ( 4.3 )	61 ( 1.8 )	77 ( 4.3 )	39 ( 1.8 )
NEW JERSEY†	0 ( ... )	3 ( 0.8 )	2 ( 1.4 )	29 ( 1.9 )	23 ( 3.9 )	75 ( 2.0 )	77 ( 3.9 )	25 ( 2.0 )
NEW MEXICO	0 ( ... )	1 ( 0.3 )	3 ( 0.9 )	16 ( 1.4 )	25 ( 4.1 )	58 ( 2.2 )	75 ( 4.1 )	42 ( 2.2 )
NEW YORK†	0 ( ... )	2 ( 0.5 )	2 ( 1.1 )	25 ( 1.7 )	27 ( 3.6 )	76 ( 2.2 )	73 ( 3.6 )	24 ( 2.2 )
NORTH CAROLINA	0 ( ... )	3 ( 0.5 )	4 ( 1.3 )	24 ( 1.3 )	30 ( 3.9 )	70 ( 1.4 )	70 ( 3.9 )	30 ( 1.4 )
NORTH DAKOTA	0 ( ... )	2 ( 0.6 )	2 ( 0.9 )	29 ( 1.5 )	39 ( 4.2 )	82 ( 1.6 )	61 ( 4.2 )	18 ( 1.6 )
OREGON	0 ( ... )	2 ( 0.5 )	2 ( 1.1 )	23 ( 1.4 )	27 ( 5.8 )	69 ( 2.2 )	73 ( 5.8 )	31 ( 2.2 )
PENNSYLVANIA†	0 ( ... )	2 ( 0.4 )	2 ( 0.9 )	26 ( 1.9 )	33 ( 3.1 )	78 ( 2.0 )	67 ( 3.1 )	22 ( 2.0 )
RHODE ISLAND	0 ( ... )	1 ( 0.3 )	1 ( ... )	19 ( 1.4 )	23 ( 5.8 )	64 ( 2.0 )	77 ( 5.8 )	36 ( 2.0 )
SOUTH CAROLINA†	0 ( ... )	1 ( 0.4 )	3 ( 1.2 )	15 ( 1.7 )	27 ( 3.5 )	57 ( 2.1 )	73 ( 3.5 )	43 ( 2.1 )
TENNESSEE	0 ( ... )	2 ( 0.4 )	3 ( 1.0 )	21 ( 1.8 )	26 ( 3.2 )	69 ( 1.9 )	74 ( 3.2 )	31 ( 1.9 )
TEXAS	0 ( 0.3 )	4 ( 0.7 )	9 ( 1.4 )	33 ( 2.0 )	50 ( 3.5 )	79 ( 1.9 )	50 ( 3.5 )	21 ( 1.9 )
UTAH	0 ( ... )	2 ( 0.5 )	2 ( 1.2 )	25 ( 1.3 )	27 ( 5.0 )	73 ( 1.5 )	73 ( 5.0 )	27 ( 1.5 )
VERMONT†	0 ( ... )	3 ( 0.6 )	2 ( 1.0 )	25 ( 1.2 )	28 ( 4.0 )	72 ( 2.1 )	72 ( 4.0 )	28 ( 2.1 )
VIRGINIA	0 ( ... )	2 ( 0.5 )	1 ( ... )	21 ( 1.6 )	13 ( 2.9 )	66 ( 2.1 )	87 ( 2.9 )	34 ( 2.1 )
WASHINGTON	0 ( ... )	2 ( 0.3 )	4 ( 1.3 )	24 ( 1.1 )	32 ( 4.1 )	72 ( 1.7 )	68 ( 4.1 )	28 ( 1.7 )
WEST VIRGINIA	0 ( ... )	2 ( 0.6 )	1 ( 0.7 )	23 ( 1.3 )	25 ( 3.2 )	72 ( 1.8 )	75 ( 3.2 )	28 ( 1.8 )
WISCONSIN	0 ( ... )	3 ( 0.6 )	3 ( 1.7 )	31 ( 1.5 )	32 ( 3.0 )	80 ( 1.2 )	68 ( 3.0 )	20 ( 1.2 )
WYOMING	0 ( ... )	2 ( 0.4 )	2 ( 1.2 )	21 ( 1.3 )	29 ( 3.2 )	68 ( 1.7 )	71 ( 3.2 )	32 ( 1.7 )
<b>Other Jurisdictions</b>								
DDESS	... ( ... )	2 ( 0.6 )	... ( ... )	20 ( 1.5 )	... ( ... )	64 ( 1.8 )	... ( ... )	36 ( 1.8 )
DoDDS	2 ( 1.1 )	1 ( 0.3 )	16 ( 4.1 )	19 ( 1.0 )	52 ( 5.7 )	65 ( 1.3 )	48 ( 5.7 )	35 ( 1.3 )
GUAM	... ( ... )	0 ( ... )	... ( ... )	3 ( 0.6 )	... ( ... )	23 ( 1.5 )	... ( ... )	77 ( 1.5 )

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).

... Characteristics of the sample do not permit a reliable estimate.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 4.5**

**1996 Mathematics Assessment**



POPULATION:  
REPORTED STATISTICS:  
BREAKDOWNS BY:

1996 Grade 4 Public School Students  
Percentage of Students by Achievement Levels  
Free/Reduced-Price Lunch Program Eligibility

Achievement Level...	Advanced			At or Above Proficient		
	Eligible	Not Eligible	Information Not Available	Eligible	Not Eligible	Information Not Available
Free/reduced-price lunch program eligibility...						
JURISDICTIONS	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )
<b>Nation</b>						
NATION	0 ( 0.3 )	3 ( 0.6 )	3 ( 1.6 )	8 ( 1.2 )	25 ( 1.4 )	28 ( 5.4 )
NORTHEAST	1 ( ... )	4 ( 1.4 )	... ( ... )	10 ( 2.8 )	33 ( 2.4 )	... ( ... )
SOUTHEAST	0 ( ... )	3 ( 1.8 )	1 ( 0.6 )	6 ( 1.4 )	21 ( 4.2 )	12 ( ... )
CENTRAL	1 ( 0.6 )	2 ( 1.2 )	3 ( 1.0 )	13 ( 3.6 )	28 ( 3.1 )	33 ( 4.4 )
WEST	0 ( ... )	3 ( 0.9 )	4 ( ... )	7 ( 2.3 )	21 ( 2.2 )	24 ( 13.4 )
<b>States</b>						
ALABAMA	0 ( ... )	2 ( 0.5 )	0 ( ... )	3 ( 0.7 )	18 ( 1.9 )	9 ( 4.7 )
ALASKA†	1 ( ... )	3 ( 0.9 )	2 ( 0.7 )	9 ( 1.7 )	29 ( 2.3 )	22 ( 2.0 )
ARIZONA	0 ( ... )	2 ( 0.8 )	1 ( 1.0 )	5 ( 1.0 )	24 ( 2.3 )	14 ( 3.6 )
ARKANSAS†	0 ( ... )	1 ( 0.6 )	... ( ... )	6 ( 0.9 )	20 ( 1.9 )	... ( ... )
CALIFORNIA	0 ( ... )	2 ( 0.8 )	1 ( ... )	4 ( 1.2 )	17 ( 2.6 )	12 ( 2.5 )
COLORADO	0 ( 0.2 )	2 ( 0.5 )	1 ( 0.8 )	9 ( 1.6 )	28 ( 1.7 )	21 ( 5.2 )
CONNECTICUT	0 ( ... )	4 ( 0.6 )	... ( ... )	7 ( 1.2 )	38 ( 2.1 )	... ( ... )
DELAWARE	1 ( ... )	2 ( 0.5 )	0 ( ... )	6 ( 0.9 )	24 ( 2.2 )	11 ( 2.2 )
DISTRICT OF COLUMBIA	0 ( ... )	4 ( 1.9 )	3 ( ... )	1 ( 0.2 )	19 ( 1.8 )	11 ( 2.2 )
FLORIDA	0 ( ... )	2 ( 0.4 )	1 ( ... )	7 ( 0.8 )	21 ( 1.7 )	22 ( 8.0 )
GEORGIA	0 ( ... )	2 ( 0.5 )	2 ( ... )	3 ( 0.7 )	20 ( 2.0 )	24 ( 7.4 )
HAWAII	0 ( ... )	3 ( 0.8 )	2 ( 1.5 )	7 ( 1.0 )	23 ( 1.5 )	13 ( 4.6 )
INDIANA	0 ( ... )	3 ( 0.7 )	... ( ... )	8 ( 1.4 )	30 ( 2.0 )	... ( ... )
IOWA†	0 ( ... )	2 ( 0.5 )	2 ( ... )	13 ( 1.5 )	27 ( 1.8 )	20 ( 6.2 )
KENTUCKY	0 ( ... )	2 ( 0.5 )	0 ( ... )	7 ( 0.9 )	24 ( 1.7 )	9 ( 3.1 )
LOUISIANA	0 ( 0.1 )	1 ( 0.4 )	1 ( ... )	3 ( 0.6 )	15 ( 1.9 )	10 ( 5.7 )
MAINE	1 ( 0.3 )	4 ( 0.9 )	4 ( 3.0 )	13 ( 1.7 )	34 ( 1.7 )	35 ( 9.3 )
MARYLAND	0 ( ... )	4 ( 1.1 )	0 ( ... )	5 ( 0.8 )	31 ( 2.4 )	8 ( 2.9 )
MASSACHUSETTS	0 ( ... )	2 ( 0.8 )	3 ( 1.2 )	8 ( 1.4 )	30 ( 2.4 )	26 ( 7.0 )
MICHIGAN†	0 ( ... )	3 ( 0.7 )	6 ( 2.9 )	8 ( 1.4 )	30 ( 1.8 )	28 ( 7.7 )
MINNESOTA	1 ( 0.6 )	4 ( 0.8 )	4 ( 1.5 )	14 ( 1.7 )	35 ( 1.9 )	26 ( 6.5 )
MISSISSIPPI	0 ( ... )	1 ( 0.5 )	... ( ... )	3 ( 0.5 )	17 ( 2.1 )	... ( ... )
MISSOURI	0 ( ... )	2 ( 0.4 )	... ( ... )	7 ( 1.2 )	27 ( 1.6 )	... ( ... )
MONTANA†	0 ( ... )	2 ( 0.6 )	0 ( ... )	13 ( 2.0 )	29 ( 1.9 )	15 ( 5.1 )
NEBRASKA	1 ( 0.3 )	3 ( 0.5 )	5 ( 1.6 )	12 ( 1.3 )	30 ( 1.8 )	32 ( 5.9 )
NEVADA†	0 ( ... )	1 ( 0.7 )	1 ( 0.3 )	4 ( 1.2 )	17 ( 2.7 )	15 ( 1.5 )
NEW JERSEY†	0 ( ... )	4 ( 1.0 )	... ( ... )	5 ( 1.5 )	35 ( 2.1 )	... ( ... )
NEW MEXICO	0 ( ... )	1 ( 0.6 )	2 ( 1.0 )	5 ( 0.9 )	21 ( 1.7 )	20 ( 3.5 )
NEW YORK†	0 ( ... )	3 ( 0.7 )	2 ( 1.2 )	7 ( 1.2 )	29 ( 1.9 )	28 ( 5.8 )
NORTH CAROLINA	1 ( 0.3 )	4 ( 0.6 )	1 ( ... )	7 ( 1.3 )	30 ( 1.9 )	17 ( 4.3 )
NORTH DAKOTA	1 ( ... )	3 ( 0.7 )	1 ( 0.6 )	15 ( 1.9 )	28 ( 1.5 )	21 ( 3.8 )
OREGON	0 ( ... )	3 ( 0.7 )	3 ( 1.1 )	9 ( 1.1 )	27 ( 1.6 )	22 ( 6.2 )
PENNSYLVANIA†	0 ( ... )	2 ( 0.5 )	1 ( ... )	7 ( 1.2 )	29 ( 2.0 )	17 ( 4.2 )
RHODE ISLAND	0 ( ... )	2 ( 0.4 )	... ( ... )	5 ( 0.9 )	24 ( 1.8 )	... ( ... )
SOUTH CAROLINA†	0 ( ... )	2 ( 0.6 )	... ( ... )	4 ( 0.8 )	20 ( 2.2 )	... ( ... )
TENNESSEE	0 ( 0.2 )	2 ( 0.5 )	1 ( ... )	6 ( 0.9 )	23 ( 2.1 )	18 ( 7.4 )
TEXAS	0 ( 0.2 )	5 ( 0.8 )	1 ( ... )	9 ( 1.1 )	39 ( 2.1 )	22 ( 6.9 )
UTAH	1 ( ... )	2 ( 0.7 )	1 ( ... )	13 ( 1.8 )	27 ( 1.8 )	23 ( 3.4 )
VERMONT†	1 ( 0.5 )	3 ( 0.8 )	3 ( 1.7 )	9 ( 1.4 )	28 ( 1.5 )	24 ( 4.2 )
VIRGINIA	0 ( ... )	2 ( 0.7 )	4 ( ... )	5 ( 0.9 )	25 ( 1.9 )	28 ( 11.2 )
WASHINGTON	0 ( ... )	2 ( 0.4 )	1 ( ... )	10 ( 1.5 )	26 ( 1.4 )	25 ( 5.4 )
WEST VIRGINIA	1 ( ... )	3 ( 0.8 )	2 ( ... )	10 ( 1.3 )	27 ( 1.6 )	25 ( 6.4 )
WISCONSIN	1 ( 0.4 )	4 ( 0.7 )	2 ( 1.4 )	13 ( 1.2 )	33 ( 1.9 )	30 ( 3.6 )
WYOMING	0 ( ... )	2 ( 0.5 )	2 ( ... )	10 ( 1.6 )	23 ( 1.6 )	22 ( 8.6 )
<b>Other Jurisdictions</b>						
DDESS	1 ( 0.9 )	3 ( 1.2 )	2 ( 1.0 )	14 ( 1.6 )	26 ( 3.0 )	21 ( 3.2 )
DoDDS	1 ( ... )	2 ( 0.5 )	1 ( 0.3 )	15 ( 2.6 )	21 ( 1.7 )	18 ( 1.7 )
GUAM	0 ( ... )	0 ( ... )	0 ( ... )	1 ( 0.5 )	5 ( 1.0 )	3 ( 2.0 )

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).

... Characteristics of the sample do not permit a reliable estimate.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 4.5** (continued) **1996 Mathematics Assessment**



POPULATION: 1996 Grade 4 Public School Students  
 REPORTED STATISTICS: Percentage of Students by Achievement Levels  
 BREAKDOWNS BY: Free/Reduced-Price Lunch Program Eligibility

Achievement Level...	At or Above Basic			Below Basic		
	Eligible	Not Eligible	Information Not Available	Eligible	Not Eligible	Information Not Available
Free/reduced-price lunch program eligibility...						
JURISDICTIONS	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )
<b>Nation</b>						
NATION	41 ( 2.6 )	73 ( 1.8 )	72 ( 5.6 )	59 ( 2.6 )	27 ( 1.8 )	28 ( 5.6 )
NORTHEAST	42 ( 7.4 )	82 ( 2.7 )	... ( ... )	58 ( 7.4 )	18 ( 2.7 )	... ( ... )
SOUTHEAST	36 ( 3.4 )	67 ( 3.3 )	61 ( 15.4 )	64 ( 3.4 )	33 ( 3.3 )	39 ( 15.4 )
CENTRAL	53 ( 6.1 )	79 ( 3.5 )	82 ( 4.9 )	47 ( 6.1 )	21 ( 3.5 )	18 ( 4.9 )
WEST	39 ( 4.4 )	68 ( 3.6 )	63 ( 9.4 )	61 ( 4.4 )	32 ( 3.6 )	37 ( 9.4 )
<b>States</b>						
ALABAMA	30 ( 2.3 )	66 ( 2.5 )	51 ( 5.0 )	70 ( 2.3 )	34 ( 2.5 )	49 ( 5.0 )
ALASKA†	43 ( 3.4 )	76 ( 2.4 )	69 ( 3.0 )	57 ( 3.4 )	24 ( 2.4 )	31 ( 3.0 )
ARIZONA	34 ( 2.8 )	75 ( 2.4 )	58 ( 6.3 )	66 ( 2.8 )	25 ( 2.4 )	42 ( 6.3 )
ARKANSAS†	37 ( 2.2 )	70 ( 2.1 )	... ( ... )	63 ( 2.2 )	30 ( 2.1 )	... ( ... )
CALIFORNIA	26 ( 2.9 )	63 ( 2.7 )	54 ( 5.6 )	74 ( 2.9 )	37 ( 2.7 )	46 ( 5.6 )
COLORADO	45 ( 3.0 )	77 ( 1.5 )	71 ( 4.6 )	55 ( 3.0 )	23 ( 1.5 )	29 ( 4.6 )
CONNECTICUT	42 ( 2.6 )	85 ( 1.4 )	... ( ... )	58 ( 2.6 )	15 ( 1.4 )	... ( ... )
DELAWARE	33 ( 2.5 )	69 ( 1.5 )	49 ( 2.9 )	67 ( 2.5 )	31 ( 1.5 )	51 ( 2.9 )
DISTRICT OF COLUMBIA	11 ( 0.9 )	49 ( 2.3 )	34 ( 3.5 )	89 ( 0.9 )	51 ( 2.3 )	66 ( 3.5 )
FLORIDA	38 ( 2.1 )	70 ( 1.7 )	63 ( 9.4 )	62 ( 2.1 )	30 ( 1.7 )	37 ( 9.4 )
GEORGIA	33 ( 2.3 )	68 ( 2.4 )	66 ( 9.0 )	67 ( 2.3 )	32 ( 2.4 )	34 ( 9.0 )
HAWAII	37 ( 2.4 )	64 ( 1.7 )	48 ( 7.1 )	63 ( 2.4 )	36 ( 1.7 )	52 ( 7.1 )
INDIANA	49 ( 2.8 )	82 ( 1.6 )	... ( ... )	51 ( 2.8 )	18 ( 1.6 )	... ( ... )
IOWA†	59 ( 3.0 )	81 ( 1.4 )	70 ( 9.8 )	41 ( 3.0 )	19 ( 1.4 )	30 ( 9.8 )
KENTUCKY	46 ( 2.3 )	73 ( 1.8 )	58 ( 12.1 )	54 ( 2.3 )	27 ( 1.8 )	42 ( 12.1 )
LOUISIANA	31 ( 1.9 )	66 ( 2.8 )	47 ( 8.0 )	69 ( 1.9 )	34 ( 2.8 )	53 ( 8.0 )
MAINE	61 ( 2.6 )	82 ( 1.5 )	82 ( 4.4 )	39 ( 2.6 )	18 ( 1.5 )	18 ( 4.4 )
MARYLAND	32 ( 2.6 )	73 ( 1.9 )	37 ( 6.8 )	68 ( 2.6 )	27 ( 1.9 )	63 ( 6.8 )
MASSACHUSETTS	50 ( 2.4 )	79 ( 1.7 )	70 ( 7.3 )	50 ( 2.4 )	21 ( 1.7 )	30 ( 7.3 )
MICHIGAN†	47 ( 2.9 )	79 ( 2.0 )	67 ( 10.6 )	53 ( 2.9 )	21 ( 2.0 )	33 ( 10.6 )
MINNESOTA	59 ( 4.2 )	82 ( 1.6 )	70 ( 6.8 )	41 ( 4.2 )	18 ( 1.6 )	30 ( 6.8 )
MISSISSIPPI	28 ( 2.0 )	67 ( 2.1 )	... ( ... )	72 ( 2.0 )	33 ( 2.1 )	... ( ... )
MISSOURI	45 ( 2.4 )	78 ( 1.5 )	... ( ... )	55 ( 2.4 )	22 ( 1.5 )	... ( ... )
MONTANA†	57 ( 3.3 )	79 ( 1.6 )	67 ( 9.5 )	43 ( 3.3 )	21 ( 1.6 )	33 ( 9.5 )
NEBRASKA	52 ( 2.9 )	79 ( 1.7 )	80 ( 3.9 )	48 ( 2.9 )	21 ( 1.7 )	20 ( 3.9 )
NEVADA†	35 ( 3.6 )	64 ( 2.9 )	59 ( 2.6 )	65 ( 3.6 )	36 ( 2.9 )	41 ( 2.6 )
NEW JERSEY†	40 ( 3.3 )	81 ( 2.0 )	... ( ... )	60 ( 3.3 )	19 ( 2.0 )	... ( ... )
NEW MEXICO	35 ( 2.9 )	70 ( 1.8 )	59 ( 4.4 )	65 ( 2.9 )	30 ( 1.8 )	41 ( 4.4 )
NEW YORK†	41 ( 2.4 )	83 ( 1.6 )	80 ( 7.7 )	59 ( 2.4 )	17 ( 1.6 )	20 ( 7.7 )
NORTH CAROLINA	45 ( 2.7 )	77 ( 1.3 )	57 ( 7.5 )	55 ( 2.7 )	23 ( 1.3 )	43 ( 7.5 )
NORTH DAKOTA	65 ( 4.5 )	79 ( 1.6 )	76 ( 5.0 )	35 ( 4.5 )	21 ( 1.6 )	24 ( 5.0 )
OREGON	47 ( 2.8 )	74 ( 2.2 )	62 ( 7.1 )	53 ( 2.8 )	26 ( 2.2 )	38 ( 7.1 )
PENNSYLVANIA†	47 ( 2.7 )	81 ( 1.8 )	68 ( 10.2 )	53 ( 2.7 )	19 ( 1.8 )	32 ( 10.2 )
RHODE ISLAND	40 ( 2.5 )	72 ( 2.2 )	... ( ... )	60 ( 2.5 )	28 ( 2.2 )	... ( ... )
SOUTH CAROLINA†	31 ( 2.3 )	68 ( 2.2 )	... ( ... )	69 ( 2.3 )	32 ( 2.2 )	... ( ... )
TENNESSEE	38 ( 2.4 )	72 ( 2.0 )	52 ( 12.6 )	62 ( 2.4 )	28 ( 2.0 )	48 ( 12.6 )
TEXAS	52 ( 2.8 )	84 ( 1.6 )	71 ( 8.7 )	48 ( 2.8 )	16 ( 1.6 )	29 ( 8.7 )
UTAH	55 ( 2.7 )	75 ( 1.9 )	68 ( 3.4 )	45 ( 2.7 )	25 ( 1.9 )	32 ( 3.4 )
VERMONT†	50 ( 4.3 )	74 ( 1.5 )	66 ( 4.6 )	50 ( 4.3 )	26 ( 1.5 )	34 ( 4.6 )
VIRGINIA	39 ( 2.9 )	72 ( 2.1 )	69 ( 11.3 )	61 ( 2.9 )	28 ( 2.1 )	31 ( 11.3 )
WASHINGTON	49 ( 3.2 )	75 ( 1.6 )	74 ( 4.3 )	51 ( 3.2 )	25 ( 1.6 )	26 ( 4.3 )
WEST VIRGINIA	49 ( 1.9 )	76 ( 1.9 )	74 ( 3.6 )	51 ( 1.9 )	24 ( 1.9 )	26 ( 3.6 )
WISCONSIN	53 ( 2.7 )	82 ( 1.5 )	79 ( 3.4 )	47 ( 2.7 )	18 ( 1.5 )	21 ( 3.4 )
WYOMING	50 ( 2.4 )	71 ( 1.8 )	65 ( 8.3 )	50 ( 2.4 )	29 ( 1.8 )	35 ( 8.3 )
<b>Other Jurisdictions</b>						
DDESS	56 ( 3.8 )	69 ( 2.0 )	66 ( 3.7 )	44 ( 3.8 )	31 ( 2.0 )	34 ( 3.7 )
DoDDS	60 ( 4.3 )	66 ( 1.6 )	64 ( 2.1 )	40 ( 4.3 )	34 ( 1.6 )	36 ( 2.1 )
GUAM	13 ( 1.8 )	29 ( 2.5 )	24 ( 5.9 )	87 ( 1.8 )	71 ( 2.5 )	76 ( 5.9 )

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).

... Characteristics of the sample do not permit a reliable estimate.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.



**TABLE 4.6**

**1992 Mathematics Assessment**



POPULATION:  
REPORTED STATISTICS:  
BREAKDOWNS BY:

1992 Grade 4 Public School Students  
Percentage of Students by Achievement Levels  
Type of Location

Achievement Level...	Advanced			At or Above Proficient		
	Central City	Urban Fringe/ Large Town	Rural/ Small Town	Central City	Urban Fringe/ Large Town	Rural/ Small Town
Type of location...						
JURISDICTIONS	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )
<b>Nation</b>						
NATION	1 ( 0.3 )	3 ( 0.6 )	1 ( 0.3 )	13 ( 1.4 )	23 ( 2.1 )	15 ( 2.1 )
NORTHEAST	0 ( ... )	4 ( 1.5 )	... ( ... )	12 ( 3.0 )	32 ( 4.2 )	... ( ... )
SOUTHEAST	1 ( 0.4 )	1 ( 1.0 )	1 ( 0.4 )	10 ( 1.6 )	13 ( 2.6 )	8 ( 2.9 )
CENTRAL	2 ( 0.9 )	2 ( 1.3 )	... ( ... )	14 ( 2.6 )	23 ( 3.9 )	... ( ... )
WEST	1 ( 0.4 )	3 ( 1.3 )	1 ( ... )	14 ( 3.2 )	21 ( 3.7 )	12 ( 3.2 )
<b>States</b>						
ALABAMA	1 ( 0.3 )	1 ( 0.4 )	0 ( ... )	12 ( 2.3 )	13 ( 3.1 )	7 ( 1.2 )
ALASKA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
ARIZONA	1 ( 0.4 )	1 ( 0.5 )	0 ( ... )	14 ( 1.1 )	15 ( 2.0 )	8 ( 2.5 )
ARKANSAS	1 ( ... )	0 ( ... )	0 ( ... )	10 ( 2.5 )	12 ( 2.3 )	9 ( 0.8 )
CALIFORNIA	1 ( 0.7 )	1 ( 0.4 )	0 ( ... )	12 ( 2.4 )	13 ( 1.5 )	11 ( 2.8 )
COLORADO	2 ( 0.6 )	2 ( 0.5 )	1 ( 0.6 )	16 ( 1.8 )	19 ( 1.7 )	17 ( 2.5 )
CONNECTICUT	2 ( 0.9 )	4 ( 0.8 )	3 ( 0.8 )	13 ( 2.6 )	28 ( 2.5 )	31 ( 2.5 )
DELAWARE	2 ( 0.5 )	2 ( 0.8 )	1 ( 0.6 )	19 ( 1.3 )	14 ( 1.7 )	13 ( 1.3 )
DISTRICT OF COLUMBIA	1 ( 0.2 )	... ( ... )	... ( ... )	5 ( 0.3 )	... ( ... )	... ( ... )
FLORIDA	1 ( 0.6 )	1 ( 0.3 )	1 ( ... )	11 ( 1.8 )	14 ( 1.6 )	8 ( 2.8 )
GEORGIA	0 ( ... )	2 ( 0.6 )	1 ( 0.4 )	8 ( 1.7 )	24 ( 2.5 )	12 ( 1.3 )
HAWAII	2 ( 0.6 )	1 ( 0.4 )	1 ( 0.5 )	18 ( 1.9 )	13 ( 1.7 )	14 ( 1.4 )
INDIANA	1 ( 0.5 )	1 ( 0.5 )	1 ( 0.3 )	14 ( 2.0 )	18 ( 2.4 )	15 ( 1.5 )
IOWA	3 ( 1.1 )	3 ( 1.3 )	2 ( 0.4 )	25 ( 2.4 )	33 ( 3.4 )	24 ( 1.5 )
KENTUCKY	2 ( 0.7 )	2 ( 1.1 )	0 ( 0.2 )	17 ( 4.0 )	17 ( 3.1 )	10 ( 0.9 )
LOUISIANA	0 ( 0.3 )	0 ( 0.2 )	0 ( ... )	9 ( 1.5 )	7 ( 1.4 )	7 ( 1.4 )
MAINE	4 ( ... )	3 ( 1.7 )	2 ( 0.4 )	29 ( 5.0 )	32 ( 5.4 )	27 ( 1.6 )
MARYLAND	1 ( 0.5 )	3 ( 0.4 )	1 ( ... )	9 ( 2.3 )	23 ( 1.7 )	12 ( 2.8 )
MASSACHUSETTS	0 ( ... )	3 ( 0.9 )	3 ( 0.8 )	10 ( 2.1 )	30 ( 2.7 )	26 ( 2.6 )
MICHIGAN	1 ( ... )	1 ( 0.4 )	1 ( 0.4 )	15 ( 4.3 )	21 ( 2.0 )	18 ( 2.2 )
MINNESOTA	1 ( 0.5 )	4 ( 0.6 )	2 ( 0.5 )	15 ( 2.3 )	31 ( 1.9 )	23 ( 1.9 )
MISSISSIPPI	0 ( ... )	1 ( ... )	0 ( 0.1 )	5 ( 1.2 )	10 ( 1.7 )	5 ( 0.9 )
MISSOURI	1 ( 0.8 )	1 ( 0.5 )	1 ( 0.5 )	16 ( 3.2 )	20 ( 2.4 )	18 ( 1.9 )
MONTANA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
NEBRASKA	3 ( 1.0 )	2 ( 1.1 )	2 ( 0.5 )	25 ( 2.6 )	23 ( 2.3 )	19 ( 2.0 )
NEVADA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
NEW JERSEY	0 ( ... )	3 ( 0.7 )	... ( ... )	7 ( 2.0 )	28 ( 1.9 )	... ( ... )
NEW MEXICO	1 ( 0.5 )	1 ( ... )	0 ( ... )	12 ( 1.8 )	13 ( 3.3 )	9 ( 1.5 )
NEW YORK	1 ( 0.4 )	2 ( 0.5 )	2 ( 1.1 )	9 ( 1.3 )	24 ( 2.5 )	17 ( 3.0 )
NORTH CAROLINA	2 ( 0.6 )	2 ( 0.6 )	1 ( 0.3 )	15 ( 1.9 )	13 ( 1.8 )	10 ( 1.1 )
NORTH DAKOTA	2 ( 0.6 )	1 ( ... )	1 ( 0.3 )	26 ( 2.5 )	25 ( 3.4 )	20 ( 1.5 )
OREGON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
PENNSYLVANIA	2 ( 0.6 )	2 ( 0.6 )	2 ( 0.7 )	15 ( 2.8 )	25 ( 2.3 )	23 ( 3.0 )
RHODE ISLAND	0 ( 0.3 )	1 ( 0.9 )	2 ( 0.8 )	8 ( 1.5 )	15 ( 1.9 )	21 ( 3.6 )
SOUTH CAROLINA	1 ( 0.5 )	2 ( 0.6 )	1 ( 0.4 )	12 ( 2.0 )	20 ( 2.2 )	10 ( 1.5 )
TENNESSEE	1 ( ... )	0 ( 0.2 )	0 ( ... )	11 ( 2.0 )	12 ( 1.8 )	6 ( 1.4 )
TEXAS	1 ( 0.4 )	1 ( 0.7 )	1 ( ... )	14 ( 1.7 )	17 ( 2.7 )	13 ( 2.3 )
UTAH	2 ( 0.8 )	2 ( 0.5 )	0 ( ... )	21 ( 3.0 )	20 ( 1.4 )	15 ( 1.8 )
VERMONT	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
VIRGINIA	2 ( 0.5 )	4 ( 1.1 )	0 ( ... )	16 ( 2.8 )	25 ( 2.7 )	10 ( 1.4 )
WASHINGTON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
WEST VIRGINIA	2 ( 0.9 )	1 ( 0.7 )	1 ( 0.3 )	18 ( 3.5 )	14 ( 2.5 )	10 ( 1.0 )
WISCONSIN	3 ( 0.9 )	2 ( 0.7 )	2 ( 0.4 )	23 ( 2.6 )	26 ( 2.1 )	25 ( 2.3 )
WYOMING	1 ( 0.4 )	0 ( ... )	1 ( 0.3 )	18 ( 2.1 )	18 ( 3.1 )	19 ( 1.4 )
<b>Other Jurisdictions</b>						
DDESS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
DoDDS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
GUAM	... ( ... )	... ( ... )	0 ( 0.2 )	... ( ... )	... ( ... )	5 ( 0.5 )

— State or other jurisdiction did not participate in the NAEP assessment year presented in this table.

... Characteristics of the sample do not permit a reliable estimate.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 4.6** (continued) **1992 Mathematics Assessment**



POPULATION: 1992 Grade 4 Public School Students  
 REPORTED STATISTICS: Percentage of Students by Achievement Levels  
 BREAKDOWNS BY: Type of Location

Achievement Level...	At or Above Basic			Below Basic		
	Central City	Urban Fringe/ Large Town	Rural/ Small Town	Central City	Urban Fringe/ Large Town	Rural/ Small Town
Type of location...						
<b>JURISDICTIONS</b>	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )
<b>Nation</b>						
NATION	48 ( 2.3 )	66 ( 2.1 )	56 ( 2.8 )	52 ( 2.3 )	34 ( 2.1 )	44 ( 2.8 )
NORTHEAST	47 ( 5.3 )	75 ( 4.6 )	... ( ... )	53 ( 5.3 )	25 ( 4.6 )	... ( ... )
SOUTHEAST	44 ( 3.2 )	56 ( 4.9 )	40 ( 6.1 )	56 ( 3.2 )	44 ( 4.9 )	60 ( 6.1 )
CENTRAL	45 ( 5.6 )	67 ( 4.4 )	... ( ... )	55 ( 5.6 )	33 ( 4.4 )	... ( ... )
WEST	52 ( 4.1 )	64 ( 3.7 )	53 ( 4.9 )	48 ( 4.1 )	36 ( 3.7 )	47 ( 4.9 )
<b>States</b>						
ALABAMA	43 ( 4.1 )	49 ( 4.8 )	39 ( 3.0 )	57 ( 4.1 )	51 ( 4.8 )	61 ( 3.0 )
ALASKA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
ARIZONA	55 ( 2.0 )	61 ( 3.6 )	38 ( 5.0 )	45 ( 2.0 )	39 ( 3.6 )	62 ( 5.0 )
ARKANSAS	44 ( 4.4 )	55 ( 4.2 )	46 ( 1.9 )	56 ( 4.4 )	45 ( 4.2 )	54 ( 1.9 )
CALIFORNIA	45 ( 3.4 )	48 ( 2.9 )	47 ( 7.8 )	55 ( 3.4 )	52 ( 2.9 )	53 ( 7.8 )
COLORADO	55 ( 2.8 )	64 ( 2.1 )	62 ( 2.6 )	45 ( 2.8 )	36 ( 2.1 )	38 ( 2.6 )
CONNECTICUT	44 ( 4.8 )	75 ( 2.2 )	80 ( 2.4 )	56 ( 4.8 )	25 ( 2.2 )	20 ( 2.4 )
DELAWARE	55 ( 1.4 )	56 ( 2.5 )	51 ( 2.5 )	45 ( 1.4 )	44 ( 2.5 )	49 ( 2.5 )
DISTRICT OF COLUMBIA	23 ( 0.9 )	... ( ... )	... ( ... )	77 ( 0.9 )	... ( ... )	... ( ... )
FLORIDA	44 ( 3.6 )	56 ( 2.2 )	45 ( 3.5 )	56 ( 3.6 )	44 ( 2.2 )	55 ( 3.5 )
GEORGIA	39 ( 4.7 )	66 ( 3.2 )	50 ( 2.5 )	61 ( 4.7 )	34 ( 3.2 )	50 ( 2.5 )
HAWAII	57 ( 3.7 )	48 ( 3.4 )	52 ( 2.3 )	43 ( 3.7 )	52 ( 3.4 )	48 ( 2.3 )
INDIANA	52 ( 3.8 )	64 ( 2.9 )	65 ( 2.8 )	48 ( 3.8 )	36 ( 2.9 )	35 ( 2.8 )
IOWA	69 ( 3.1 )	81 ( 2.9 )	72 ( 1.7 )	31 ( 3.1 )	19 ( 2.9 )	28 ( 1.7 )
KENTUCKY	52 ( 6.3 )	59 ( 3.5 )	48 ( 1.6 )	48 ( 6.3 )	41 ( 3.5 )	52 ( 1.6 )
LOUISIANA	37 ( 3.8 )	44 ( 4.1 )	36 ( 3.5 )	63 ( 3.8 )	56 ( 4.1 )	64 ( 3.5 )
MAINE	70 ( 6.1 )	76 ( 5.3 )	75 ( 1.6 )	30 ( 6.1 )	24 ( 5.3 )	25 ( 1.6 )
MARYLAND	39 ( 4.0 )	62 ( 2.0 )	51 ( 4.8 )	61 ( 4.0 )	38 ( 2.0 )	49 ( 4.8 )
MASSACHUSETTS	43 ( 3.9 )	79 ( 1.9 )	74 ( 2.8 )	57 ( 3.9 )	21 ( 1.9 )	26 ( 2.8 )
MICHIGAN	40 ( 6.0 )	68 ( 2.6 )	68 ( 2.6 )	60 ( 6.0 )	32 ( 2.6 )	32 ( 2.6 )
MINNESOTA	53 ( 4.5 )	76 ( 2.1 )	70 ( 2.0 )	47 ( 4.5 )	24 ( 2.1 )	30 ( 2.0 )
MISSISSIPPI	36 ( 4.2 )	46 ( 4.4 )	33 ( 1.9 )	64 ( 4.2 )	54 ( 4.4 )	67 ( 1.9 )
MISSOURI	48 ( 4.6 )	67 ( 2.5 )	64 ( 2.2 )	52 ( 4.6 )	33 ( 2.5 )	36 ( 2.2 )
MONTANA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
NEBRASKA	67 ( 2.8 )	68 ( 5.0 )	66 ( 2.4 )	33 ( 2.8 )	32 ( 5.0 )	34 ( 2.4 )
NEVADA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
NEW JERSEY	34 ( 5.5 )	74 ( 2.2 )	... ( ... )	66 ( 5.5 )	26 ( 2.2 )	... ( ... )
NEW MEXICO	51 ( 3.3 )	52 ( 4.0 )	46 ( 3.2 )	49 ( 3.3 )	48 ( 4.0 )	54 ( 3.2 )
NEW YORK	41 ( 2.8 )	69 ( 2.9 )	68 ( 6.4 )	59 ( 2.8 )	31 ( 2.9 )	32 ( 6.4 )
NORTH CAROLINA	54 ( 2.3 )	52 ( 3.7 )	46 ( 2.8 )	46 ( 2.3 )	48 ( 3.7 )	54 ( 2.8 )
NORTH DAKOTA	76 ( 3.5 )	75 ( 3.5 )	71 ( 1.7 )	24 ( 3.5 )	25 ( 3.5 )	29 ( 1.7 )
OREGON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
PENNSYLVANIA	52 ( 5.0 )	70 ( 2.6 )	71 ( 3.5 )	48 ( 5.0 )	30 ( 2.6 )	29 ( 3.5 )
RHODE ISLAND	38 ( 3.4 )	63 ( 2.7 )	71 ( 4.7 )	62 ( 3.4 )	37 ( 2.7 )	29 ( 4.7 )
SOUTH CAROLINA	46 ( 4.1 )	62 ( 3.2 )	41 ( 2.4 )	54 ( 4.1 )	38 ( 3.2 )	59 ( 2.4 )
TENNESSEE	45 ( 4.1 )	55 ( 3.7 )	43 ( 3.0 )	55 ( 4.1 )	45 ( 3.7 )	57 ( 3.0 )
TEXAS	53 ( 2.9 )	61 ( 3.2 )	53 ( 4.3 )	47 ( 2.9 )	39 ( 3.2 )	47 ( 4.3 )
UTAH	67 ( 3.8 )	68 ( 1.9 )	60 ( 3.7 )	33 ( 3.8 )	32 ( 1.9 )	40 ( 3.7 )
VERMONT	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
VIRGINIA	54 ( 2.6 )	68 ( 2.6 )	45 ( 3.4 )	46 ( 2.6 )	32 ( 2.6 )	55 ( 3.4 )
WASHINGTON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
WEST VIRGINIA	55 ( 5.1 )	56 ( 3.5 )	50 ( 1.8 )	45 ( 5.1 )	44 ( 3.5 )	50 ( 1.8 )
WISCONSIN	65 ( 3.0 )	75 ( 2.0 )	73 ( 2.4 )	35 ( 3.0 )	25 ( 2.0 )	27 ( 2.4 )
WYOMING	66 ( 2.7 )	66 ( 5.0 )	70 ( 1.6 )	34 ( 2.7 )	34 ( 5.0 )	30 ( 1.6 )
<b>Other Jurisdictions</b>						
DDESS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
DoDDS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
GUAM	... ( ... )	... ( ... )	26 ( 1.4 )	... ( ... )	... ( ... )	74 ( 1.4 )

— State or other jurisdiction did not participate in the NAEP assessment year presented in this table.

... Characteristics of the sample do not permit a reliable estimate.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 4.6** (continued) **1996 Mathematics Assessment**



POPULATION: 1996 Grade 4 Public School Students  
 REPORTED STATISTICS: Percentage of Students by Achievement Levels  
 BREAKDOWNS BY: Type of Location

Achievement Level...	Advanced			At or Above Proficient		
	Central City	Urban Fringe/ Large Town	Rural/ Small Town	Central City	Urban Fringe/ Large Town	Rural/ Small Town
Type of location...						
<b>JURISDICTIONS</b>	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )
<b>Nation</b>						
NATION	2 ( 0.6 )	3 ( 0.6 )	1 ( 0.3 )	15 ( 1.4 )	24 ( 1.8 )	19 ( 2.2 )
NORTHEAST	1 ( ... )	4 ( 1.3 )	... ( ... )	17 ( 4.3 )	30 ( 3.2 )	... ( ... )
SOUTHEAST	1 ( ... )	4 ( ... )	1 ( 0.4 )	9 ( 3.2 )	21 ( 7.8 )	12 ( 3.4 )
CENTRAL	2 ( 1.4 )	2 ( 1.3 )	1 ( 0.9 )	19 ( 2.3 )	32 ( 4.4 )	22 ( 4.8 )
WEST	3 ( 1.3 )	2 ( 1.0 )	2 ( 0.7 )	14 ( 2.2 )	16 ( 2.7 )	21 ( 3.7 )
<b>States</b>						
ALABAMA	2 ( 0.6 )	1 ( 0.6 )	0 ( 0.3 )	14 ( 2.5 )	10 ( 1.8 )	9 ( 1.4 )
ALASKA†	1 ( 0.6 )	... ( ... )	2 ( 0.6 )	19 ( 2.4 )	... ( ... )	22 ( 1.3 )
ARIZONA	2 ( 0.6 )	2 ( 0.7 )	0 ( ... )	16 ( 2.0 )	16 ( 3.2 )	9 ( 2.8 )
ARKANSAS†	1 ( 0.7 )	1 ( ... )	1 ( ... )	13 ( 3.1 )	17 ( 2.6 )	13 ( 1.8 )
CALIFORNIA	1 ( 0.8 )	1 ( 0.3 )	1 ( ... )	10 ( 3.0 )	11 ( 1.3 )	10 ( 3.9 )
COLORADO	2 ( 0.6 )	2 ( 0.5 )	1 ( 0.5 )	21 ( 2.2 )	25 ( 2.2 )	20 ( 2.6 )
CONNECTICUT	1 ( 0.6 )	4 ( 0.9 )	3 ( 1.1 )	15 ( 2.9 )	36 ( 3.3 )	37 ( 2.6 )
DELAWARE	2 ( 0.7 )	1 ( 0.5 )	1 ( 0.7 )	16 ( 1.4 )	15 ( 2.3 )	17 ( 2.0 )
DISTRICT OF COLUMBIA	1 ( 0.4 )	... ( ... )	... ( ... )	5 ( 0.5 )	... ( ... )	... ( ... )
FLORIDA	1 ( 0.3 )	1 ( 0.3 )	1 ( ... )	13 ( 1.8 )	16 ( 1.5 )	13 ( 3.0 )
GEORGIA	1 ( 0.4 )	2 ( 0.5 )	0 ( ... )	9 ( 2.3 )	18 ( 2.2 )	9 ( 1.7 )
HAWAII	3 ( 1.3 )	1 ( 0.5 )	1 ( 0.5 )	24 ( 3.5 )	15 ( 1.5 )	13 ( 1.8 )
INDIANA	3 ( 1.1 )	3 ( 1.0 )	1 ( 0.4 )	21 ( 2.9 )	27 ( 3.2 )	23 ( 1.5 )>
IOWA†	1 ( 0.8 )	3 ( 0.9 )	1 ( 0.4 )	20 ( 3.0 )	38 ( 8.6 )	21 ( 1.5 )
KENTUCKY	1 ( 0.7 )	2 ( 0.8 )	1 ( 0.2 )	17 ( 3.1 )	20 ( 3.9 )	13 ( 1.4 )
LOUISIANA	1 ( 0.4 )	1 ( 0.3 )	0 ( ... )	8 ( 1.8 )	10 ( 1.7 )	6 ( 1.1 )
MAINE	5 ( 2.1 )	5 ( 2.2 )	2 ( 0.5 )	30 ( 4.6 )	36 ( 5.6 )	26 ( 1.6 )
MARYLAND	2 ( ... )	4 ( 1.0 )	1 ( ... )	11 ( 4.2 )	26 ( 2.2 )	14 ( 2.8 )
MASSACHUSETTS	0 ( ... )	3 ( 0.9 )	1 ( 0.5 )	12 ( 2.3 )	30 ( 3.0 )	24 ( 3.6 )
MICHIGAN†	1 ( 0.8 )	3 ( 0.9 )	1 ( 0.7 )	13 ( 3.0 )	28 ( 2.1 )	24 ( 2.3 )
MINNESOTA	3 ( 0.8 )	5 ( 0.9 )	2 ( 0.6 )	21 ( 2.8 )	36 ( 2.5 )	26 ( 2.1 )
MISSISSIPPI	1 ( 0.4 )	1 ( ... )	0 ( 0.1 )	11 ( 3.7 )	19 ( 4.2 )	6 ( 0.7 )
MISSOURI	1 ( 0.4 )	2 ( 0.6 )	1 ( 0.3 )	13 ( 2.6 )	25 ( 2.3 )	17 ( 1.9 )
MONTANA†	1 ( 0.7 )	... ( ... )	1 ( 0.5 )	22 ( 2.1 )	... ( ... )	22 ( 1.9 )
NEBRASKA	3 ( 0.5 )	3 ( 1.3 )	2 ( 0.5 )	25 ( 2.7 )	32 ( 6.5 )	23 ( 1.9 )
NEVADA†	1 ( 0.5 )	1 ( 0.4 )	1 ( 0.5 )	15 ( 1.8 )	13 ( 1.9 )	13 ( 2.7 )
NEW JERSEY†	1 ( ... )	3 ( 0.8 )	... ( ... )	14 ( 4.6 )	26 ( 2.1 )	... ( ... )
NEW MEXICO	1 ( 0.4 )	0 ( ... )	1 ( 0.4 )	16 ( 2.1 )	11 ( 3.4 )	11 ( 1.7 )
NEW YORK†	1 ( 0.3 )	3 ( 0.9 )	1 ( ... )	14 ( 1.8 )	27 ( 2.5 )	16 ( 3.3 )
NORTH CAROLINA	4 ( 0.8 )	2 ( 1.2 )	2 ( 0.6 )	26 ( 3.1 )	21 ( 2.6 )	18 ( 1.9 )
NORTH DAKOTA	3 ( 1.1 )	0 ( ... )	2 ( 0.6 )	29 ( 2.6 )	19 ( 4.9 )	23 ( 2.0 )
OREGON	3 ( 1.1 )	2 ( 0.5 )	2 ( 0.5 )	20 ( 2.8 )	23 ( 2.3 )	20 ( 2.2 )
PENNSYLVANIA†	0 ( ... )	2 ( 0.5 )	1 ( ... )	5 ( 1.4 )	28 ( 2.3 )	20 ( 2.6 )
RHODE ISLAND	1 ( 0.3 )	1 ( 0.6 )	2 ( 0.8 )	11 ( 1.5 )	19 ( 1.7 )	25 ( 3.5 )
SOUTH CAROLINA†	2 ( 0.8 )	2 ( 0.7 )	0 ( 0.2 )	15 ( 2.8 )	14 ( 2.3 )	8 ( 1.6 )
TENNESSEE	1 ( 0.7 )	2 ( 0.9 )	1 ( 0.4 )	15 ( 3.0 )	21 ( 2.5 )	15 ( 2.5 )
TEXAS	2 ( 0.5 )	4 ( 1.1 )	2 ( 0.8 )	21 ( 2.7 )	30 ( 2.7 )	26 ( 3.2 )
UTAH	2 ( 0.6 )	2 ( 0.5 )	1 ( ... )	22 ( 3.0 )	23 ( 1.6 )	22 ( 2.4 )
VERMONT†	... ( ... )	... ( ... )	3 ( 0.5 )	... ( ... )	... ( ... )	22 ( 1.2 )
VIRGINIA	1 ( 0.7 )	3 ( 1.0 )	1 ( 0.5 )	16 ( 3.0 )	27 ( 2.6 )	12 ( 1.7 )
WASHINGTON	1 ( 0.3 )	2 ( 0.5 )	2 ( 0.6 )	20 ( 2.0 )	21 ( 1.6 )	22 ( 3.3 )
WEST VIRGINIA	2 ( 1.1 )	2 ( 0.6 )	1 ( 0.6 )	19 ( 2.5 )	22 ( 2.6 )	18 ( 1.5 )>
WISCONSIN	2 ( 0.8 )	4 ( 1.7 )	3 ( 0.7 )	22 ( 2.6 )	32 ( 2.7 )	28 ( 1.9 )
WYOMING	1 ( 0.6 )	... ( ... )	1 ( 0.4 )	15 ( 2.5 )	... ( ... )	20 ( 1.4 )
<b>Other Jurisdictions</b>						
DDESS	... ( ... )	2 ( 1.0 )	2 ( 1.0 )	... ( ... )	21 ( 2.4 )	18 ( 2.7 )
DoDDS	... ( ... )	... ( ... )	... ( ... )	... ( ... )	... ( ... )	... ( ... )
GUAM	... ( ... )	... ( ... )	... ( ... )	... ( ... )	... ( ... )	... ( ... )

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).  
 ... Characteristics of the sample do not permit a reliable estimate.  
 > (<) The value for the students was significantly higher (lower) than in the 1992 assessment at about the 95% confidence level using appropriate multiple comparison procedures.  
 SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 4.6** (continued) **1996 Mathematics Assessment**



POPULATION: **1996 Grade 4 Public School Students**  
 REPORTED STATISTICS: **Percentage of Students by Achievement Levels**  
 BREAKDOWNS BY: **Type of Location**

Achievement Level...	At or Above Basic			Below Basic		
	Central City	Urban Fringe/ Large Town	Rural/ Small Town	Central City	Urban Fringe/ Large Town	Rural/ Small Town
Type of location...	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )
<b>JURISDICTIONS</b>						
<b>Nation</b>						
NATION	51 ( 3.7)	69 ( 2.3)	62 ( 2.8)	49 ( 3.7)	31 ( 2.3)	38 ( 2.8)
NORTHEAST	45 ( 9.0)	79 ( 3.6)	... ( ... )	55 ( 9.0)	21 ( 3.6)	... ( ... )
SOUTHEAST	47 ( 5.3)	65 ( 7.5)	48 ( 4.8)	53 ( 5.3)	35 ( 7.5)	52 ( 4.8)
CENTRAL	63 ( 7.8)	79 ( 4.9)	74 ( 4.7)	37 ( 7.8)	21 ( 4.9)	26 ( 4.7)
WEST	47 ( 5.8)	59 ( 4.2)	64 ( 3.6)	53 ( 5.8)	41 ( 4.2)	36 ( 3.6)
<b>States</b>						
ALABAMA	45 ( 3.3)	53 ( 4.2)	47 ( 3.2)	55 ( 3.3)	47 ( 4.2)	53 ( 3.2)
ALASKA†	65 ( 3.0)	... ( ... )	65 ( 2.4)	35 ( 3.0)	... ( ... )	35 ( 2.4)
ARIZONA	57 ( 2.8)	60 ( 4.8)	44 ( 6.8)	43 ( 2.8)	40 ( 4.8)	56 ( 6.8)
ARKANSAS†	47 ( 5.4)	61 ( 5.1)	55 ( 3.1)	53 ( 5.4)	39 ( 5.1)	45 ( 3.1)
CALIFORNIA	42 ( 4.3)	50 ( 3.1)	40 (15.1)	58 ( 4.3)	50 ( 3.1)	60 (15.1)
COLORADO	62 ( 3.7)	72 ( 2.7)	67 ( 3.5)	38 ( 3.7)	28 ( 2.7)	33 ( 3.5)
CONNECTICUT	51 ( 4.6)	82 ( 2.7)	87 ( 2.3)	49 ( 4.6)	18 ( 2.7)	13 ( 2.3)
DELAWARE	54 ( 1.5)	55 ( 2.5)	52 ( 2.8)	46 ( 1.5)	45 ( 2.5)	48 ( 2.8)
DISTRICT OF COLUMBIA	20 ( 0.8)	... ( ... )	... ( ... )	80 ( 0.8)	... ( ... )	... ( ... )
FLORIDA	46 ( 3.0)	58 ( 2.4)	57 ( 6.4)	54 ( 3.0)	42 ( 2.4)	43 ( 6.4)
GEORGIA	38 ( 5.0)	61 ( 3.1)	50 ( 2.5)	62 ( 5.0)	39 ( 3.1)	50 ( 2.5)
HAWAII	61 ( 4.5)	51 ( 2.3)	49 ( 2.9)	39 ( 4.5)	49 ( 2.3)	51 ( 2.9)
INDIANA	64 ( 3.2)	77 ( 3.2)	74 ( 2.3)	36 ( 3.2)	23 ( 3.2)	26 ( 2.3)
IOWA†	66 ( 3.7)	84 ( 5.3)	76 ( 1.7)	34 ( 3.7)	16 ( 5.3)	24 ( 1.7)
KENTUCKY	61 ( 3.8)	69 ( 4.7)	57 ( 2.4)	39 ( 3.8)	31 ( 4.7)	43 ( 2.4)
LOUISIANA	38 ( 3.9)	51 ( 2.7)	43 ( 3.2)	62 ( 3.9)	49 ( 2.7)	57 ( 3.2)
MAINE	81 ( 3.8)	81 ( 3.8)	74 ( 1.7)	19 ( 3.8)	19 ( 3.8)	26 ( 1.7)
MARYLAND	38 ( 5.2)	66 ( 2.1)	56 ( 5.4)	62 ( 5.2)	34 ( 2.1)	44 ( 5.4)
MASSACHUSETTS	54 ( 4.0)	78 ( 2.5)	78 ( 3.0)	46 ( 4.0)	22 ( 2.5)	22 ( 3.0)
MICHIGAN†	45 ( 4.5)	77 ( 2.4)	75 ( 2.7)	55 ( 4.5)	23 ( 2.4)	25 ( 2.7)
MINNESOTA	61 ( 2.9)	82 ( 2.2)	76 ( 2.8)	39 ( 2.9)	18 ( 2.2)	24 ( 2.8)
MISSISSIPPI	45 ( 4.6)	63 ( 6.4)	38 ( 2.3)	55 ( 4.6)	37 ( 6.4)	62 ( 2.3)
MISSOURI	51 ( 5.0)	73 ( 2.7)	68 ( 2.7)	49 ( 5.0)	27 ( 2.7)	32 ( 2.7)
MONTANA†	73 ( 3.5)	... ( ... )	70 ( 2.4)	27 ( 3.5)	... ( ... )	30 ( 2.4)
NEBRASKA	65 ( 3.0)	77 ( 5.0)	72 ( 2.1)	35 ( 3.0)	23 ( 5.0)	28 ( 2.1)
NEVADA†	59 ( 3.2)	55 ( 3.2)	57 ( 3.2)	41 ( 3.2)	45 ( 3.2)	43 ( 3.2)
NEW JERSEY†	49 ( 8.5)	71 ( 2.7)	... ( ... )	51 ( 8.5)	29 ( 2.7)	... ( ... )
NEW MEXICO	56 ( 4.2)	45 ( 5.6)	49 ( 3.7)	44 ( 4.2)	55 ( 5.6)	51 ( 3.7)
NEW YORK†	49 ( 3.2)	80 ( 2.3)	69 ( 2.8)	51 ( 3.2)	20 ( 2.3)	31 ( 2.8)
NORTH CAROLINA	66 ( 3.1)	68 ( 3.2)	61 ( 2.6)>	34 ( 3.1)	32 ( 3.2)	39 ( 2.6)<
NORTH DAKOTA	80 ( 1.9)	77 ( 6.3)	73 ( 2.6)	20 ( 1.9)	23 ( 6.3)	27 ( 2.6)
OREGON	64 ( 4.4)	67 ( 3.2)	63 ( 3.4)	36 ( 4.4)	33 ( 3.2)	37 ( 3.4)
PENNSYLVANIA†	39 ( 4.5)	80 ( 2.6)	73 ( 3.7)	61 ( 4.5)	20 ( 2.6)	27 ( 3.7)
RHODE ISLAND	44 ( 2.5)	67 ( 2.8)	78 ( 4.1)	56 ( 2.5)	33 ( 2.8)	22 ( 4.1)
SOUTH CAROLINA†	51 ( 4.7)	53 ( 3.1)	43 ( 3.1)	49 ( 4.7)	47 ( 3.1)	57 ( 3.1)
TENNESSEE	49 ( 4.1)	69 ( 3.8)	59 ( 2.8)>	51 ( 4.1)	31 ( 3.8)	41 ( 2.8)<
TEXAS	64 ( 2.9)	73 ( 3.8)	76 ( 3.6)>	36 ( 2.9)	27 ( 3.8)	24 ( 3.6)<
UTAH	67 ( 4.0)	69 ( 2.3)	69 ( 2.9)	33 ( 4.0)	31 ( 2.3)	31 ( 2.9)
VERMONT†	... ( ... )	... ( ... )	67 ( 2.2)	... ( ... )	... ( ... )	33 ( 2.2)
VIRGINIA	58 ( 3.6)	72 ( 2.9)	51 ( 4.2)	42 ( 3.6)	28 ( 2.9)	49 ( 4.2)
WASHINGTON	67 ( 3.7)	66 ( 2.2)	68 ( 4.0)	33 ( 3.7)	34 ( 2.2)	32 ( 4.0)
WEST VIRGINIA	63 ( 3.8)	69 ( 3.3)	61 ( 2.3)>	37 ( 3.8)	31 ( 3.3)	39 ( 2.3)<
WISCONSIN	63 ( 2.9)	81 ( 2.5)	80 ( 1.8)	37 ( 2.9)	19 ( 2.5)	20 ( 1.8)
WYOMING	61 ( 3.8)	... ( ... )	65 ( 2.0)	39 ( 3.8)	... ( ... )	35 ( 2.0)
<b>Other Jurisdictions</b>						
DDESS	... ( ... )	66 ( 1.8)	61 ( 4.0)	... ( ... )	34 ( 1.8)	39 ( 4.0)
DoDDS	... ( ... )	... ( ... )	... ( ... )	... ( ... )	... ( ... )	... ( ... )
GUAM	... ( ... )	... ( ... )	... ( ... )	... ( ... )	... ( ... )	... ( ... )

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).  
 ... Characteristics of the sample do not permit a reliable estimate.  
 > (<) The value for the students was significantly higher (lower) than in the 1992 assessment at about the 95% confidence level using appropriate multiple comparison procedures.  
 SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 4.7**

**1990 Mathematics Assessment**



POPULATION:  
REPORTED STATISTICS:  
BREAKDOWNS BY:

1990 Grade 8 Public School Students  
Percentage of Students by Achievement Levels  
Gender

Achievement Level...	Advanced		At or Above Proficient		At or Above Basic		Below Basic	
	Male	Female	Male	Female	Male	Female	Male	Female
What is your gender?	Male	Female	Male	Female	Male	Female	Male	Female
JURISDICTIONS	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )
<b>Nation</b>								
NATION	2 ( 0.5)	2 ( 0.5)	17 ( 1.5)	14 ( 1.2)	51 ( 2.0)	51 ( 1.7)	49 ( 2.0)	49 ( 1.7)
NORTHEAST	3 ( 1.0)	2 ( 1.0)	23 ( 4.5)	18 ( 3.5)	57 ( 6.0)	61 ( 4.3)	43 ( 6.0)	39 ( 4.3)
SOUTHEAST	2 ( 0.9)	1 ( 0.3)	12 ( 2.2)	11 ( 2.7)	42 ( 3.4)	42 ( 2.8)	58 ( 3.4)	58 ( 2.8)
CENTRAL	2 ( 0.8)	1 ( ... )	17 ( 3.1)	12 ( 2.1)	55 ( 3.3)	55 ( 3.2)	45 ( 3.3)	45 ( 3.2)
WEST	3 ( 1.0)	2 ( 0.9)	16 ( 2.8)	14 ( 2.1)	51 ( 3.3)	49 ( 3.6)	49 ( 3.3)	51 ( 3.6)
<b>States</b>								
ALABAMA	1 ( 0.3)	1 ( 0.4)	10 ( 1.1)	8 ( 0.9)	41 ( 2.3)	40 ( 2.0)	59 ( 2.3)	60 ( 2.0)
ALASKA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
ARIZONA	2 ( 0.5)	1 ( 0.5)	15 ( 1.3)	10 ( 1.2)	51 ( 2.0)	44 ( 2.1)	49 ( 2.0)	56 ( 2.1)
ARKANSAS	1 ( 0.4)	0 ( ... )	11 ( 0.9)	8 ( 1.0)	45 ( 1.8)	43 ( 1.6)	55 ( 1.8)	57 ( 1.6)
CALIFORNIA	2 ( 0.4)	1 ( 0.4)	14 ( 1.5)	11 ( 1.2)	46 ( 2.3)	44 ( 1.8)	54 ( 2.3)	56 ( 1.8)
COLORADO	2 ( 0.5)	1 ( 0.5)	18 ( 1.1)	16 ( 1.4)	59 ( 1.6)	56 ( 1.9)	41 ( 1.6)	44 ( 1.9)
CONNECTICUT	4 ( 0.6)	3 ( 0.5)	23 ( 1.4)	20 ( 1.4)	61 ( 1.7)	59 ( 2.0)	39 ( 1.7)	41 ( 2.0)
DELAWARE	2 ( 0.6)	2 ( 0.5)	15 ( 1.2)	13 ( 1.6)	47 ( 2.0)	49 ( 2.6)	53 ( 2.0)	51 ( 2.6)
DISTRICT OF COLUMBIA	1 ( 0.5)	1 ( 0.3)	2 ( 0.6)	4 ( 0.8)	15 ( 1.2)	18 ( 1.3)	85 ( 1.2)	82 ( 1.3)
FLORIDA	2 ( 0.6)	1 ( 0.3)	14 ( 1.1)	10 ( 1.2)	44 ( 1.9)	41 ( 1.9)	56 ( 1.9)	59 ( 1.9)
GEORGIA	3 ( 0.7)	2 ( 0.5)	15 ( 1.7)	13 ( 1.3)	48 ( 1.8)	47 ( 1.9)	52 ( 1.8)	53 ( 1.9)
HAWAII	1 ( 0.5)	2 ( 0.4)	11 ( 1.1)	12 ( 1.0)	37 ( 1.5)	44 ( 1.7)	63 ( 1.5)	56 ( 1.7)
INDIANA	4 ( 0.8)	1 ( 0.4)	19 ( 1.6)	14 ( 1.4)	59 ( 1.8)	54 ( 1.7)	41 ( 1.8)	46 ( 1.7)
IOWA	4 ( 0.9)	2 ( 0.4)	29 ( 1.6)	22 ( 1.7)	72 ( 1.4)	69 ( 2.0)	28 ( 1.4)	31 ( 2.0)
KENTUCKY	2 ( 0.5)	1 ( 0.2)	11 ( 1.1)	9 ( 0.8)	44 ( 1.9)	42 ( 1.9)	56 ( 1.9)	58 ( 1.9)
LOUISIANA	1 ( 0.4)	0 ( 0.2)	7 ( 0.9)	4 ( 0.7)	32 ( 1.8)	31 ( 2.0)	68 ( 1.8)	69 ( 2.0)
MAINE	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
MARYLAND	3 ( 0.6)	2 ( 0.6)	17 ( 1.3)	16 ( 1.4)	50 ( 1.8)	50 ( 2.1)	50 ( 1.8)	50 ( 2.1)
MASSACHUSETTS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
MICHIGAN	2 ( 0.6)	2 ( 0.5)	17 ( 1.3)	15 ( 1.4)	54 ( 2.0)	53 ( 2.0)	46 ( 2.0)	47 ( 2.0)
MINNESOTA	4 ( 0.7)	3 ( 0.6)	25 ( 1.5)	22 ( 1.4)	67 ( 1.5)	68 ( 1.7)	33 ( 1.5)	32 ( 1.7)
MISSISSIPPI	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
MISSOURI	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
MONTANA	5 ( 0.8)	2 ( 0.6)	31 ( 2.0)	22 ( 1.9)	76 ( 1.6)	73 ( 2.3)	24 ( 1.6)	27 ( 2.3)
NEBRASKA	4 ( 0.9)	2 ( 0.6)	26 ( 1.8)	23 ( 1.6)	69 ( 1.7)	67 ( 2.1)	31 ( 1.7)	33 ( 2.1)
NEW MEXICO	1 ( 0.5)	1 ( ... )	12 ( 1.2)	8 ( 1.3)	47 ( 1.8)	40 ( 1.6)	53 ( 1.8)	60 ( 1.6)
NEW YORK	3 ( 0.7)	2 ( 0.5)	17 ( 1.3)	14 ( 1.1)	51 ( 2.1)	49 ( 2.1)	49 ( 2.1)	51 ( 2.1)
NORTH CAROLINA	1 ( 0.4)	1 ( 0.3)	9 ( 0.8)	8 ( 0.9)	38 ( 1.6)	38 ( 1.8)	62 ( 1.6)	62 ( 1.8)
NORTH DAKOTA	5 ( 0.9)	2 ( 0.7)	30 ( 2.4)	24 ( 2.0)	78 ( 1.8)	73 ( 2.3)	22 ( 1.8)	27 ( 2.3)
OREGON	4 ( 0.8)	2 ( 0.5)	23 ( 1.5)	18 ( 1.2)	61 ( 1.6)	62 ( 1.8)	39 ( 1.6)	38 ( 1.8)
RHODE ISLAND	2 ( 0.6)	1 ( 0.3)	16 ( 1.2)	13 ( 1.0)	50 ( 1.4)	48 ( 1.5)	50 ( 1.4)	52 ( 1.5)
SOUTH CAROLINA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
TENNESSEE	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
TEXAS	2 ( 0.4)	1 ( 0.3)	14 ( 1.4)	11 ( 1.4)	48 ( 2.2)	43 ( 1.7)	52 ( 2.2)	57 ( 1.7)
UTAH	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
VERMONT	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
VIRGINIA	5 ( 1.0)	3 ( 0.8)	19 ( 2.2)	15 ( 1.4)	53 ( 2.1)	51 ( 2.0)	47 ( 2.1)	49 ( 2.0)
WASHINGTON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
WEST VIRGINIA	1 ( 0.4)	1 ( 0.3)	10 ( 1.1)	8 ( 1.1)	43 ( 1.9)	41 ( 1.4)	57 ( 1.9)	59 ( 1.4)
WISCONSIN	4 ( 0.7)	3 ( 0.6)	24 ( 1.5)	22 ( 2.0)	66 ( 1.8)	65 ( 2.2)	34 ( 1.8)	35 ( 2.2)
WYOMING	2 ( 0.5)	1 ( 0.4)	21 ( 1.4)	16 ( 1.0)	66 ( 1.5)	61 ( 1.6)	34 ( 1.5)	39 ( 1.6)
<b>Other Jurisdictions</b>								
DDESS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
DoDDS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
GUAM	1 ( 0.3)	0 ( ... )	4 ( 0.8)	3 ( 0.7)	23 ( 1.6)	21 ( 1.4)	77 ( 1.6)	79 ( 1.4)

— State or other jurisdiction did not participate in the NAEP assessment year presented in this table.  
... Characteristics of the sample do not permit a reliable estimate.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 4.7** (continued)

**1992 Mathematics Assessment**



POPULATION: 1992 Grade 8 Public School Students  
 REPORTED STATISTICS: Percentage of Students by Achievement Levels  
 BREAKDOWNS BY: Gender

Achievement Level...	Advanced		At or Above Proficient		At or Above Basic		Below Basic	
	Male	Female	Male	Female	Male	Female	Male	Female
What is your gender?								
JURISDICTIONS	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )
<b>Nation</b>								
NATION	3 ( 0.5)	3 ( 0.5)	20 ( 1.3)	20 ( 1.3)»	55 ( 1.5)	56 ( 1.5)	45 ( 1.5)	44 ( 1.5)
NORTHEAST	5 ( 1.2)	4 ( 1.5)	22 ( 2.6)	22 ( 3.2)	54 ( 4.0)	55 ( 4.9)	46 ( 4.0)	45 ( 4.9)
SOUTHEAST	1 ( 0.6)	1 ( 0.4)	13 ( 1.2)	13 ( 1.7)	47 ( 2.4)	47 ( 2.2)	53 ( 2.4)	53 ( 2.2)
CENTRAL	3 ( 0.8)	3 ( 0.6)	24 ( 3.3)	23 ( 3.3)	64 ( 4.0)	65 ( 3.2)	36 ( 4.0)	35 ( 3.2)
WEST	3 ( 1.2)	4 ( 1.2)	20 ( 2.4)	21 ( 2.4)	55 ( 3.4)	58 ( 2.7)	45 ( 3.4)	42 ( 2.7)
<b>States</b>								
ALABAMA	1 ( 0.5)	0 ( 0.2)	11 ( 1.3)	9 ( 1.2)	40 ( 2.2)	37 ( 2.2)	60 ( 2.2)	63 ( 2.2)
ALASKA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
ARIZONA	1 ( 0.4)	2 ( 0.6)	16 ( 1.6)	14 ( 1.5)	55 ( 2.3)	54 ( 2.0)»	45 ( 2.3)	46 ( 2.0)«
ARKANSAS	1 ( 0.4)	0 ( 0.2)	11 ( 1.2)	9 ( 0.9)	45 ( 2.1)	44 ( 2.1)	55 ( 2.1)	56 ( 2.1)
CALIFORNIA	2 ( 0.7)	2 ( 0.9)	16 ( 1.5)	17 ( 1.8)	50 ( 2.2)	51 ( 2.2)	50 ( 2.2)	49 ( 2.2)
COLORADO	2 ( 0.5)	2 ( 0.7)	23 ( 1.4)	20 ( 1.5)	66 ( 1.7)»	62 ( 1.9)	34 ( 1.7)«	38 ( 1.9)
CONNECTICUT	4 ( 0.8)	3 ( 0.5)	27 ( 1.3)	24 ( 1.3)	65 ( 2.1)	64 ( 1.6)	35 ( 2.1)	36 ( 1.6)
DELAWARE	2 ( 0.7)	2 ( 0.5)	16 ( 1.4)	15 ( 1.7)	53 ( 1.9)	50 ( 1.9)	47 ( 1.9)	50 ( 1.9)
DISTRICT OF COLUMBIA	1 ( 0.3)	0 ( ... )	4 ( 1.1)	5 ( 1.1)	21 ( 2.0)	22 ( 1.6)	79 ( 2.0)	78 ( 1.6)
FLORIDA	2 ( 0.5)	1 ( 0.4)	15 ( 1.5)	14 ( 1.2)	48 ( 2.2)	49 ( 2.3)	52 ( 2.2)	51 ( 2.3)
GEORGIA	2 ( 0.4)	1 ( 0.4)	14 ( 1.3)	11 ( 1.1)	50 ( 2.2)	46 ( 1.9)	50 ( 2.2)	54 ( 1.9)
HAWAII	2 ( 0.4)	2 ( 0.6)	12 ( 1.0)	15 ( 1.0)	42 ( 1.5)	50 ( 1.7)	58 ( 1.5)	50 ( 1.7)
INDIANA	3 ( 0.6)	2 ( 0.4)	22 ( 1.7)	18 ( 1.5)	63 ( 1.7)	57 ( 2.0)	37 ( 1.7)	43 ( 2.0)
IOWA	4 ( 0.8)	3 ( 0.9)	33 ( 1.6)	30 ( 2.0)»	76 ( 1.7)	76 ( 1.5)»	24 ( 1.7)	24 ( 1.5)«
KENTUCKY	2 ( 0.5)	1 ( 0.3)	15 ( 1.6)	13 ( 1.3)	52 ( 1.8)»	51 ( 2.0)»	48 ( 1.8)«	49 ( 2.0)«
LOUISIANA	0 ( 0.2)	0 ( 0.2)	7 ( 1.1)	7 ( 1.2)	39 ( 1.9)	35 ( 2.4)	61 ( 1.9)	65 ( 2.4)
MAINE	3 ( 0.7)	3 ( 0.6)	27 ( 1.9)	24 ( 1.9)	71 ( 1.7)	72 ( 1.7)	29 ( 1.7)	28 ( 1.7)
MARYLAND	4 ( 0.8)	2 ( 0.5)	21 ( 1.7)	19 ( 1.5)	55 ( 1.7)	53 ( 1.9)	45 ( 1.7)	47 ( 1.9)
MASSACHUSETTS	3 ( 0.9)	2 ( 0.6)	26 ( 1.8)	21 ( 1.5)	63 ( 2.0)	62 ( 1.6)	37 ( 2.0)	38 ( 1.6)
MICHIGAN	3 ( 0.6)	2 ( 0.5)	21 ( 1.9)	17 ( 1.6)	60 ( 1.9)	56 ( 2.2)	40 ( 1.9)	44 ( 2.2)
MINNESOTA	5 ( 1.0)	5 ( 0.8)	32 ( 1.7)»	31 ( 1.6)»	74 ( 1.6)»	75 ( 1.6)	26 ( 1.6)«	25 ( 1.6)
MISSISSIPPI	0 ( ... )	0 ( 0.2)	7 ( 1.0)	6 ( 0.9)	35 ( 2.1)	32 ( 1.8)	65 ( 2.1)	68 ( 1.8)
MISSOURI	3 ( 0.5)	2 ( 0.5)	21 ( 1.6)	18 ( 1.4)	63 ( 1.7)	62 ( 2.3)	37 ( 1.7)	38 ( 2.3)
MONTANA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
NEBRASKA	3 ( 0.9)	3 ( 0.8)	28 ( 1.9)	25 ( 1.9)	71 ( 1.6)	69 ( 1.9)	29 ( 1.6)	31 ( 1.9)
NEW MEXICO	1 ( 0.4)	1 ( ... )	13 ( 1.2)	9 ( 0.9)	50 ( 1.9)	45 ( 1.4)	50 ( 1.9)	55 ( 1.4)
NEW YORK	4 ( 0.8)	3 ( 0.6)	21 ( 1.7)	19 ( 1.4)»	59 ( 2.9)	56 ( 2.7)	41 ( 2.9)	44 ( 2.7)
NORTH CAROLINA	1 ( 0.4)	1 ( 0.5)	14 ( 1.4)»	10 ( 1.2)	48 ( 1.9)»	46 ( 1.5)»	52 ( 1.9)«	54 ( 1.5)«
NORTH DAKOTA	4 ( 0.7)	2 ( 0.7)	31 ( 2.1)	28 ( 1.9)	79 ( 1.5)	77 ( 1.9)	21 ( 1.5)	23 ( 1.9)
OREGON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
RHODE ISLAND	1 ( 0.4)	1 ( 0.5)	17 ( 1.6)	15 ( 1.3)	56 ( 1.8)	57 ( 1.4)»	44 ( 1.8)	43 ( 1.4)«
SOUTH CAROLINA	2 ( 0.5)	2 ( 0.6)	16 ( 1.3)	14 ( 1.4)	48 ( 1.8)	47 ( 1.6)	52 ( 1.8)	53 ( 1.6)
TENNESSEE	2 ( 0.6)	0 ( 0.3)	14 ( 1.4)	9 ( 1.1)	50 ( 2.2)	44 ( 2.2)	50 ( 2.2)	56 ( 2.2)
TEXAS	4 ( 0.9)	3 ( 0.8)	21 ( 1.4)»	16 ( 1.6)	55 ( 1.6)	50 ( 2.1)	45 ( 1.6)	50 ( 2.1)
UTAH	3 ( 0.5)	2 ( 0.4)	24 ( 1.5)	21 ( 1.2)	68 ( 1.4)	65 ( 1.6)	32 ( 1.4)	35 ( 1.6)
VERMONT	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
VIRGINIA	3 ( 0.9)	2 ( 0.4)	20 ( 1.6)	18 ( 1.3)	58 ( 2.2)	56 ( 2.1)	42 ( 2.2)	44 ( 2.1)
WASHINGTON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
WEST VIRGINIA	1 ( 0.3)	1 ( 0.3)	11 ( 1.2)	9 ( 0.9)	48 ( 1.8)	46 ( 2.0)	52 ( 1.8)	54 ( 2.0)
WISCONSIN	3 ( 0.8)	3 ( 0.6)	28 ( 1.6)	26 ( 1.9)	72 ( 2.3)	70 ( 2.3)	28 ( 2.3)	30 ( 2.3)
WYOMING	2 ( 0.6)	2 ( 0.6)	21 ( 1.6)	21 ( 1.6)	66 ( 1.8)	68 ( 1.8)	34 ( 1.8)	32 ( 1.8)
<b>Other Jurisdictions</b>								
DDESS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
DoDDS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
GUAM	0 ( 0.3)	0 ( 0.2)	6 ( 1.0)	5 ( 1.0)	25 ( 1.5)	26 ( 2.0)	75 ( 1.5)	74 ( 2.0)

— State or other jurisdiction did not participate in the NAEP assessment year presented in this table.  
 ... Characteristics of the sample do not permit a reliable estimate.  
 » ( « ) The value for the students was significantly higher (lower) than in the 1990 assessment at about the 95% confidence level using appropriate multiple comparison procedures.  
 SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 4.7** (continued)

**1996 Mathematics Assessment**



POPULATION: 1996 Grade 8 Public School Students  
 REPORTED STATISTICS: Percentage of Students by Achievement Levels  
 BREAKDOWNS BY: Gender

Achievement Level...	Advanced		At or Above Proficient		At or Above Basic		Below Basic	
	Male	Female	Male	Female	Male	Female	Male	Female
What is your gender?								
<b>JURISDICTIONS</b>	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )
<b>Nation</b>								
NATION	4 ( 0.7)	3 ( 0.6)	24 ( 1.6)»	21 ( 1.4)»	60 ( 1.9)»	61 ( 1.5)»	40 ( 1.9)«	39 ( 1.5)«
NORTHEAST	6 ( 2.8)	5 ( 2.1)	28 ( 5.7)	26 ( 4.5)	66 ( 5.3)	65 ( 2.9)	34 ( 5.3)	35 ( 2.9)
SOUTHEAST	3 ( 1.0)	2 ( 0.6)	18 ( 2.9)	15 ( 2.3)	55 ( 4.6)	53 ( 4.1)	45 ( 4.6)	47 ( 4.1)
CENTRAL	6 ( 1.5)	3 ( 1.1)	30 ( 3.2)	27 ( 3.3)»	66 ( 4.1)	70 ( 4.1)	34 ( 4.1)	30 ( 4.1)
WEST	3 ( 0.9)	3 ( 1.0)	21 ( 2.3)	20 ( 2.4)	57 ( 2.8)	59 ( 3.0)	43 ( 2.8)	41 ( 3.0)
<b>States</b>								
ALABAMA	2 ( 0.7)	1 ( 0.3)	14 ( 2.3)	11 ( 1.7)	46 ( 3.2)	44 ( 2.6)	54 ( 3.2)	56 ( 2.6)
ALASKA†	7 ( 1.7)	6 ( 1.0)	29 ( 2.1)	30 ( 2.1)	67 ( 2.9)	69 ( 2.6)	33 ( 2.9)	31 ( 2.6)
ARIZONA	2 ( 0.5)	2 ( 0.5)	20 ( 1.6)	16 ( 1.3)»	61 ( 2.3)»	54 ( 2.6)»	39 ( 2.3)«	46 ( 2.6)«
ARKANSAS†	2 ( 0.6)	1 ( 0.4)	14 ( 1.4)	12 ( 1.1)»	51 ( 2.2)	53 ( 2.0)»»	49 ( 2.2)	47 ( 2.0)«<
CALIFORNIA	4 ( 0.8)	2 ( 0.4)	19 ( 2.0)	15 ( 1.4)	52 ( 2.8)	51 ( 2.4)»	48 ( 2.8)	49 ( 2.4)«
COLORADO	4 ( 0.7)	2 ( 0.5)	28 ( 1.7)»	23 ( 1.7)»	69 ( 1.9)»	64 ( 1.8)»	31 ( 1.9)«	36 ( 1.8)«
CONNECTICUT	5 ( 0.8)	5 ( 0.9)	30 ( 2.1)»	31 ( 1.6)»	72 ( 1.9)»	69 ( 2.0)»	28 ( 1.9)«	31 ( 2.0)«
DELAWARE	4 ( 0.8)	2 ( 0.7)	21 ( 2.0)	17 ( 1.8)	58 ( 2.4)»	53 ( 2.0)	42 ( 2.4)»	47 ( 2.0)
DISTRICT OF COLUMBIA	1 ( 0.2)	1 ( 0.4)	6 ( 1.0)»	5 ( 1.0)	18 ( 1.5)	21 ( 1.5)	82 ( 1.5)	79 ( 1.5)
FLORIDA	2 ( 0.7)	1 ( 0.5)	18 ( 1.6)	16 ( 1.7)»	55 ( 2.2)»	52 ( 2.7)»	45 ( 2.2)«	48 ( 2.7)«
GEORGIA	2 ( 0.5)	2 ( 0.6)	17 ( 2.0)	14 ( 2.0)	51 ( 2.2)	51 ( 2.4)	49 ( 2.2)	49 ( 2.4)
HAWAII	2 ( 0.4)	2 ( 0.6)	15 ( 1.1)	17 ( 1.4)»	48 ( 1.8)»	55 ( 2.1)»	52 ( 1.8)«	45 ( 2.1)«
INDIANA	3 ( 0.6)	3 ( 0.8)	24 ( 2.0)	23 ( 1.9)»	68 ( 2.4)»	68 ( 2.1)»»	32 ( 2.4)«	32 ( 2.1)«<
IOWA†	3 ( 0.5)	5 ( 1.1)	31 ( 2.3)	32 ( 2.1)»	78 ( 1.7)»	78 ( 1.7)»	22 ( 1.7)«	22 ( 1.7)«
KENTUCKY	2 ( 0.5)	1 ( 0.5)	17 ( 1.6)»	15 ( 1.5)»	57 ( 1.9)»	56 ( 2.0)»	43 ( 1.9)«	44 ( 2.0)«
LOUISIANA	1 ( 0.3)	0 ( 0.3)	8 ( 1.3)	7 ( 1.3)	39 ( 2.1)»	38 ( 2.3)	61 ( 2.1)«	62 ( 2.3)
MAINE	6 ( 1.1)	5 ( 0.8)	33 ( 2.1)	29 ( 2.0)	78 ( 1.7)	77 ( 2.0)	22 ( 1.7)	23 ( 2.0)
MARYLAND†	6 ( 1.4)	4 ( 1.0)	26 ( 2.8)»	23 ( 2.3)»	59 ( 2.7)»	56 ( 2.4)	41 ( 2.7)«	44 ( 2.4)
MASSACHUSETTS	5 ( 0.9)	5 ( 1.1)	29 ( 2.2)	26 ( 2.1)	69 ( 2.4)	68 ( 2.9)	31 ( 2.4)	32 ( 2.9)
MICHIGAN†	5 ( 0.9)»	3 ( 0.9)	30 ( 2.1)»	27 ( 2.0)»»	69 ( 2.6)»	65 ( 2.4)»	31 ( 2.6)«	35 ( 2.4)«
MINNESOTA	7 ( 1.3)	5 ( 0.8)	36 ( 2.4)»	33 ( 1.9)»	76 ( 2.0)»	74 ( 1.9)»	24 ( 2.0)«	26 ( 1.9)«
MISSISSIPPI	1 ( 0.3)	0 ( 0.2)	7 ( 0.9)	7 ( 1.0)	37 ( 1.9)	34 ( 1.8)	63 ( 1.9)	66 ( 1.8)
MISSOURI	3 ( 0.8)	2 ( 0.5)	23 ( 1.8)	21 ( 1.6)	64 ( 2.1)	63 ( 2.5)	36 ( 2.1)	37 ( 2.5)
MONTANA†	6 ( 0.7)	5 ( 0.8)»	33 ( 1.9)	31 ( 2.3)»	74 ( 2.5)	76 ( 2.2)	26 ( 2.5)	24 ( 2.2)
NEBRASKA	5 ( 0.9)	5 ( 0.9)»	32 ( 2.0)	30 ( 1.7)»	76 ( 1.5)»	76 ( 1.8)»	24 ( 1.5)«	24 ( 1.8)«
NEW MEXICO	2 ( 0.6)	1 ( 0.4)	15 ( 1.5)	14 ( 1.4)»	50 ( 2.0)	51 ( 2.3)»	50 ( 2.0)	49 ( 2.3)«
NEW YORK†	4 ( 0.9)	2 ( 0.7)	24 ( 1.6)»	20 ( 2.3)»	63 ( 2.4)»	59 ( 2.3)»	37 ( 2.4)«	41 ( 2.3)«
NORTH CAROLINA	4 ( 0.9)»	3 ( 0.7)»	23 ( 1.6)»»	18 ( 1.6)»»	59 ( 2.5)»»	54 ( 1.9)»	41 ( 2.5)«<	46 ( 1.9)«
NORTH DAKOTA	5 ( 1.0)	4 ( 0.7)	34 ( 1.3)	32 ( 2.4)»	77 ( 1.7)	78 ( 1.6)	23 ( 1.7)	22 ( 1.6)
OREGON	4 ( 0.8)	5 ( 1.1)	26 ( 2.1)	26 ( 1.8)»	67 ( 2.1)	67 ( 2.0)	33 ( 2.1)	33 ( 2.0)
RHODE ISLAND	3 ( 1.0)	2 ( 0.6)	22 ( 1.6)»	19 ( 1.5)»	62 ( 2.0)»	58 ( 2.1)»	38 ( 2.0)«	42 ( 2.1)«
SOUTH CAROLINA†	3 ( 0.6)	1 ( 0.4)	16 ( 1.5)	12 ( 1.3)	50 ( 2.2)	47 ( 1.9)	50 ( 2.2)	53 ( 1.9)
TENNESSEE	2 ( 0.5)	1 ( 0.4)	16 ( 1.6)	14 ( 1.4)	53 ( 2.6)	53 ( 2.1)	47 ( 2.6)	47 ( 2.1)
TEXAS	3 ( 0.7)	2 ( 0.5)	23 ( 1.9)»	19 ( 1.9)»	63 ( 2.2)»	57 ( 2.3)»	37 ( 2.2)«	43 ( 2.3)«
UTAH	4 ( 0.5)	2 ( 0.5)	27 ( 1.6)	22 ( 1.5)	71 ( 1.6)	69 ( 2.1)	29 ( 1.6)	31 ( 2.1)
VERMONT†	5 ( 1.1)	3 ( 0.5)	28 ( 2.1)	26 ( 1.8)	73 ( 3.0)	71 ( 1.7)	27 ( 3.0)	29 ( 1.7)
VIRGINIA	4 ( 0.8)	2 ( 0.4)	24 ( 1.5)	18 ( 1.6)	61 ( 2.2)»	56 ( 2.7)	39 ( 2.2)«	44 ( 2.7)
WASHINGTON	4 ( 0.9)	4 ( 0.7)	27 ( 1.5)	26 ( 1.6)	66 ( 2.0)	68 ( 2.0)	34 ( 2.0)	32 ( 2.0)
WEST VIRGINIA	1 ( 0.4)	1 ( 0.7)	14 ( 1.0)»	14 ( 1.2)»»	52 ( 2.0)»	55 ( 2.1)»»	48 ( 2.0)«	45 ( 2.1)«<
WISCONSIN†	7 ( 1.1)	4 ( 0.9)	33 ( 2.3)»	31 ( 2.2)»	74 ( 2.2)»	76 ( 2.4)»	26 ( 2.2)«	24 ( 2.4)«
WYOMING	3 ( 0.7)	2 ( 0.6)	24 ( 1.5)	20 ( 1.4)»	69 ( 1.5)	68 ( 2.1)»	31 ( 1.5)	32 ( 2.1)«
<b>Other Jurisdictions</b>								
DDESS	7 ( 1.9)	3 ( 0.9)	24 ( 2.8)	18 ( 3.6)	58 ( 3.6)	56 ( 4.1)	42 ( 3.6)	44 ( 4.1)
DoDDS	4 ( 1.1)	2 ( 1.0)	25 ( 1.7)	21 ( 2.3)	66 ( 1.5)	65 ( 2.8)	34 ( 1.5)	35 ( 2.8)
GUAM	0 ( ... )	1 ( ... )	6 ( 1.3)	6 ( 1.0)	26 ( 2.6)	32 ( 2.7)»	74 ( 2.6)	68 ( 2.7)«

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).  
 ... Characteristics of the sample do not permit a reliable estimate.  
 » (») The value for the students was significantly higher (lower) than in the 1990 assessment at about the 95% confidence level using appropriate multiple comparison procedures.  
 > (<) The value for the students was significantly higher (lower) than in the 1992 assessment at about the 95% confidence level using appropriate multiple comparison procedures.  
 SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 4.8**

**1990 Mathematics Assessment**



POPULATION: 1990 Grade 8 Public School Students  
 REPORTED STATISTICS: Percentage of Students by Achievement Levels  
 BREAKDOWNS BY: Race/Ethnicity

Achievement Level...	Advanced				
	White	Black	Hispanic	Asian/ Pacific Islander	American Indian
Which best describes your race or your ethnic background?					
JURISDICTIONS	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )
<b>Nation</b>					
NATION	3 ( 0.5)	0 ( ... )	0 ( 0.2)	6 ( 2.7)	0 ( ... )
NORTHEAST	3 ( 1.1)	0 ( ... )	... ( ... )	... ( ... )	... ( ... )
SOUTHEAST	2 ( 0.8)	0 ( ... )	... ( ... )	... ( ... )	... ( ... )
CENTRAL	2 ( 0.6)	0 ( ... )	... ( ... )	... ( ... )	... ( ... )
WEST	3 ( 0.8)	0 ( ... )	1 ( 0.3)	... ( ... )	... ( ... )
<b>States</b>					
ALABAMA	1 ( 0.3)	0 ( ... )	1 ( ... )	... ( ... )	... ( ... )
ALASKA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
ARIZONA	2 ( 0.5)	0 ( ... )	0 ( ... )	... ( ... )	0 ( ... )
ARKANSAS	1 ( 0.3)	0 ( ... )	0 ( ... )	... ( ... )	... ( ... )
CALIFORNIA	3 ( 0.6)	0 ( ... )	0 ( ... )	4 ( 1.3)	... ( ... )
COLORADO	2 ( 0.4)	0 ( ... )	0 ( ... )	... ( ... )	... ( ... )
CONNECTICUT	4 ( 0.5)	0 ( ... )	1 ( ... )	... ( ... )	... ( ... )
DELAWARE	2 ( 0.6)	0 ( ... )	0 ( ... )	... ( ... )	... ( ... )
DISTRICT OF COLUMBIA	... ( ... )	0 ( ... )	0 ( ... )	... ( ... )	... ( ... )
FLORIDA	2 ( 0.5)	0 ( ... )	1 ( 0.5)	2 ( ... )	... ( ... )
GEORGIA	4 ( 0.6)	0 ( ... )	0 ( ... )	... ( ... )	... ( ... )
HAWAII	2 ( 0.8)	... ( ... )	0 ( ... )	2 ( 0.4)	... ( ... )
INDIANA	3 ( 0.5)	1 ( ... )	1 ( ... )	... ( ... )	... ( ... )
IOWA	3 ( 0.5)	... ( ... )	0 ( ... )	... ( ... )	... ( ... )
KENTUCKY	1 ( 0.3)	0 ( ... )	0 ( ... )	... ( ... )	... ( ... )
LOUISIANA	1 ( 0.3)	0 ( ... )	0 ( ... )	... ( ... )	... ( ... )
MAINE	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
MARYLAND	4 ( 0.7)	0 ( ... )	1 ( ... )	7 ( 2.8)	... ( ... )
MASSACHUSETTS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
MICHIGAN	2 ( 0.5)	0 ( ... )	1 ( ... )	... ( ... )	... ( ... )
MINNESOTA	3 ( 0.5)	1 ( ... )	0 ( ... )	8 ( 4.2)	... ( ... )
MISSISSIPPI	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
MISSOURI	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
MONTANA	4 ( 0.5)	... ( ... )	1 ( ... )	... ( ... )	0 ( ... )
NEBRASKA	4 ( 0.6)	0 ( ... )	0 ( ... )	... ( ... )	... ( ... )
NEW MEXICO	2 ( 0.7)	... ( ... )	0 ( 0.2)	... ( ... )	0 ( ... )
NEW YORK	4 ( 0.6)	0 ( ... )	1 ( 0.3)	10 ( 3.4)	... ( ... )
NORTH CAROLINA	1 ( 0.5)	0 ( ... )	0 ( ... )	... ( ... )	0 ( ... )
NORTH DAKOTA	4 ( 0.7)	... ( ... )	2 ( ... )	... ( ... )	0 ( ... )
OREGON	3 ( 0.5)	... ( ... )	3 ( 1.3)	4 ( 2.7)	0 ( ... )
RHODE ISLAND	2 ( 0.4)	0 ( ... )	0 ( ... )	... ( ... )	... ( ... )
SOUTH CAROLINA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
TENNESSEE	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
TEXAS	3 ( 0.6)	0 ( ... )	0 ( ... )	... ( ... )	... ( ... )
UTAH	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
VERMONT	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
VIRGINIA	4 ( 0.9)	0 ( 0.3)	1 ( ... )	16 ( 4.3)	... ( ... )
WASHINGTON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
WEST VIRGINIA	1 ( 0.2)	0 ( ... )	0 ( ... )	... ( ... )	... ( ... )
WISCONSIN	3 ( 0.4)	0 ( ... )	0 ( ... )	... ( ... )	... ( ... )
WYOMING	2 ( 0.3)	... ( ... )	0 ( ... )	... ( ... )	0 ( ... )
<b>Other Jurisdictions</b>					
DDESS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
DoDDS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
GUAM	1 ( ... )	... ( ... )	0 ( ... )	1 ( 0.2)	... ( ... )

— State or other jurisdiction did not participate in the NAEP assessment year presented in this table.

... Characteristics of the sample do not permit a reliable estimate.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.



**TABLE 4.8** (continued)

**1990 Mathematics Assessment**



POPULATION: 1990 Grade 8 Public School Students  
 REPORTED STATISTICS: Percentage of Students by Achievement Levels  
 BREAKDOWNS BY: Race/Ethnicity

Achievement Level...	At or Above Proficient				
	White	Black	Hispanic	Asian/ Pacific Islander	American Indian
Which best describes your race or your ethnic background?					
JURISDICTIONS	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )
<b>Nation</b>					
NATION	19 ( 1.4)	5 ( 1.1)	5 ( 1.5)	32 ( 6.5)	5 ( ... )
NORTHEAST	23 ( 3.2)	8 ( 5.1)	... ( ... )	... ( ... )	... ( ... )
SOUTHEAST	15 ( 3.5)	4 ( 1.5)	... ( ... )	... ( ... )	... ( ... )
CENTRAL	18 ( 1.4)	2 ( ... )	... ( ... )	... ( ... )	... ( ... )
WEST	19 ( 3.2)	8 ( 2.7)	5 ( 2.0)	... ( ... )	... ( ... )
<b>States</b>					
ALABAMA	12 ( 1.0)	2 ( 0.6)	4 ( 1.7)	... ( ... )	... ( ... )
ALASKA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
ARIZONA	18 ( 1.2)	4 ( 2.1)	4 ( 0.9)	... ( ... )	0 ( ... )
ARKANSAS	12 ( 0.9)	1 ( 0.4)	2 ( ... )	... ( ... )	... ( ... )
CALIFORNIA	19 ( 1.9)	3 ( 1.3)	3 ( 0.7)	20 ( 3.1)	... ( ... )
COLORADO	21 ( 1.2)	1 ( ... )	4 ( 1.0)	... ( ... )	... ( ... )
CONNECTICUT	26 ( 1.1)	4 ( 1.4)	4 ( 1.5)	... ( ... )	... ( ... )
DELAWARE	18 ( 1.0)	4 ( 0.9)	6 ( 3.3)	... ( ... )	... ( ... )
DISTRICT OF COLUMBIA	... ( ... )	1 ( 0.4)	2 ( 1.1)	... ( ... )	... ( ... )
FLORIDA	16 ( 1.4)	2 ( 0.8)	8 ( 1.4)	28 ( 6.8)	... ( ... )
GEORGIA	20 ( 1.7)	4 ( 0.8)	3 ( 1.6)	... ( ... )	... ( ... )
HAWAII	17 ( 2.8)	... ( ... )	4 ( 1.4)	12 ( 0.8)	... ( ... )
INDIANA	18 ( 1.1)	2 ( 1.0)	8 ( 3.2)	... ( ... )	... ( ... )
IOWA	26 ( 1.5)	... ( ... )	9 ( 2.9)	... ( ... )	... ( ... )
KENTUCKY	12 ( 0.9)	2 ( 0.9)	1 ( ... )	... ( ... )	... ( ... )
LOUISIANA	8 ( 1.1)	1 ( 0.4)	2 ( ... )	... ( ... )	... ( ... )
MAINE	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
MARYLAND	22 ( 1.4)	3 ( 0.8)	7 ( 1.7)	47 ( 6.5)	... ( ... )
MASSACHUSETTS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
MICHIGAN	19 ( 1.3)	1 ( 0.6)	4 ( 1.9)	... ( ... )	... ( ... )
MINNESOTA	25 ( 1.3)	8 ( 2.8)	6 ( 2.3)	20 ( 5.6)	... ( ... )
MISSISSIPPI	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
MISSOURI	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
MONTANA	29 ( 1.5)	... ( ... )	10 ( 5.2)	... ( ... )	7 ( 2.5)
NEBRASKA	27 ( 1.4)	2 ( ... )	4 ( 2.7)	... ( ... )	... ( ... )
NEW MEXICO	20 ( 2.0)	... ( ... )	4 ( 0.8)	... ( ... )	2 ( 1.0)
NEW YORK	21 ( 1.3)	4 ( 1.1)	5 ( 1.5)	32 ( 6.2)	... ( ... )
NORTH CAROLINA	13 ( 1.0)	2 ( 0.7)	1 ( 1.0)	... ( ... )	2 ( ... )
NORTH DAKOTA	29 ( 1.8)	... ( ... )	7 ( 4.5)	... ( ... )	2 ( ... )
OREGON	22 ( 1.2)	... ( ... )	10 ( 3.0)	28 ( 6.2)	6 ( 2.6)
RHODE ISLAND	17 ( 0.9)	2 ( 1.1)	2 ( 0.7)	... ( ... )	... ( ... )
SOUTH CAROLINA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
TENNESSEE	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
TEXAS	21 ( 1.8)	2 ( 1.1)	4 ( 1.0)	... ( ... )	... ( ... )
UTAH	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
VERMONT	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
VIRGINIA	21 ( 1.9)	4 ( 1.0)	9 ( 3.5)	41 ( 5.5)	... ( ... )
WASHINGTON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
WEST VIRGINIA	10 ( 0.8)	2 ( ... )	3 ( ... )	... ( ... )	... ( ... )
WISCONSIN	26 ( 1.5)	3 ( 1.8)	6 ( 2.6)	... ( ... )	... ( ... )
WYOMING	20 ( 1.1)	... ( ... )	7 ( 2.8)	... ( ... )	5 ( 2.4)
<b>Other Jurisdictions</b>					
DDESS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
DoDDS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
GUAM	10 ( 2.5)	... ( ... )	1 ( ... )	4 ( 0.6)	... ( ... )

— State or other jurisdiction did not participate in the NAEP assessment year presented in this table.

... Characteristics of the sample do not permit a reliable estimate.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 4.8** (continued)

**1990 Mathematics Assessment**



POPULATION: 1990 Grade 8 Public School Students  
 REPORTED STATISTICS: Percentage of Students by Achievement Levels  
 BREAKDOWNS BY: Race/Ethnicity

Achievement Level...	At or Above Basic				
	White	Black	Hispanic	Asian/ Pacific Islander	American Indian
Which best describes your race or your ethnic background?					
JURISDICTIONS	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )
<b>Nation</b>					
NATION	60 ( 1.8)	22 ( 2.5)	31 ( 3.2)	71 ( 6.1)	31 ( 9.7)
NORTHEAST	64 ( 4.4)	31 ( 8.0)	... ( ... )	... ( ... )	... ( ... )
SOUTHEAST	54 ( 3.3)	19 ( 3.3)	... ( ... )	... ( ... )	... ( ... )
CENTRAL	63 ( 3.0)	14 ( 3.5)	... ( ... )	... ( ... )	... ( ... )
WEST	59 ( 3.4)	33 ( 9.9)	31 ( 3.8)	... ( ... )	... ( ... )
<b>States</b>					
ALABAMA	52 ( 1.8)	18 ( 2.0)	15 ( 4.7)	... ( ... )	... ( ... )
ALASKA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
ARIZONA	61 ( 1.7)	30 ( 5.6)	27 ( 2.2)	... ( ... )	18 ( 2.8)
ARKANSAS	55 ( 1.4)	13 ( 1.3)	16 ( 5.0)	... ( ... )	... ( ... )
CALIFORNIA	61 ( 2.2)	19 ( 2.9)	23 ( 2.2)	59 ( 4.5)	... ( ... )
COLORADO	66 ( 1.3)	20 ( 5.5)	32 ( 2.6)	... ( ... )	... ( ... )
CONNECTICUT	69 ( 1.5)	28 ( 3.6)	23 ( 3.3)	... ( ... )	... ( ... )
DELAWARE	56 ( 2.1)	27 ( 2.9)	28 ( 6.0)	... ( ... )	... ( ... )
DISTRICT OF COLUMBIA	... ( ... )	15 ( 0.8)	10 ( 2.3)	... ( ... )	... ( ... )
FLORIDA	54 ( 1.9)	17 ( 1.8)	31 ( 2.8)	63 ( 6.8)	... ( ... )
GEORGIA	62 ( 1.8)	25 ( 1.7)	20 ( 3.7)	... ( ... )	... ( ... )
HAWAII	53 ( 2.5)	... ( ... )	18 ( 3.2)	40 ( 1.2)	... ( ... )
INDIANA	62 ( 1.4)	23 ( 3.9)	28 ( 4.1)	... ( ... )	... ( ... )
IOWA	72 ( 1.3)	... ( ... )	39 ( 4.9)	... ( ... )	... ( ... )
KENTUCKY	47 ( 1.8)	23 ( 3.4)	14 ( 3.8)	... ( ... )	... ( ... )
LOUISIANA	45 ( 2.0)	13 ( 1.5)	14 ( 3.7)	... ( ... )	... ( ... )
MAINE	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
MARYLAND	64 ( 1.8)	23 ( 2.5)	26 ( 3.2)	80 ( 4.2)	... ( ... )
MASSACHUSETTS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
MICHIGAN	62 ( 1.6)	13 ( 1.5)	29 ( 4.0)	... ( ... )	... ( ... )
MINNESOTA	71 ( 1.1)	22 ( 5.6)	26 ( 5.7)	61 ( 5.9)	... ( ... )
MISSISSIPPI	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
MISSOURI	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
MONTANA	79 ( 1.6)	... ( ... )	53 ( 6.2)	... ( ... )	42 ( 6.0)
NEBRASKA	73 ( 1.5)	19 ( 4.1)	41 ( 6.6)	... ( ... )	... ( ... )
NEW MEXICO	64 ( 2.1)	... ( ... )	31 ( 1.7)	... ( ... )	22 ( 2.4)
NEW YORK	65 ( 1.6)	20 ( 3.9)	24 ( 3.5)	68 ( 7.0)	... ( ... )
NORTH CAROLINA	50 ( 2.0)	18 ( 1.5)	10 ( 3.3)	... ( ... )	18 ( 4.9)
NORTH DAKOTA	79 ( 1.4)	... ( ... )	37 ( 8.0)	... ( ... )	26 ( 4.7)
OREGON	65 ( 1.4)	... ( ... )	38 ( 4.2)	69 ( 5.4)	42 ( 5.2)
RHODE ISLAND	55 ( 1.2)	14 ( 3.5)	15 ( 3.2)	... ( ... )	... ( ... )
SOUTH CAROLINA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
TENNESSEE	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
TEXAS	64 ( 2.0)	18 ( 2.3)	29 ( 1.9)	... ( ... )	... ( ... )
UTAH	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
VERMONT	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
VIRGINIA	60 ( 1.9)	26 ( 2.4)	31 ( 4.5)	83 ( 4.5)	... ( ... )
WASHINGTON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
WEST VIRGINIA	44 ( 1.1)	18 ( 6.1)	19 ( 4.3)	... ( ... )	... ( ... )
WISCONSIN	72 ( 1.6)	20 ( 5.1)	34 ( 5.6)	... ( ... )	... ( ... )
WYOMING	67 ( 1.4)	... ( ... )	39 ( 3.9)	... ( ... )	45 ( 6.7)
<b>Other Jurisdictions</b>					
DDESS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
D <sub>o</sub> DDS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
GUAM	48 ( 5.3)	... ( ... )	6 ( 1.5)	23 ( 1.2)	... ( ... )

— State or other jurisdiction did not participate in the NAEP assessment year presented in this table.

... Characteristics of the sample do not permit a reliable estimate.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 4.8** (continued)

**1990 Mathematics Assessment**



POPULATION: 1990 Grade 8 Public School Students  
 REPORTED STATISTICS: Percentage of Students by Achievement Levels  
 BREAKDOWNS BY: Race/Ethnicity

Achievement Level...	Below Basic				
	White	Black	Hispanic	Asian/ Pacific Islander	American Indian
Which best describes your race or your ethnic background?					
JURISDICTIONS	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )
<b>Nation</b>					
NATION	40 ( 1.8)	78 ( 2.5)	69 ( 3.2)	29 ( 6.1)	69 ( 9.7)
NORTHEAST	36 ( 4.4)	69 ( 8.0)	... ( ... )	... ( ... )	... ( ... )
SOUTHEAST	46 ( 3.3)	81 ( 3.3)	... ( ... )	... ( ... )	... ( ... )
CENTRAL	37 ( 3.0)	86 ( 3.5)	... ( ... )	... ( ... )	... ( ... )
WEST	41 ( 3.4)	67 ( 9.9)	69 ( 3.8)	... ( ... )	... ( ... )
<b>States</b>					
ALABAMA	48 ( 1.8)	82 ( 2.0)	85 ( 4.7)	... ( ... )	... ( ... )
ALASKA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
ARIZONA	39 ( 1.7)	70 ( 5.6)	73 ( 2.2)	... ( ... )	82 ( 2.8)
ARKANSAS	45 ( 1.4)	87 ( 1.3)	84 ( 5.0)	... ( ... )	... ( ... )
CALIFORNIA	39 ( 2.2)	81 ( 2.9)	77 ( 2.2)	41 ( 4.5)	... ( ... )
COLORADO	34 ( 1.3)	80 ( 5.5)	68 ( 2.6)	... ( ... )	... ( ... )
CONNECTICUT	31 ( 1.5)	72 ( 3.6)	77 ( 3.3)	... ( ... )	... ( ... )
DELAWARE	44 ( 2.1)	73 ( 2.9)	72 ( 6.0)	... ( ... )	... ( ... )
DISTRICT OF COLUMBIA	... ( ... )	85 ( 0.8)	90 ( 2.3)	... ( ... )	... ( ... )
FLORIDA	46 ( 1.9)	83 ( 1.8)	69 ( 2.8)	37 ( 6.8)	... ( ... )
GEORGIA	38 ( 1.8)	75 ( 1.7)	80 ( 3.7)	... ( ... )	... ( ... )
HAWAII	47 ( 2.5)	... ( ... )	82 ( 3.2)	60 ( 1.2)	... ( ... )
INDIANA	38 ( 1.4)	77 ( 3.9)	72 ( 4.1)	... ( ... )	... ( ... )
IOWA	28 ( 1.3)	... ( ... )	61 ( 4.9)	... ( ... )	... ( ... )
KENTUCKY	53 ( 1.8)	77 ( 3.4)	86 ( 3.8)	... ( ... )	... ( ... )
LOUISIANA	55 ( 2.0)	87 ( 1.5)	86 ( 3.7)	... ( ... )	... ( ... )
MAINE	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
MARYLAND	36 ( 1.8)	77 ( 2.5)	74 ( 3.2)	20 ( 4.2)	... ( ... )
MASSACHUSETTS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
MICHIGAN	38 ( 1.6)	87 ( 1.5)	71 ( 4.0)	... ( ... )	... ( ... )
MINNESOTA	29 ( 1.1)	78 ( 5.6)	74 ( 5.7)	39 ( 5.9)	... ( ... )
MISSISSIPPI	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
MISSOURI	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
MONTANA	21 ( 1.6)	... ( ... )	47 ( 6.2)	... ( ... )	58 ( 6.0)
NEBRASKA	27 ( 1.5)	81 ( 4.1)	59 ( 6.6)	... ( ... )	... ( ... )
NEW MEXICO	36 ( 2.1)	... ( ... )	69 ( 1.7)	... ( ... )	78 ( 2.4)
NEW YORK	35 ( 1.6)	80 ( 3.9)	76 ( 3.5)	32 ( 7.0)	... ( ... )
NORTH CAROLINA	50 ( 2.0)	82 ( 1.5)	90 ( 3.3)	... ( ... )	82 ( 4.9)
NORTH DAKOTA	21 ( 1.4)	... ( ... )	63 ( 8.0)	... ( ... )	74 ( 4.7)
OREGON	35 ( 1.4)	... ( ... )	62 ( 4.2)	31 ( 5.4)	58 ( 5.2)
RHODE ISLAND	45 ( 1.2)	86 ( 3.5)	85 ( 3.2)	... ( ... )	... ( ... )
SOUTH CAROLINA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
TENNESSEE	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
TEXAS	36 ( 2.0)	82 ( 2.3)	71 ( 1.9)	... ( ... )	... ( ... )
UTAH	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
VERMONT	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
VIRGINIA	40 ( 1.9)	74 ( 2.4)	69 ( 4.5)	17 ( 4.5)	... ( ... )
WASHINGTON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
WEST VIRGINIA	56 ( 1.1)	82 ( 6.1)	81 ( 4.3)	... ( ... )	... ( ... )
WISCONSIN	28 ( 1.6)	80 ( 5.1)	66 ( 5.6)	... ( ... )	... ( ... )
WYOMING	33 ( 1.4)	... ( ... )	61 ( 3.9)	... ( ... )	55 ( 6.7)
<b>Other Jurisdictions</b>					
DDESS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
D <sub>o</sub> DDS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
GUAM	52 ( 5.3)	... ( ... )	94 ( 1.5)	77 ( 1.2)	... ( ... )

— State or other jurisdiction did not participate in the NAEP assessment year presented in this table.

... Characteristics of the sample do not permit a reliable estimate.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 4.8** (continued)

**1992 Mathematics Assessment**



POPULATION: 1992 Grade 8 Public School Students  
 REPORTED STATISTICS: Percentage of Students by Achievement Levels  
 BREAKDOWNS BY: Race/Ethnicity

Achievement Level...	Advanced				
	White	Black	Hispanic	Asian/ Pacific Islander	American Indian
Which best describes your race or your ethnic background?					
JURISDICTIONS	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )
<b>Nation</b>					
NATION	4 ( 0.5)	0 ( ... )	0 ( 0.3)	14 ( 4.7)	0 ( ... )
NORTHEAST	6 ( 1.4)	1 ( ... )	0 ( ... )	... ( ... )	... ( ... )
SOUTHEAST	2 ( 0.5)	0 ( ... )	2 ( ... )	... ( ... )	... ( ... )
CENTRAL	3 ( 0.8)	0 ( ... )	0 ( ... )	... ( ... )	... ( ... )
WEST	4 ( 1.2)	0 ( ... )	0 ( ... )	16 ( 7.4)	... ( ... )
<b>States</b>					
ALABAMA	1 ( 0.4)	0 ( ... )	0 ( ... )	... ( ... )	... ( ... )
ALASKA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
ARIZONA	2 ( 0.5)	0 ( ... )	0 ( 0.2)	... ( ... )	0 ( ... )
ARKANSAS	1 ( 0.3)	0 ( ... )	1 ( ... )	... ( ... )	... ( ... )
CALIFORNIA	3 ( 1.4)	0 ( ... )	0 ( ... )	5 ( 1.7)	... ( ... )
COLORADO	3 ( 0.6)	0 ( ... )	0 ( ... )	... ( ... )	... ( ... )
CONNECTICUT	4 ( 0.8)	0 ( ... )	0 ( ... )	11 ( 5.1)	... ( ... )
DELAWARE	3 ( 0.7)	0 ( 0.1)	0 ( ... )	... ( ... )	... ( ... )
DISTRICT OF COLUMBIA	... ( ... )	0 ( ... )	0 ( ... )	... ( ... )	... ( ... )
FLORIDA	2 ( 0.4)	0 ( ... )	0 ( ... )	... ( ... )	... ( ... )
GEORGIA	2 ( 0.4)	0 ( ... )	0 ( ... )	... ( ... )	... ( ... )
HAWAII	2 ( 1.1)	... ( ... )	0 ( ... )	2 ( 0.5)	... ( ... )
INDIANA	3 ( 0.5)	0 ( ... )	2 ( ... )	... ( ... )	... ( ... )
IOWA	4 ( 0.7)	... ( ... )	0 ( ... )	... ( ... )	... ( ... )
KENTUCKY	2 ( 0.3)	0 ( ... )	0 ( ... )	... ( ... )	... ( ... )
LOUISIANA	1 ( 0.3)	0 ( ... )	0 ( ... )	... ( ... )	... ( ... )
MAINE	3 ( 0.5)	... ( ... )	... ( ... )	... ( ... )	1 ( ... )
MARYLAND	5 ( 0.9)	0 ( ... )	1 ( ... )	7 ( 2.9)	... ( ... )
MASSACHUSETTS	3 ( 0.6)	0 ( ... )	0 ( ... )	... ( ... )	... ( ... )
MICHIGAN	3 ( 0.5)	0 ( ... )	1 ( ... )	... ( ... )	... ( ... )
MINNESOTA	5 ( 0.7)	... ( ... )	0 ( ... )	... ( ... )	... ( ... )
MISSISSIPPI	1 ( 0.3)	0 ( ... )	0 ( ... )	... ( ... )	... ( ... )
MISSOURI	2 ( 0.4)	0 ( ... )	1 ( ... )	... ( ... )	... ( ... )
MONTANA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
NEBRASKA	3 ( 0.6)	0 ( ... )	0 ( ... )	... ( ... )	... ( ... )
NEW MEXICO	2 ( 0.6)	... ( ... )	0 ( 0.1)	... ( ... )	0 ( ... )
NEW YORK	4 ( 0.5)	0 ( ... )	1 ( ... )	11 ( 4.4)	... ( ... )
NORTH CAROLINA	2 ( 0.4)	0 ( ... )	0 ( ... )	... ( ... )	... ( ... )
NORTH DAKOTA	3 ( 0.5)	... ( ... )	... ( ... )	... ( ... )	0 ( ... )
OREGON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
RHODE ISLAND	2 ( 0.4)	0 ( ... )	0 ( ... )	1 ( ... )	... ( ... )
SOUTH CAROLINA	3 ( 0.8)	0 ( ... )	0 ( ... )	... ( ... )	... ( ... )
TENNESSEE	1 ( 0.5)	0 ( ... )	0 ( ... )	... ( ... )	... ( ... )
TEXAS	5 ( 0.9)	0 ( ... )	0 ( ... )	22 ( 7.2)	... ( ... )
UTAH	2 ( 0.4)	... ( ... )	1 ( ... )	... ( ... )	... ( ... )
VERMONT	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
VIRGINIA	3 ( 0.8)	0 ( ... )	0 ( ... )	4 ( 2.2)	... ( ... )
WASHINGTON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
WEST VIRGINIA	1 ( 0.2)	0 ( ... )	0 ( ... )	... ( ... )	... ( ... )
WISCONSIN	4 ( 0.7)	0 ( 0.2)	0 ( ... )	... ( ... )	0 ( ... )
WYOMING	2 ( 0.4)	... ( ... )	0 ( ... )	... ( ... )	0 ( ... )
<b>Other Jurisdictions</b>					
DDESS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
DoDDS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
GUAM	2 ( ... )	... ( ... )	0 ( ... )	1 ( 0.2)	... ( ... )

— State or other jurisdiction did not participate in the NAEP assessment year presented in this table.

... Characteristics of the sample do not permit a reliable estimate.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 4.8** (continued)

**1992 Mathematics Assessment**



POPULATION: 1992 Grade 8 Public School Students  
 REPORTED STATISTICS: Percentage of Students by Achievement Levels  
 BREAKDOWNS BY: Race/Ethnicity

Achievement Level...	At or Above Proficient				
	White	Black	Hispanic	Asian/ Pacific Islander	American Indian
Which best describes your race or your ethnic background?					
JURISDICTIONS	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )
<b>Nation</b>					
NATION	26 ( 1.3)»	2 ( 0.7)	6 ( 0.8)	38 ( 8.0)	7 ( 3.3)
NORTHEAST	30 ( 3.3)	3 ( ... )	6 ( 2.3)	... ( ... )	... ( ... )
SOUTHEAST	18 ( 1.3)	2 ( 0.7)	6 ( 2.9)	... ( ... )	... ( ... )
CENTRAL	28 ( 3.1)	3 ( 1.4)	3 ( 1.4)	... ( ... )	... ( ... )
WEST	27 ( 2.4)	1 ( 0.8)	6 ( 0.9)	38 (14.0)	... ( ... )
<b>States</b>					
ALABAMA	15 ( 1.3)	1 ( 0.4)	1 ( ... )	... ( ... )	... ( ... )
ALASKA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
ARIZONA	22 ( 1.7)	4 ( 2.5)	5 ( 1.3)	... ( ... )	6 ( 2.9)
ARKANSAS	13 ( 1.0)	2 ( 0.8)	3 ( 1.8)	... ( ... )	... ( ... )
CALIFORNIA	25 ( 2.2)	2 ( 1.2)	4 ( 1.0)	29 ( 3.3)	... ( ... )
COLORADO	26 ( 1.4)	5 ( 2.9)	7 ( 1.1)	... ( ... )	... ( ... )
CONNECTICUT	32 ( 1.2)»	3 ( 1.2)	4 ( 1.3)	45 ( 8.8)	... ( ... )
DELAWARE	21 ( 1.2)	3 ( 1.1)	3 ( ... )	... ( ... )	... ( ... )
DISTRICT OF COLUMBIA	... ( ... )	2 ( 0.6)	6 ( 3.1)	... ( ... )	... ( ... )
FLORIDA	22 ( 1.7)»	3 ( 0.9)	5 ( 1.5)	... ( ... )	... ( ... )
GEORGIA	19 ( 1.4)	3 ( 0.6)	4 ( ... )	... ( ... )	... ( ... )
HAWAII	18 ( 2.3)	... ( ... )	4 ( 1.0)	15 ( 0.8)	... ( ... )
INDIANA	22 ( 1.3)	3 ( 1.4)	8 ( 2.9)	... ( ... )	... ( ... )
IOWA	32 ( 1.4)»	... ( ... )	12 ( 4.7)	... ( ... )	... ( ... )
KENTUCKY	15 ( 1.2)	4 ( 1.8)	4 ( 2.5)	... ( ... )	... ( ... )
LOUISIANA	12 ( 1.6)	1 ( 0.4)	1 ( ... )	... ( ... )	... ( ... )
MAINE	26 ( 1.5)	... ( ... )	... ( ... )	... ( ... )	9 ( 4.6)
MARYLAND	29 ( 1.8)»	3 ( 0.9)	4 ( 1.9)	41 ( 6.3)	... ( ... )
MASSACHUSETTS	26 ( 1.4)	6 ( 2.2)	4 ( 1.6)	... ( ... )	... ( ... )
MICHIGAN	24 ( 1.8)	2 ( 0.7)	8 ( 3.0)	... ( ... )	... ( ... )
MINNESOTA	33 ( 1.2)»	... ( ... )	6 ( 2.5)	... ( ... )	... ( ... )
MISSISSIPPI	12 ( 1.3)	1 ( 0.4)	1 ( ... )	... ( ... )	... ( ... )
MISSOURI	22 ( 1.3)	3 ( 1.0)	9 ( 4.7)	... ( ... )	... ( ... )
MONTANA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
NEBRASKA	29 ( 1.7)	2 ( 1.3)	10 ( 2.8)	... ( ... )	... ( ... )
NEW MEXICO	19 ( 1.5)	... ( ... )	5 ( 0.6)	... ( ... )	1 ( ... )
NEW YORK	27 ( 1.7)	4 ( 1.5)	7 ( 1.7)	33 ( 7.8)	... ( ... )
NORTH CAROLINA	16 ( 1.2)	3 ( 0.8)	5 ( ... )	... ( ... )	... ( ... )
NORTH DAKOTA	31 ( 1.7)	... ( ... )	... ( ... )	... ( ... )	5 ( 3.0)
OREGON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
RHODE ISLAND	18 ( 1.3)	2 ( ... )	2 ( 0.9)	14 ( 3.3)	... ( ... )
SOUTH CAROLINA	23 ( 1.6)	3 ( 0.6)	2 ( ... )	... ( ... )	... ( ... )
TENNESSEE	15 ( 1.2)	2 ( 0.8)	2 ( ... )	... ( ... )	... ( ... )
TEXAS	27 ( 1.8)	5 ( 1.4)	7 ( 1.0)	57 ( 7.0)	... ( ... )
UTAH	24 ( 1.2)	... ( ... )	6 ( 2.6)	... ( ... )	... ( ... )
VERMONT	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
VIRGINIA	24 ( 1.3)	4 ( 1.1)	11 ( 4.0)	32 ( 5.4)	... ( ... )
WASHINGTON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
WEST VIRGINIA	10 ( 0.8)	3 ( 1.8)	2 ( ... )	... ( ... )	... ( ... )
WISCONSIN	30 ( 1.4)	8 ( 5.5)	6 ( 2.1)	... ( ... )	9 ( 3.4)
WYOMING	23 ( 1.1)	... ( ... )	9 ( 2.5)	... ( ... )	1 ( ... )
<b>Other Jurisdictions</b>					
DDESS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
DoDDS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
GUAM	19 ( 7.1)	... ( ... )	3 ( 1.3)	6 ( 0.6)	... ( ... )

— State or other jurisdiction did not participate in the NAEP assessment year presented in this table.

... Characteristics of the sample do not permit a reliable estimate.

» (\*) The value for the students was significantly higher (lower) than in the 1990 assessment at about the 95% confidence level using appropriate multiple comparison procedures.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 4.8** (continued)

**1992 Mathematics Assessment**



POPULATION: 1992 Grade 8 Public School Students  
 REPORTED STATISTICS: Percentage of Students by Achievement Levels  
 BREAKDOWNS BY: Race/Ethnicity

Achievement Level...	At or Above Basic				
	White	Black	Hispanic	Asian/ Pacific Islander	American Indian
Which best describes your race or your ethnic background?					
JURISDICTIONS	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )
<b>Nation</b>					
NATION	68 ( 1.4)»	20 ( 2.0)	32 ( 2.1)	75 ( 5.4)	38 ( 6.1)
NORTHEAST	68 ( 4.1)	20 ( 4.6)	29 ( 5.9)	... ( ... )	... ( ... )
SOUTHEAST	60 ( 2.2)	18 ( 2.7)	26 ( 5.9)	... ( ... )	... ( ... )
CENTRAL	74 ( 2.9)	24 ( 4.9)	32 ( 5.7)	... ( ... )	... ( ... )
WEST	68 ( 3.4)	22 ( 5.5)	34 ( 2.5)	72 ( 9.1)	... ( ... )
<b>States</b>					
ALABAMA	53 ( 2.0)	15 ( 1.7)	12 ( 3.8)	... ( ... )	... ( ... )
ALASKA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
ARIZONA	68 ( 1.9)	31 ( 6.5)	32 ( 3.7)	... ( ... )	39 ( 5.1)»
ARKANSAS	55 ( 2.0)	14 ( 1.9)	18 ( 4.5)	... ( ... )	... ( ... )
CALIFORNIA	69 ( 2.1)	21 ( 4.4)	28 ( 2.1)	65 ( 3.8)	... ( ... )
COLORADO	72 ( 1.4)»	26 ( 6.2)	41 ( 2.5)	... ( ... )	... ( ... )
CONNECTICUT	77 ( 1.2)»	27 ( 3.9)	27 ( 3.2)	75 ( 7.1)	... ( ... )
DELAWARE	64 ( 1.7)	25 ( 2.3)	29 ( 4.0)	... ( ... )	... ( ... )
DISTRICT OF COLUMBIA	... ( ... )	20 ( 1.3)»	19 ( 3.2)	... ( ... )	... ( ... )
FLORIDA	64 ( 1.9)»	22 ( 2.8)	33 ( 3.9)	... ( ... )	... ( ... )
GEORGIA	63 ( 2.1)	24 ( 1.9)	24 ( 8.7)	... ( ... )	... ( ... )
HAWAII	57 ( 2.5)	... ( ... )	29 ( 2.8)	48 ( 1.5)»	... ( ... )
INDIANA	65 ( 1.6)	27 ( 4.1)	41 ( 7.4)	... ( ... )	... ( ... )
IOWA	78 ( 1.4)»	... ( ... )	46 ( 5.2)	... ( ... )	... ( ... )
KENTUCKY	55 ( 1.5)»	25 ( 3.6)	23 ( 5.7)	... ( ... )	... ( ... )
LOUISIANA	52 ( 2.4)	17 ( 1.9)	19 ( 3.7)	... ( ... )	... ( ... )
MAINE	73 ( 1.2)	... ( ... )	... ( ... )	... ( ... )	49 ( 7.4)
MARYLAND	70 ( 1.7)	25 ( 2.1)	29 ( 3.8)	77 ( 5.0)	... ( ... )
MASSACHUSETTS	69 ( 1.7)	29 ( 4.5)	25 ( 4.5)	... ( ... )	... ( ... )
MICHIGAN	69 ( 1.8)»	18 ( 2.7)	38 ( 6.5)	... ( ... )	... ( ... )
MINNESOTA	77 ( 1.3)»	... ( ... )	40 ( 7.0)	... ( ... )	... ( ... )
MISSISSIPPI	53 ( 2.0)	14 ( 1.5)	10 ( 3.5)	... ( ... )	... ( ... )
MISSOURI	69 ( 1.5)	25 ( 3.4)	34 ( 6.8)	... ( ... )	... ( ... )
MONTANA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
NEBRASKA	76 ( 1.2)	19 ( 6.0)	41 ( 5.2)	... ( ... )	... ( ... )
NEW MEXICO	66 ( 1.9)	... ( ... )	33 ( 1.8)	... ( ... )	33 ( 5.4)
NEW YORK	73 ( 1.2)»	20 ( 4.4)	32 ( 4.4)	69 ( 8.8)	... ( ... )
NORTH CAROLINA	57 ( 1.5)	24 ( 2.0)	23 ( 6.2)	... ( ... )	... ( ... )
NORTH DAKOTA	80 ( 1.4)	... ( ... )	... ( ... )	... ( ... )	48 (11.6)
OREGON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
RHODE ISLAND	63 ( 1.4)»	28 ( 4.3)	18 ( 4.2)	59 ( 5.4)	... ( ... )
SOUTH CAROLINA	64 ( 1.5)	25 ( 1.4)	15 ( 2.9)	... ( ... )	... ( ... )
TENNESSEE	56 ( 1.7)	17 ( 2.7)	18 ( 5.4)	... ( ... )	... ( ... )
TEXAS	71 ( 2.0)	28 ( 3.0)	33 ( 1.7)	85 ( 4.6)	... ( ... )
UTAH	70 ( 1.2)	... ( ... )	40 ( 4.6)	... ( ... )	... ( ... )
VERMONT	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
VIRGINIA	66 ( 1.6)	29 ( 3.0)	44 ( 4.4)	71 ( 5.3)	... ( ... )
WASHINGTON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
WEST VIRGINIA	49 ( 1.6)	26 ( 5.9)	15 ( 5.4)	... ( ... )	... ( ... )
WISCONSIN	76 ( 1.6)	32 ( 9.4)	37 ( 7.7)	... ( ... )	53 (12.8)
WYOMING	71 ( 1.2)	... ( ... )	45 ( 4.5)	... ( ... )	32 ( 4.4)
<b>Other Jurisdictions</b>					
DDESS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
D <sub>o</sub> DDS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
GUAM	60 ( 7.7)	... ( ... )	15 ( 2.7)	25 ( 1.5)	... ( ... )

— State or other jurisdiction did not participate in the NAEP assessment year presented in this table.

... Characteristics of the sample do not permit a reliable estimate.

» (\*) The value for the students was significantly higher (lower) than in the 1990 assessment at about the 95% confidence level using appropriate multiple comparison procedures.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 4.8** (continued) **1992 Mathematics Assessment**



POPULATION: 1992 Grade 8 Public School Students  
 REPORTED STATISTICS: Percentage of Students by Achievement Levels  
 BREAKDOWNS BY: Race/Ethnicity

Achievement Level...	Below Basic				
	White	Black	Hispanic	Asian/ Pacific Islander	American Indian
Which best describes your race or your ethnic background?					
JURISDICTIONS	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )
<b>Nation</b>					
NATION	32 ( 1.4)«	80 ( 2.0)	68 ( 2.1)	25 ( 5.4)	62 ( 6.1)
NORTHEAST	32 ( 4.1)	80 ( 4.6)	71 ( 5.9)	... ( ... )	... ( ... )
SOUTHEAST	40 ( 2.2)	82 ( 2.7)	74 ( 5.9)	... ( ... )	... ( ... )
CENTRAL	26 ( 2.9)	76 ( 4.9)	68 ( 5.7)	... ( ... )	... ( ... )
WEST	32 ( 3.4)	78 ( 5.5)	66 ( 2.5)	28 ( 9.1)	... ( ... )
<b>States</b>					
ALABAMA	47 ( 2.0)	85 ( 1.7)	88 ( 3.8)	... ( ... )	... ( ... )
ALASKA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
ARIZONA	32 ( 1.9)	69 ( 6.5)	68 ( 3.7)	... ( ... )	61 ( 5.1)«
ARKANSAS	45 ( 2.0)	86 ( 1.9)	82 ( 4.5)	... ( ... )	... ( ... )
CALIFORNIA	31 ( 2.1)	79 ( 4.4)	72 ( 2.1)	35 ( 3.8)	... ( ... )
COLORADO	28 ( 1.4)«	74 ( 6.2)	59 ( 2.5)	... ( ... )	... ( ... )
CONNECTICUT	23 ( 1.2)«	73 ( 3.9)	73 ( 3.2)	25 ( 7.1)	... ( ... )
DELAWARE	36 ( 1.7)	75 ( 2.3)	71 ( 4.0)	... ( ... )	... ( ... )
DISTRICT OF COLUMBIA	... ( ... )	80 ( 1.3)«	81 ( 3.2)	... ( ... )	... ( ... )
FLORIDA	36 ( 1.9)«	78 ( 2.8)	67 ( 3.9)	... ( ... )	... ( ... )
GEORGIA	37 ( 2.1)	76 ( 1.9)	76 ( 8.7)	... ( ... )	... ( ... )
HAWAII	43 ( 2.5)	... ( ... )	71 ( 2.8)	52 ( 1.5)«	... ( ... )
INDIANA	35 ( 1.6)	73 ( 4.1)	59 ( 7.4)	... ( ... )	... ( ... )
IOWA	22 ( 1.4)«	... ( ... )	54 ( 5.2)	... ( ... )	... ( ... )
KENTUCKY	45 ( 1.5)«	75 ( 3.6)	77 ( 5.7)	... ( ... )	... ( ... )
LOUISIANA	48 ( 2.4)	83 ( 1.9)	81 ( 3.7)	... ( ... )	... ( ... )
MAINE	27 ( 1.2)	... ( ... )	... ( ... )	... ( ... )	51 ( 7.4)
MARYLAND	30 ( 1.7)	75 ( 2.1)	71 ( 3.8)	23 ( 5.0)	... ( ... )
MASSACHUSETTS	31 ( 1.7)	71 ( 4.5)	75 ( 4.5)	... ( ... )	... ( ... )
MICHIGAN	31 ( 1.8)«	82 ( 2.7)	62 ( 6.5)	... ( ... )	... ( ... )
MINNESOTA	23 ( 1.3)«	... ( ... )	60 ( 7.0)	... ( ... )	... ( ... )
MISSISSIPPI	47 ( 2.0)	86 ( 1.5)	90 ( 3.5)	... ( ... )	... ( ... )
MISSOURI	31 ( 1.5)	75 ( 3.4)	66 ( 6.8)	... ( ... )	... ( ... )
MONTANA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
NEBRASKA	24 ( 1.2)	81 ( 6.0)	59 ( 5.2)	... ( ... )	... ( ... )
NEW MEXICO	34 ( 1.9)	... ( ... )	67 ( 1.8)	... ( ... )	67 ( 5.4)
NEW YORK	27 ( 1.2)«	80 ( 4.4)	68 ( 4.4)	31 ( 8.8)	... ( ... )
NORTH CAROLINA	43 ( 1.5)	76 ( 2.0)	77 ( 6.2)	... ( ... )	... ( ... )
NORTH DAKOTA	20 ( 1.4)	... ( ... )	... ( ... )	... ( ... )	52 ( 11.6)
OREGON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
RHODE ISLAND	37 ( 1.4)«	72 ( 4.3)	82 ( 4.2)	41 ( 5.4)	... ( ... )
SOUTH CAROLINA	36 ( 1.5)	75 ( 1.4)	85 ( 2.9)	... ( ... )	... ( ... )
TENNESSEE	44 ( 1.7)	83 ( 2.7)	82 ( 5.4)	... ( ... )	... ( ... )
TEXAS	29 ( 2.0)	72 ( 3.0)	67 ( 1.7)	15 ( 4.6)	... ( ... )
UTAH	30 ( 1.2)	... ( ... )	60 ( 4.6)	... ( ... )	... ( ... )
VERMONT	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
VIRGINIA	34 ( 1.6)	71 ( 3.0)	56 ( 4.4)	29 ( 5.3)	... ( ... )
WASHINGTON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
WEST VIRGINIA	51 ( 1.6)	74 ( 5.9)	85 ( 5.4)	... ( ... )	... ( ... )
WISCONSIN	24 ( 1.6)	68 ( 9.4)	63 ( 7.7)	... ( ... )	47 ( 12.8)
WYOMING	29 ( 1.2)	... ( ... )	55 ( 4.5)	... ( ... )	68 ( 4.4)
<b>Other Jurisdictions</b>					
DDESS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
DøDDS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
GUAM	40 ( 7.7)	... ( ... )	85 ( 2.7)	75 ( 1.5)	... ( ... )

— State or other jurisdiction did not participate in the NAEP assessment year presented in this table.  
 ... Characteristics of the sample do not permit a reliable estimate.  
 » (») The value for the students was significantly higher (lower) than in the 1990 assessment at about the 95% confidence level using appropriate multiple comparison procedures.  
 SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 4.8** (continued) **1996 Mathematics Assessment**



POPULATION: 1996 Grade 8 Public School Students  
 REPORTED STATISTICS: Percentage of Students by Achievement Levels  
 BREAKDOWNS BY: Race/Ethnicity

Achievement Level...	Advanced				
	White	Black	Hispanic	Asian/ Pacific Islander	American Indian
Which best describes your race or your ethnic background?					
JURISDICTIONS	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )
<b>Nation</b>					
NATION	5 ( 0.8)	0 ( ... )	1 ( ... )	4 ( 1.6)	2 ( ... )
NORTHEAST	7 ( 3.1)	0 ( ... )	1 ( ... )	... ( ... )	... ( ... )
SOUTHEAST	3 ( 0.9)	0 ( ... )	1 ( ... )	... ( ... )	... ( ... )
CENTRAL	6 ( 1.3)	0 ( ... )	... ( ... )	... ( ... )	... ( ... )
WEST	4 ( 0.9)	0 ( ... )	1 ( ... )	2 ( 1.2)	... ( ... )
<b>States</b>					
ALABAMA	2 ( 0.6)	0 ( ... )	0 ( ... )	... ( ... )	... ( ... )
ALASKA†	9 ( 1.5)	... ( ... )	0 ( ... )	10 ( 6.8)	1 ( ... )
ARIZONA	3 ( 0.5)	0 ( ... )	1 ( ... )	... ( ... )	0 ( ... )
ARKANSAS†	2 ( 0.5)	0 ( ... )	... ( ... )	... ( ... )	... ( ... )
CALIFORNIA	4 ( 0.9)	0 ( ... )	0 ( ... )	9 ( 1.5)»	... ( ... )
COLORADO	4 ( 0.6)	0 ( ... )	1 ( 0.5)	7 ( 4.0)	... ( ... )
CONNECTICUT	6 ( 0.7)»	0 ( ... )	1 ( ... )	9 ( 4.0)	... ( ... )
DELAWARE	4 ( 0.8)	0 ( ... )	1 ( ... )	... ( ... )	... ( ... )
DISTRICT OF COLUMBIA	22 ( 7.0)	0 ( ... )	0 ( ... )	... ( ... )	... ( ... )
FLORIDA	3 ( 0.8)	0 ( ... )	1 ( 0.3)	... ( ... )	... ( ... )
GEORGIA	3 ( 0.7)	0 ( ... )	1 ( ... )	... ( ... )	... ( ... )
HAWAII	3 ( 1.1)	... ( ... )	1 ( ... )	3 ( 0.6)	... ( ... )
INDIANA	3 ( 0.7)	0 ( ... )	1 ( ... )	... ( ... )	... ( ... )
IOWA†	4 ( 0.6)	0 ( ... )	1 ( ... )	... ( ... )	... ( ... )
KENTUCKY	2 ( 0.4)	0 ( ... )	... ( ... )	... ( ... )	... ( ... )
LOUISIANA	1 ( 0.4)	0 ( ... )	0 ( ... )	... ( ... )	... ( ... )
MAINE	6 ( 0.8)	... ( ... )	... ( ... )	... ( ... )	... ( ... )
MARYLAND†	7 ( 1.2)	0 ( ... )	2 ( ... )	25 ( 6.5)	... ( ... )
MASSACHUSETTS	6 ( 0.9)	1 ( ... )	0 ( ... )	4 ( ... )	... ( ... )
MICHIGAN†	5 ( 0.9)»	0 ( ... )	1 ( ... )	... ( ... )	... ( ... )
MINNESOTA	6 ( 0.9)»	0 ( ... )	4 ( 3.1)	6 ( 2.5)	... ( ... )
MISSISSIPPI	1 ( 0.3)	0 ( ... )	0 ( ... )	... ( ... )	... ( ... )
MISSOURI	3 ( 0.6)	0 ( ... )	1 ( ... )	... ( ... )	... ( ... )
MONTANA†	6 ( 0.7)	... ( ... )	1 ( ... )	... ( ... )	1 ( ... )
NEBRASKA	6 ( 0.8)	0 ( ... )	0 ( ... )	... ( ... )	... ( ... )
NEW MEXICO	4 ( 0.7)	... ( ... )	0 ( 0.2)	... ( ... )	0 ( ... )
NEW YORK†	4 ( 0.7)	0 ( ... )	0 ( ... )	8 ( 2.9)	... ( ... )
NORTH CAROLINA	4 ( 0.9)»	0 ( ... )	1 ( ... )	... ( ... )	... ( ... )
NORTH DAKOTA	5 ( 0.8)	... ( ... )	1 ( ... )	... ( ... )	0 ( ... )
OREGON	5 ( 0.9)	... ( ... )	3 ( 1.5)	7 ( 3.3)	1 ( ... )
RHODE ISLAND	3 ( 0.5)	0 ( ... )	1 ( ... )	1 ( ... )	... ( ... )
SOUTH CAROLINA†	3 ( 0.6)	0 ( ... )	0 ( ... )	... ( ... )	... ( ... )
TENNESSEE	2 ( 0.4)	0 ( ... )	0 ( ... )	... ( ... )	... ( ... )
TEXAS	4 ( 0.7)	1 ( 0.2)	1 ( 0.4)	14 ( 5.7)	... ( ... )
UTAH	3 ( 0.4)	... ( ... )	0 ( ... )	2 ( ... )	... ( ... )
VERMONT†	4 ( 0.6)	... ( ... )	... ( ... )	... ( ... )	... ( ... )
VIRGINIA	4 ( 0.6)	0 ( ... )	2 ( ... )	7 ( 2.6)	... ( ... )
WASHINGTON	5 ( 0.8)	0 ( ... )	0 ( 0.3)	5 ( 2.4)	0 ( ... )
WEST VIRGINIA	1 ( 0.4)	0 ( ... )	0 ( ... )	... ( ... )	... ( ... )
WISCONSIN†	6 ( 0.9)»	0 ( ... )	0 ( ... )	... ( ... )	... ( ... )
WYOMING	3 ( 0.6)	... ( ... )	0 ( ... )	... ( ... )	0 ( ... )
<b>Other Jurisdictions</b>					
DDESS	9 ( 2.3)	1 ( ... )	3 ( ... )	... ( ... )	... ( ... )
DōDDS	5 ( 1.0)	1 ( ... )	1 ( 0.7)	5 ( 2.6)	... ( ... )
GUAM	... ( ... )	... ( ... )	0 ( ... )	0 ( ... )	... ( ... )

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).

... Characteristics of the sample do not permit a reliable estimate.

» (\*) The value for the students was significantly higher (lower) than in the 1990 assessment at about the 95% confidence level using appropriate multiple comparison procedures.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.



**TABLE 4.8** (continued)

**1996 Mathematics Assessment**



POPULATION: 1996 Grade 8 Public School Students  
 REPORTED STATISTICS: Percentage of Students by Achievement Levels  
 BREAKDOWNS BY: Race/Ethnicity

Achievement Level...	At or Above Proficient				
	White	Black	Hispanic	Asian/ Pacific Islander	American Indian
Which best describes your race or your ethnic background?					
JURISDICTIONS	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )
<b>Nation</b>					
NATION	30 ( 1.5)»	4 ( 0.9)	8 ( 1.6)	23 ( 3.8)	14 ( 5.4)
NORTHEAST	35 ( 5.4)	7 ( 2.3)	13 ( 7.0)	... ( ... )	... ( ... )
SOUTHEAST	22 ( 2.4)	2 ( 0.9)	5 ( 1.8)	... ( ... )	... ( ... )
CENTRAL	33 ( 2.7)»	4 ( 2.4)	... ( ... )	... ( ... )	... ( ... )
WEST	29 ( 2.6)	3 ( 1.0)	7 ( 1.9)	16 ( 4.2)	... ( ... )
<b>States</b>					
ALABAMA	18 ( 2.7)	1 ( 0.5)	6 ( 2.6)	... ( ... )	... ( ... )
ALASKA†	37 ( 1.9)	... ( ... )	13 ( 4.9)	30 ( 9.1)	12 ( 2.6)
ARIZONA	25 ( 1.7)»	5 ( 2.7)	6 ( 1.1)	... ( ... )	9 ( 5.3)
ARKANSAS†	17 ( 1.3)»	2 ( 0.9)	... ( ... )	... ( ... )	... ( ... )
CALIFORNIA	28 ( 2.3)»	2 ( ... )	5 ( 0.8)	29 ( 4.1)	... ( ... )
COLORADO	31 ( 1.4)»	8 ( 3.6)	10 ( 1.5)»	37 ( 8.6)	... ( ... )
CONNECTICUT	37 ( 1.6)»	4 ( 1.5)	8 ( 1.9)	35 ( 7.9)	... ( ... )
DELAWARE	24 ( 1.4)»	4 ( 1.2)	8 ( 3.2)	... ( ... )	... ( ... )
DISTRICT OF COLUMBIA	61 ( 9.2)	2 ( 0.6)	4 ( 1.5)	... ( ... )	... ( ... )
FLORIDA	26 ( 1.9)»	3 ( 1.1)	8 ( 1.6)	... ( ... )	... ( ... )
GEORGIA	24 ( 2.6)	3 ( 0.8)	10 ( 4.2)	... ( ... )	... ( ... )
HAWAII	22 ( 3.5)	... ( ... )	7 ( 1.6)	18 ( 1.3)»	... ( ... )
INDIANA	27 ( 1.8)»	2 ( 1.0)	10 ( 3.1)	... ( ... )	... ( ... )
IOWA†	33 ( 1.8)»	11 ( 4.1)	12 ( 5.0)	... ( ... )	... ( ... )
KENTUCKY	17 ( 1.3)»	2 ( ... )	... ( ... )	... ( ... )	... ( ... )
LOUISIANA	12 ( 1.6)	2 ( 0.5)	2 ( ... )	... ( ... )	... ( ... )
MAINE	32 ( 1.7)	... ( ... )	... ( ... )	... ( ... )	... ( ... )
MARYLAND†	34 ( 2.8)»	4 ( 1.0)	14 ( 3.7)	62 ( 5.9)	... ( ... )
MASSACHUSETTS	32 ( 2.1)	8 ( 3.3)	5 ( 2.2)	29 ( 6.5)	... ( ... )
MICHIGAN†	34 ( 1.8)»>	5 ( 2.0)	12 ( 4.6)	... ( ... )	... ( ... )
MINNESOTA	37 ( 1.9)»	6 ( 3.5)	19 ( 6.4)	27 ( 5.5)	... ( ... )
MISSISSIPPI	13 ( 1.6)	1 ( 0.3)	3 ( 1.7)	... ( ... )	... ( ... )
MISSOURI	25 ( 1.6)	4 ( 1.7)	10 ( 4.3)	... ( ... )	... ( ... )
MONTANA†	36 ( 1.5)»	... ( ... )	12 ( 4.1)	... ( ... )	14 ( 2.6)
NEBRASKA	34 ( 1.6)»	7 ( 3.3)	7 ( 2.8)	... ( ... )	... ( ... )
NEW MEXICO	28 ( 1.8)»>	... ( ... )	6 ( 1.2)	... ( ... )	6 ( 1.6)
NEW YORK†	31 ( 1.8)»	4 ( 1.8)	6 ( 1.4)	35 ( 6.3)	... ( ... )
NORTH CAROLINA	28 ( 1.6)»>	5 ( 1.0)	7 ( 2.8)	... ( ... )	... ( ... )
NORTH DAKOTA	35 ( 1.5)»	... ( ... )	13 ( 4.9)	... ( ... )	7 ( 3.6)
OREGON	29 ( 1.7)»	... ( ... )	13 ( 3.7)	34 ( 5.5)	10 ( 3.7)
RHODE ISLAND	24 ( 1.5)»	7 ( 3.6)	4 ( 1.4)	18 ( 5.5)	... ( ... )
SOUTH CAROLINA†	22 ( 2.1)	3 ( 0.6)	4 ( 2.9)	... ( ... )	... ( ... )
TENNESSEE	18 ( 1.5)	3 ( 1.2)	6 ( 2.7)	... ( ... )	... ( ... )
TEXAS	33 ( 1.8)»	5 ( 1.7)	8 ( 1.4)	57 (10.0)	... ( ... )
UTAH	27 ( 1.3)	... ( ... )	6 ( 1.8)	24 ( 7.5)	... ( ... )
VERMONT†	29 ( 1.4)	... ( ... )	... ( ... )	... ( ... )	... ( ... )
VIRGINIA	28 ( 1.4)»	4 ( 0.8)	9 ( 3.4)	38 ( 6.8)	... ( ... )
WASHINGTON	30 ( 1.4)	5 ( 2.7)	10 ( 2.8)	29 ( 4.8)	7 ( 2.6)
WEST VIRGINIA	15 ( 0.9)»>	2 ( ... )	7 ( 4.2)	... ( ... )	... ( ... )
WISCONSIN†	36 ( 2.0)»	2 ( ... )	10 ( 2.9)	... ( ... )	... ( ... )
WYOMING	24 ( 1.0)	... ( ... )	8 ( 1.6)	... ( ... )	4 ( 2.5)
<b>Other Jurisdictions</b>					
DDESS	34 ( 4.7)	8 ( 3.1)	18 ( 5.2)	... ( ... )	... ( ... )
DoDDS	32 ( 1.8)	6 ( 1.2)	15 ( 3.0)	24 ( 4.2)	... ( ... )
GUAM	... ( ... )	... ( ... )	2 ( 1.4)	6 ( 1.1)	... ( ... )

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).  
 ... Characteristics of the sample do not permit a reliable estimate.  
 » (») The value for the students was significantly higher (lower) than in the 1990 assessment at about the 95% confidence level using appropriate multiple comparison procedures.  
 > (<) The value for the students was significantly higher (lower) than in the 1992 assessment at about the 95% confidence level using appropriate multiple comparison procedures.  
 SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 4.8** (continued) **1996 Mathematics Assessment**



POPULATION: 1996 Grade 8 Public School Students  
 REPORTED STATISTICS: Percentage of Students by Achievement Levels  
 BREAKDOWNS BY: Race/Ethnicity

Achievement Level...	At or Above Basic				
	White	Black	Hispanic	Asian/ Pacific Islander	American Indian
Which best describes your race or your ethnic background?					
JURISDICTIONS	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )
<b>Nation</b>					
NATION	73 ( 1.5)»	27 ( 2.9)	37 ( 2.5)	58 ( 5.3)	50 ( 6.2)
NORTHEAST	76 ( 4.7)	37 ( 4.2)	51 ( 6.4)	... ( ... )	... ( ... )
SOUTHEAST	67 ( 3.0)	19 ( 2.6)	29 ( 8.3)	... ( ... )	... ( ... )
CENTRAL	76 ( 2.5)	24 ( 7.3)	... ( ... )	... ( ... )	... ( ... )
WEST	73 ( 2.2)	31 ( 4.4)	36 ( 2.7)	51 ( 6.1)	... ( ... )
<b>States</b>					
ALABAMA	63 ( 3.2)»	17 ( 2.0)	23 ( 5.0)	... ( ... )	... ( ... )
ALASKA†	77 ( 2.2)	... ( ... )	44 ( 8.1)	65 ( 6.9)	46 ( 4.5)
ARIZONA	72 ( 1.8)»	34 ( 6.2)	35 ( 2.6)	... ( ... )	40 ( 9.9)
ARKANSAS†	62 ( 1.8)»	17 ( 2.9)	... ( ... )	... ( ... )	... ( ... )
CALIFORNIA	71 ( 2.0)»	25 ( 4.4)	32 ( 2.4)»	67 ( 4.5)	... ( ... )
COLORADO	76 ( 1.2)»	40 ( 4.8)»	43 ( 3.1)»	76 ( 9.9)	... ( ... )
CONNECTICUT	80 ( 1.4)»	29 ( 3.8)	37 ( 2.5)»	70 ( 7.8)	... ( ... )
DELAWARE	66 ( 1.8)»	27 ( 4.2)	36 ( 5.5)	... ( ... )	... ( ... )
DISTRICT OF COLUMBIA	79 ( 6.3)	17 ( 1.5)	16 ( 4.1)	... ( ... )	... ( ... )
FLORIDA	72 ( 2.3)»	21 ( 2.2)	39 ( 2.6)	... ( ... )	... ( ... )
GEORGIA	68 ( 2.1)	24 ( 1.7)	36 ( 6.6)	... ( ... )	... ( ... )
HAWAII	62 ( 3.3)	... ( ... )	33 ( 3.1)»	55 ( 1.7)»	... ( ... )
INDIANA	74 ( 1.9)»»	31 ( 4.4)	44 ( 7.6)	... ( ... )	... ( ... )
IOWA†	79 ( 1.4)»	38 ( 6.9)	57 ( 6.3)	... ( ... )	... ( ... )
KENTUCKY	60 ( 1.6)»	31 ( 4.0)	... ( ... )	... ( ... )	... ( ... )
LOUISIANA	56 ( 1.8)»	17 ( 2.0)	24 ( 4.6)	... ( ... )	... ( ... )
MAINE	78 ( 1.6)	... ( ... )	... ( ... )	... ( ... )	... ( ... )
MARYLAND†	75 ( 1.9)»	26 ( 2.2)	36 ( 5.2)	86 ( 5.2)	... ( ... )
MASSACHUSETTS	75 ( 2.0)	35 ( 5.4)	26 ( 5.5)	67 ( 7.1)	... ( ... )
MICHIGAN†	77 ( 1.7)»	29 ( 4.6)»	37 ( 5.2)	... ( ... )	... ( ... )
MINNESOTA	79 ( 1.3)»	33 ( 7.1)	49 ( 7.7)»	60 ( 7.0)	... ( ... )
MISSISSIPPI	56 ( 1.9)	16 ( 1.3)	11 ( 2.9)	... ( ... )	... ( ... )
MISSOURI	70 ( 2.1)	26 ( 4.7)	48 ( 8.2)	... ( ... )	... ( ... )
MONTANA†	79 ( 1.5)	... ( ... )	52 ( 6.5)	... ( ... )	55 ( 5.3)
NEBRASKA	80 ( 1.1)»	40 ( 4.5)»	44 ( 5.6)	... ( ... )	... ( ... )
NEW MEXICO	72 ( 2.0)»	... ( ... )	38 ( 1.9)»	... ( ... )	37 ( 3.8)»
NEW YORK†	77 ( 1.8)»	32 ( 4.0)	30 ( 3.6)	75 ( 5.2)	... ( ... )
NORTH CAROLINA	69 ( 1.8)»»	31 ( 2.5)»	41 ( 5.6)»	... ( ... )	... ( ... )
NORTH DAKOTA	80 ( 1.1)	... ( ... )	55 ( 8.5)	... ( ... )	36 ( 7.0)
OREGON	70 ( 1.6)»	... ( ... )	46 ( 5.3)	78 ( 7.1)	46 ( 6.7)
RHODE ISLAND	67 ( 1.6)»	31 ( 5.0)»	27 ( 5.8)	56 ( 7.3)	... ( ... )
SOUTH CAROLINA†	65 ( 2.3)	28 ( 1.9)	26 ( 5.6)	... ( ... )	... ( ... )
TENNESSEE	62 ( 2.1)	19 ( 2.9)	32 ( 8.0)	... ( ... )	... ( ... )
TEXAS	78 ( 1.7)»	31 ( 4.3)»	42 ( 2.6)»	86 ( 5.5)	... ( ... )
UTAH	73 ( 1.3)	... ( ... )	45 ( 4.4)	62 ( 7.1)	... ( ... )
VERMONT†	74 ( 1.6)	... ( ... )	... ( ... )	... ( ... )	... ( ... )
VIRGINIA	71 ( 1.8)»	26 ( 3.3)	44 ( 7.3)	74 ( 5.5)	... ( ... )
WASHINGTON	74 ( 1.5)	27 ( 5.4)	36 ( 4.5)	66 ( 6.0)	45 ( 6.5)
WEST VIRGINIA	56 ( 1.7)»	29 ( 6.3)	30 ( 6.6)	... ( ... )	... ( ... )
WISCONSIN†	82 ( 1.7)»	19 ( 4.6)	45 ( 6.1)	... ( ... )	... ( ... )
WYOMING	72 ( 1.2)»	... ( ... )	45 ( 5.0)	... ( ... )	35 ( 7.3)
<b>Other Jurisdictions</b>					
DDESS	74 ( 5.5)	39 ( 6.0)	52 ( 7.7)	... ( ... )	... ( ... )
DōDDS	77 ( 2.2)	39 ( 3.8)	59 ( 4.2)	72 ( 3.8)	... ( ... )
GUAM	... ( ... )	... ( ... )	16 ( 3.0)»	31 ( 2.2)»	... ( ... )

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).

... Characteristics of the sample do not permit a reliable estimate.

» (») The value for the students was significantly higher (lower) than in the 1990 assessment at about the 95% confidence level using appropriate multiple comparison procedures.

> (<) The value for the students was significantly higher (lower) than in the 1992 assessment at about the 95% confidence level using appropriate multiple comparison procedures.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 4.8** (continued)

**1996 Mathematics Assessment**



POPULATION: 1996 Grade 8 Public School Students  
 REPORTED STATISTICS: Percentage of Students by Achievement Levels  
 BREAKDOWNS BY: Race/Ethnicity

Achievement Level...	Below Basic				
	White	Black	Hispanic	Asian/ Pacific Islander	American Indian
Which best describes your race or your ethnic background?					
JURISDICTIONS	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )
<b>Nation</b>					
NATION	27 ( 1.5)«	73 ( 2.9)	63 ( 2.5)	42 ( 5.3)	50 ( 6.2)
NORTHEAST	24 ( 4.7)	63 ( 4.2)	49 ( 6.4)	... ( ... )	... ( ... )
SOUTHEAST	33 ( 3.0)	81 ( 2.6)	71 ( 8.3)	... ( ... )	... ( ... )
CENTRAL	24 ( 2.5)	76 ( 7.3)	... ( ... )	... ( ... )	... ( ... )
WEST	27 ( 2.2)	69 ( 4.4)	64 ( 2.7)	49 ( 6.1)	... ( ... )
<b>States</b>					
ALABAMA	37 ( 3.2)«	83 ( 2.0)	77 ( 5.0)	... ( ... )	... ( ... )
ALASKA†	23 ( 2.2)	... ( ... )	56 ( 8.1)	35 ( 6.9)	54 ( 4.5)
ARIZONA	28 ( 1.8)«	66 ( 6.2)	65 ( 2.6)	... ( ... )	60 ( 9.9)
ARKANSAS†	38 ( 1.8)«	83 ( 2.9)	... ( ... )	... ( ... )	... ( ... )
CALIFORNIA	29 ( 2.0)«	75 ( 4.4)	68 ( 2.4)«	33 ( 4.5)	... ( ... )
COLORADO	24 ( 1.2)«	60 ( 4.8)«	57 ( 3.1)«	24 ( 9.9)	... ( ... )
CONNECTICUT	20 ( 1.4)«	71 ( 3.8)	63 ( 2.5)«	30 ( 7.8)	... ( ... )
DELAWARE	34 ( 1.8)«	73 ( 4.2)	64 ( 5.5)	... ( ... )	... ( ... )
DISTRICT OF COLUMBIA	21 ( 6.3)	83 ( 1.5)	84 ( 4.1)	... ( ... )	... ( ... )
FLORIDA	28 ( 2.3)«	79 ( 2.2)	61 ( 2.6)	... ( ... )	... ( ... )
GEORGIA	32 ( 2.1)	76 ( 1.7)	64 ( 6.6)	... ( ... )	... ( ... )
HAWAII	38 ( 3.3)	... ( ... )	67 ( 3.1)«	45 ( 1.7)«	... ( ... )
INDIANA	26 ( 1.9)«<	69 ( 4.4)	56 ( 7.6)	... ( ... )	... ( ... )
IOWA†	21 ( 1.4)«	62 ( 6.9)	43 ( 6.3)	... ( ... )	... ( ... )
KENTUCKY	40 ( 1.6)«	69 ( 4.0)	... ( ... )	... ( ... )	... ( ... )
LOUISIANA	44 ( 1.8)«	83 ( 2.0)	76 ( 4.6)	... ( ... )	... ( ... )
MAINE	22 ( 1.6)	... ( ... )	... ( ... )	... ( ... )	... ( ... )
MARYLAND†	25 ( 1.9)«	74 ( 2.2)	64 ( 5.2)	14 ( 5.2)	... ( ... )
MASSACHUSETTS	25 ( 2.0)	65 ( 5.4)	74 ( 5.5)	33 ( 7.1)	... ( ... )
MICHIGAN†	23 ( 1.7)«	71 ( 4.6)«	63 ( 5.2)	... ( ... )	... ( ... )
MINNESOTA	21 ( 1.3)«	67 ( 7.1)	51 ( 7.7)«	40 ( 7.0)	... ( ... )
MISSISSIPPI	44 ( 1.9)	84 ( 1.3)	89 ( 2.9)	... ( ... )	... ( ... )
MISSOURI	30 ( 2.1)	74 ( 4.7)	52 ( 8.2)	... ( ... )	... ( ... )
MONTANA†	21 ( 1.5)	... ( ... )	48 ( 6.5)	... ( ... )	45 ( 5.3)
NEBRASKA	20 ( 1.1)«	60 ( 4.5)«	56 ( 5.6)	... ( ... )	... ( ... )
NEW MEXICO	28 ( 2.0)«	... ( ... )	62 ( 1.9)«	... ( ... )	63 ( 3.8)«
NEW YORK†	23 ( 1.8)«	68 ( 4.0)	70 ( 3.6)	25 ( 5.2)	... ( ... )
NORTH CAROLINA	31 ( 1.8)«<	69 ( 2.5)«	59 ( 5.6)«	... ( ... )	... ( ... )
NORTH DAKOTA	20 ( 1.1)	... ( ... )	45 ( 8.5)	... ( ... )	64 ( 7.0)
OREGON	30 ( 1.6)«	... ( ... )	54 ( 5.3)	22 ( 7.1)	54 ( 6.7)
RHODE ISLAND	33 ( 1.6)«	69 ( 5.0)«	73 ( 5.8)	44 ( 7.3)	... ( ... )
SOUTH CAROLINA†	35 ( 2.3)	72 ( 1.9)	74 ( 5.6)	... ( ... )	... ( ... )
TENNESSEE	38 ( 2.1)	81 ( 2.9)	68 ( 8.0)	... ( ... )	... ( ... )
TEXAS	22 ( 1.7)«	69 ( 4.3)«	58 ( 2.6)«	14 ( 5.5)	... ( ... )
UTAH	27 ( 1.3)	... ( ... )	55 ( 4.4)	38 ( 7.1)	... ( ... )
VERMONT†	26 ( 1.6)	... ( ... )	... ( ... )	... ( ... )	... ( ... )
VIRGINIA	29 ( 1.8)«	74 ( 3.3)	56 ( 7.3)	26 ( 5.5)	... ( ... )
WASHINGTON	26 ( 1.5)	73 ( 5.4)	64 ( 4.5)	34 ( 6.0)	55 ( 6.5)
WEST VIRGINIA	44 ( 1.7)«	71 ( 6.3)	70 ( 6.6)	... ( ... )	... ( ... )
WISCONSIN†	18 ( 1.7)«	81 ( 4.6)	55 ( 6.1)	... ( ... )	... ( ... )
WYOMING	28 ( 1.2)«	... ( ... )	55 ( 5.0)	... ( ... )	65 ( 7.3)
<b>Other Jurisdictions</b>					
DDESS	26 ( 5.5)	61 ( 6.0)	48 ( 7.7)	... ( ... )	... ( ... )
DōDDS	23 ( 2.2)	61 ( 3.8)	41 ( 4.2)	28 ( 3.8)	... ( ... )
GUAM	... ( ... )	... ( ... )	84 ( 3.0)«	69 ( 2.2)«	... ( ... )

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).  
 ... Characteristics of the sample do not permit a reliable estimate.  
 » (») The value for the students was significantly higher (lower) than in the 1990 assessment at about the 95% confidence level using appropriate multiple comparison procedures.  
 > (<) The value for the students was significantly higher (lower) than in the 1992 assessment at about the 95% confidence level using appropriate multiple comparison procedures.  
 SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 4.9**

**1990 Mathematics Assessment**



POPULATION: 1990 Grade 8 Public School Students  
 REPORTED STATISTICS: Percentage of Students by Achievement Levels  
 BREAKDOWNS BY: Parents' Education Level

Achievement Level...	Advanced				
	Did Not Finish High School	High School Graduate	Some Education After High School	College Graduate	I Don't Know
What is the highest level of education either your mother or father obtained?					
JURISDICTIONS	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )
<b>Nation</b>					
NATION	0 ( ... )	0 ( ... )	3 ( 0.9 )	4 ( 0.8 )	0 ( ... )
NORTHEAST	... ( ... )	1 ( 0.5 )	2 ( ... )	5 ( 1.5 )	... ( ... )
SOUTHEAST	0 ( ... )	0 ( ... )	0 ( ... )	4 ( 1.2 )	0 ( ... )
CENTRAL	... ( ... )	0 ( ... )	3 ( 2.0 )	3 ( 1.3 )	... ( ... )
WEST	0 ( ... )	0 ( ... )	4 ( 1.8 )	4 ( 1.0 )	0 ( ... )
<b>States</b>					
ALABAMA	0 ( ... )	0 ( ... )	0 ( ... )	2 ( 0.6 )	0 ( ... )
ALASKA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
ARIZONA	0 ( ... )	0 ( ... )	1 ( 0.7 )	3 ( 0.7 )	0 ( ... )
ARKANSAS	0 ( ... )	0 ( ... )	1 ( 0.6 )	2 ( 0.6 )	0 ( ... )
CALIFORNIA	0 ( ... )	0 ( ... )	1 ( 0.6 )	4 ( 0.7 )	1 ( 0.5 )
COLORADO	0 ( ... )	1 ( ... )	1 ( 0.5 )	3 ( 0.7 )	0 ( ... )
CONNECTICUT	0 ( ... )	1 ( 0.4 )	1 ( 0.8 )	6 ( 0.7 )	0 ( ... )
DELAWARE	0 ( ... )	0 ( 0.3 )	0 ( ... )	4 ( 1.1 )	0 ( ... )
DISTRICT OF COLUMBIA	0 ( ... )	0 ( ... )	0 ( ... )	2 ( 0.6 )	0 ( ... )
FLORIDA	0 ( ... )	1 ( 0.3 )	1 ( 0.5 )	3 ( 0.7 )	1 ( ... )
GEORGIA	0 ( ... )	1 ( ... )	3 ( 0.7 )	5 ( 1.1 )	0 ( ... )
HAWAII	1 ( ... )	0 ( ... )	1 ( 0.8 )	3 ( 0.6 )	0 ( ... )
INDIANA	0 ( ... )	1 ( 0.3 )	3 ( 0.9 )	5 ( 1.0 )	0 ( ... )
IOWA	1 ( ... )	1 ( 0.4 )	3 ( 1.1 )	5 ( 1.0 )	2 ( ... )
KENTUCKY	0 ( ... )	1 ( 0.3 )	1 ( 0.7 )	2 ( 0.8 )	0 ( ... )
LOUISIANA	0 ( ... )	0 ( ... )	0 ( ... )	1 ( 0.6 )	1 ( ... )
MAINE	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
MARYLAND	1 ( ... )	0 ( 0.2 )	1 ( ... )	5 ( 1.1 )	1 ( ... )
MASSACHUSETTS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
MICHIGAN	0 ( ... )	0 ( ... )	2 ( 0.7 )	4 ( 1.0 )	0 ( ... )
MINNESOTA	0 ( ... )	1 ( ... )	3 ( 1.1 )	6 ( 0.8 )	1 ( ... )
MISSISSIPPI	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
MISSOURI	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
MONTANA	2 ( ... )	1 ( 0.6 )	5 ( 1.5 )	5 ( 1.3 )	0 ( ... )
NEBRASKA	0 ( ... )	1 ( 0.6 )	3 ( 1.2 )	6 ( 1.2 )	1 ( ... )
NEW MEXICO	0 ( ... )	0 ( ... )	1 ( 0.5 )	2 ( 0.8 )	0 ( ... )
NEW YORK	0 ( ... )	1 ( 0.5 )	3 ( 1.0 )	4 ( 0.8 )	1 ( ... )
NORTH CAROLINA	0 ( ... )	0 ( 0.1 )	0 ( ... )	2 ( 0.9 )	0 ( ... )
NORTH DAKOTA	0 ( ... )	2 ( 1.3 )	3 ( 1.1 )	5 ( 1.2 )	1 ( ... )
OREGON	0 ( ... )	0 ( ... )	3 ( 0.9 )	5 ( 0.9 )	0 ( ... )
RHODE ISLAND	0 ( ... )	0 ( 0.3 )	1 ( 0.4 )	3 ( 0.6 )	0 ( ... )
SOUTH CAROLINA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
TENNESSEE	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
TEXAS	0 ( ... )	0 ( ... )	1 ( 0.6 )	4 ( 0.8 )	1 ( 0.6 )
UTAH	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
VERMONT	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
VIRGINIA	0 ( ... )	1 ( 0.3 )	1 ( 0.7 )	8 ( 1.5 )	1 ( ... )
WASHINGTON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
WEST VIRGINIA	0 ( ... )	0 ( ... )	1 ( 0.7 )	2 ( 0.6 )	0 ( ... )
WISCONSIN	0 ( ... )	2 ( 0.5 )	3 ( 0.8 )	6 ( 0.9 )	0 ( ... )
WYOMING	0 ( ... )	1 ( 0.4 )	1 ( 0.7 )	3 ( 0.7 )	0 ( ... )
<b>Other Jurisdictions</b>					
DDESS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
D <sub>o</sub> DDS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
GUAM	1 ( ... )	0 ( ... )	0 ( ... )	1 ( 0.5 )	0 ( ... )

— State or other jurisdiction did not participate in the NAEP assessment year presented in this table.

... Characteristics of the sample do not permit a reliable estimate.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 4.9** (continued)

**1990 Mathematics Assessment**



POPULATION: 1990 Grade 8 Public School Students  
 REPORTED STATISTICS: Percentage of Students by Achievement Levels  
 BREAKDOWNS BY: Parents' Education Level

Achievement Level...	At or Above Proficient				
	Did Not Finish High School	High School Graduate	Some Education After High School	College Graduate	I Don't Know
What is the highest level of education either your mother or father obtained?					
JURISDICTIONS	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )
<b>Nation</b>					
NATION	3 ( 1.1 )	8 ( 1.3 )	15 ( 2.0 )	25 ( 2.2 )	5 ( 1.7 )
NORTHEAST	... ( ... )	11 ( 2.1 )	16 ( 5.6 )	31 ( 5.5 )	... ( ... )
SOUTHEAST	1 ( ... )	5 ( 2.2 )	11 ( 3.8 )	25 ( 4.3 )	2 ( ... )
CENTRAL	... ( ... )	12 ( 2.8 )	18 ( 4.4 )	18 ( 3.4 )	... ( ... )
WEST	5 ( 2.9 )	6 ( 2.6 )	15 ( 2.9 )	24 ( 3.6 )	5 ( 2.8 )
<b>States</b>					
ALABAMA	2 ( ... )	5 ( 1.1 )	10 ( 1.4 )	16 ( 1.5 )	3 ( 1.5 )
ALASKA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
ARIZONA	3 ( 1.3 )	6 ( 1.3 )	14 ( 2.2 )	21 ( 1.9 )	5 ( 1.7 )
ARKANSAS	2 ( 0.8 )	4 ( 0.7 )	12 ( 1.5 )	18 ( 1.5 )	3 ( 1.0 )
CALIFORNIA	3 ( 1.5 )	4 ( 1.2 )	13 ( 2.1 )	22 ( 2.1 )	5 ( 1.3 )
COLORADO	3 ( 1.4 )	8 ( 1.8 )	16 ( 1.9 )	25 ( 1.4 )	6 ( 2.0 )
CONNECTICUT	2 ( 1.5 )	9 ( 1.3 )	18 ( 1.6 )	34 ( 1.3 )	6 ( 2.4 )
DELAWARE	1 ( ... )	5 ( 0.8 )	13 ( 2.0 )	26 ( 2.0 )	4 ( 1.9 )
DISTRICT OF COLUMBIA	0 ( ... )	1 ( 0.4 )	2 ( 1.1 )	6 ( 1.3 )	1 ( ... )
FLORIDA	2 ( 1.1 )	6 ( 1.1 )	14 ( 1.9 )	20 ( 1.6 )	5 ( 1.6 )
GEORGIA	3 ( 1.3 )	7 ( 1.1 )	15 ( 1.7 )	24 ( 2.5 )	7 ( 2.1 )
HAWAII	6 ( 2.7 )	5 ( 1.0 )	14 ( 2.0 )	19 ( 1.4 )	5 ( 1.3 )
INDIANA	7 ( 2.3 )	9 ( 1.5 )	19 ( 1.6 )	26 ( 2.5 )	4 ( 2.1 )
IOWA	7 ( 2.9 )	15 ( 1.9 )	28 ( 2.4 )	33 ( 2.3 )	17 ( 3.5 )
KENTUCKY	2 ( 1.0 )	6 ( 0.9 )	18 ( 2.3 )	18 ( 1.9 )	4 ( 1.9 )
LOUISIANA	2 ( 0.7 )	3 ( 0.8 )	7 ( 1.3 )	10 ( 1.6 )	3 ( 1.2 )
MAINE	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
MARYLAND	5 ( 2.0 )	6 ( 0.9 )	13 ( 2.1 )	28 ( 1.9 )	6 ( 1.8 )
MASSACHUSETTS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
MICHIGAN	4 ( 1.4 )	7 ( 1.3 )	16 ( 2.3 )	25 ( 1.8 )	8 ( 1.8 )
MINNESOTA	7 ( 3.6 )	11 ( 1.6 )	26 ( 2.2 )	33 ( 1.5 )	11 ( 3.2 )
MISSISSIPPI	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
MISSOURI	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
MONTANA	11 ( 4.2 )	16 ( 2.3 )	29 ( 2.6 )	35 ( 2.0 )	6 ( 2.9 )
NEBRASKA	5 ( 2.5 )	15 ( 2.1 )	23 ( 2.4 )	34 ( 1.9 )	10 ( 2.6 )
NEW MEXICO	3 ( 1.5 )	3 ( 1.0 )	10 ( 1.6 )	21 ( 2.1 )	1 ( ... )
NEW YORK	2 ( ... )	6 ( 1.3 )	15 ( 2.6 )	25 ( 1.9 )	8 ( 2.5 )
NORTH CAROLINA	2 ( 1.1 )	4 ( 0.8 )	8 ( 1.4 )	17 ( 1.6 )	2 ( ... )
NORTH DAKOTA	7 ( ... )	17 ( 3.3 )	28 ( 4.9 )	35 ( 2.4 )	9 ( 4.2 )
OREGON	4 ( 1.8 )	11 ( 2.0 )	23 ( 2.2 )	28 ( 2.0 )	9 ( 2.1 )
RHODE ISLAND	4 ( 1.5 )	7 ( 1.4 )	15 ( 2.7 )	24 ( 1.7 )	4 ( 1.3 )
SOUTH CAROLINA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
TENNESSEE	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
TEXAS	3 ( 1.2 )	6 ( 1.3 )	15 ( 2.1 )	24 ( 2.0 )	4 ( 1.9 )
UTAH	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
VERMONT	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
VIRGINIA	3 ( 1.1 )	6 ( 0.9 )	16 ( 2.8 )	31 ( 2.5 )	8 ( 1.8 )
WASHINGTON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
WEST VIRGINIA	2 ( ... )	5 ( 1.0 )	12 ( 1.8 )	19 ( 1.7 )	4 ( 2.6 )
WISCONSIN	6 ( 2.1 )	17 ( 1.7 )	23 ( 2.5 )	35 ( 2.4 )	9 ( 2.4 )
WYOMING	3 ( 1.9 )	10 ( 1.3 )	18 ( 1.8 )	27 ( 1.5 )	4 ( 1.9 )
<b>Other Jurisdictions</b>					
DDESS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
D <sub>o</sub> DDS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
GUAM	1 ( ... )	3 ( 0.6 )	7 ( 2.8 )	6 ( 1.3 )	2 ( 0.9 )

— State or other jurisdiction did not participate in the NAEP assessment year presented in this table.

... Characteristics of the sample do not permit a reliable estimate.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 4.9** (continued)

**1990 Mathematics Assessment**



POPULATION: 1990 Grade 8 Public School Students  
 REPORTED STATISTICS: Percentage of Students by Achievement Levels  
 BREAKDOWNS BY: Parents' Education Level

Achievement Level...	At or Above Basic				
	Did Not Finish High School	High School Graduate	Some Education After High School	College Graduate	I Don't Know
What is the highest level of education either your mother or father obtained?					
JURISDICTIONS	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )
<b>Nation</b>					
NATION	24 ( 3.5)	41 ( 2.0)	57 ( 2.7)	66 ( 2.1)	29 ( 3.5)
NORTHEAST	... ( ... )	44 ( 4.4)	59 ( 4.6)	76 ( 3.4)	... ( ... )
SOUTHEAST	17 ( 6.7)	32 ( 5.9)	51 ( 6.1)	63 ( 4.2)	17 ( 5.3)
CENTRAL	... ( ... )	51 ( 4.0)	59 ( 5.2)	64 ( 5.3)	... ( ... )
WEST	30 ( 5.7)	36 ( 4.5)	61 ( 4.5)	62 ( 3.0)	34 ( 5.9)
<b>States</b>					
ALABAMA	24 ( 3.4)	32 ( 2.5)	48 ( 3.4)	52 ( 2.7)	27 ( 4.1)
ALASKA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
ARIZONA	25 ( 2.8)	35 ( 2.6)	54 ( 3.0)	62 ( 2.4)	30 ( 3.0)
ARKANSAS	27 ( 2.2)	35 ( 2.0)	56 ( 3.2)	58 ( 1.9)	21 ( 3.6)
CALIFORNIA	24 ( 3.4)	33 ( 2.8)	52 ( 3.2)	62 ( 2.3)	24 ( 2.8)
COLORADO	27 ( 4.6)	41 ( 2.8)	64 ( 2.0)	69 ( 1.7)	38 ( 4.0)
CONNECTICUT	27 ( 4.6)	44 ( 3.0)	60 ( 3.1)	75 ( 1.4)	37 ( 4.8)
DELAWARE	24 ( 5.4)	36 ( 3.0)	53 ( 4.3)	63 ( 1.9)	30 ( 4.7)
DISTRICT OF COLUMBIA	11 ( 2.8)	11 ( 1.5)	20 ( 2.8)	23 ( 2.3)	9 ( 2.1)
FLORIDA	23 ( 3.1)	30 ( 2.0)	53 ( 2.5)	56 ( 2.0)	27 ( 2.7)
GEORGIA	28 ( 2.9)	34 ( 2.2)	58 ( 2.7)	62 ( 2.6)	27 ( 4.0)
HAWAII	24 ( 4.6)	29 ( 2.0)	50 ( 3.0)	51 ( 1.8)	25 ( 2.5)
INDIANA	33 ( 4.0)	47 ( 2.2)	63 ( 2.3)	69 ( 2.1)	31 ( 4.6)
IOWA	45 ( 5.7)	62 ( 2.3)	76 ( 2.5)	77 ( 1.7)	55 ( 3.7)
KENTUCKY	23 ( 2.4)	38 ( 1.7)	57 ( 2.4)	58 ( 2.7)	22 ( 3.9)
LOUISIANA	18 ( 2.8)	26 ( 2.2)	42 ( 2.5)	41 ( 3.3)	22 ( 2.7)
MAINE	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
MARYLAND	30 ( 4.1)	34 ( 1.9)	53 ( 2.8)	63 ( 2.1)	33 ( 3.5)
MASSACHUSETTS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
MICHIGAN	29 ( 4.2)	43 ( 3.0)	60 ( 3.0)	65 ( 2.1)	36 ( 4.0)
MINNESOTA	38 ( 6.8)	55 ( 2.3)	77 ( 2.1)	77 ( 2.0)	46 ( 4.8)
MISSISSIPPI	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
MISSOURI	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
MONTANA	57 ( 4.3)	65 ( 2.9)	78 ( 2.7)	82 ( 2.0)	53 ( 9.6)
NEBRASKA	41 ( 6.6)	57 ( 3.1)	73 ( 2.4)	79 ( 1.7)	45 ( 4.8)
NEW MEXICO	23 ( 2.3)	32 ( 2.4)	51 ( 3.1)	62 ( 2.4)	17 ( 2.7)
NEW YORK	26 ( 4.4)	41 ( 2.2)	55 ( 3.0)	64 ( 1.6)	29 ( 4.0)
NORTH CAROLINA	20 ( 3.0)	27 ( 1.8)	48 ( 2.4)	54 ( 2.3)	15 ( 3.7)
NORTH DAKOTA	44 ( 7.7)	65 ( 3.3)	78 ( 3.4)	84 ( 1.8)	55 ( 6.6)
OREGON	37 ( 5.8)	45 ( 2.7)	69 ( 2.4)	72 ( 1.5)	41 ( 2.9)
RHODE ISLAND	25 ( 3.7)	39 ( 2.1)	58 ( 3.0)	64 ( 1.6)	20 ( 3.1)
SOUTH CAROLINA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
TENNESSEE	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
TEXAS	26 ( 2.6)	35 ( 2.3)	57 ( 2.9)	64 ( 2.0)	25 ( 3.4)
UTAH	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
VERMONT	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
VIRGINIA	24 ( 3.5)	37 ( 2.3)	58 ( 2.3)	69 ( 2.0)	30 ( 3.9)
WASHINGTON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
WEST VIRGINIA	22 ( 2.7)	35 ( 1.9)	50 ( 2.8)	60 ( 2.2)	22 ( 3.7)
WISCONSIN	38 ( 5.3)	60 ( 2.3)	71 ( 2.5)	76 ( 2.2)	41 ( 4.9)
WYOMING	41 ( 5.1)	51 ( 2.7)	71 ( 2.4)	74 ( 1.9)	29 ( 4.6)
<b>Other Jurisdictions</b>					
DDESS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
D <sub>o</sub> DDS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
GUAM	11 ( 3.6)	17 ( 1.6)	36 ( 4.3)	32 ( 2.0)	13 ( 1.8)

— State or other jurisdiction did not participate in the NAEP assessment year presented in this table.

... Characteristics of the sample do not permit a reliable estimate.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 4.9** (continued)

**1990 Mathematics Assessment**



POPULATION: 1990 Grade 8 Public School Students  
 REPORTED STATISTICS: Percentage of Students by Achievement Levels  
 BREAKDOWNS BY: Parents' Education Level

Achievement Level...	Below Basic				
	Did Not Finish High School	High School Graduate	Some Education After High School	College Graduate	I Don't Know
What is the highest level of education either your mother or father obtained?					
JURISDICTIONS	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )
<b>Nation</b>					
NATION	76 ( 3.5)	59 ( 2.0)	43 ( 2.7)	34 ( 2.1)	71 ( 3.5)
NORTHEAST	... ( ... )	56 ( 4.4)	41 ( 4.6)	24 ( 3.4)	... ( ... )
SOUTHEAST	83 ( 6.7)	68 ( 5.9)	49 ( 6.1)	37 ( 4.2)	83 ( 5.3)
CENTRAL	... ( ... )	49 ( 4.0)	41 ( 5.2)	36 ( 5.3)	... ( ... )
WEST	70 ( 5.7)	64 ( 4.5)	39 ( 4.5)	38 ( 3.0)	66 ( 5.9)
<b>States</b>					
ALABAMA	76 ( 3.4)	68 ( 2.5)	52 ( 3.4)	48 ( 2.7)	73 ( 4.1)
ALASKA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
ARIZONA	75 ( 2.8)	65 ( 2.6)	46 ( 3.0)	38 ( 2.4)	70 ( 3.0)
ARKANSAS	73 ( 2.2)	65 ( 2.0)	44 ( 3.2)	42 ( 1.9)	79 ( 3.6)
CALIFORNIA	76 ( 3.4)	67 ( 2.8)	48 ( 3.2)	38 ( 2.3)	76 ( 2.8)
COLORADO	73 ( 4.6)	59 ( 2.8)	36 ( 2.0)	31 ( 1.7)	62 ( 4.0)
CONNECTICUT	73 ( 4.6)	56 ( 3.0)	40 ( 3.1)	25 ( 1.4)	63 ( 4.8)
DELAWARE	76 ( 5.4)	64 ( 3.0)	47 ( 4.3)	37 ( 1.9)	70 ( 4.7)
DISTRICT OF COLUMBIA	89 ( 2.8)	89 ( 1.5)	80 ( 2.8)	77 ( 2.3)	91 ( 2.1)
FLORIDA	77 ( 3.1)	70 ( 2.0)	47 ( 2.5)	44 ( 2.0)	73 ( 2.7)
GEORGIA	72 ( 2.9)	66 ( 2.2)	42 ( 2.7)	38 ( 2.6)	73 ( 4.0)
HAWAII	76 ( 4.6)	71 ( 2.0)	50 ( 3.0)	49 ( 1.8)	75 ( 2.5)
INDIANA	67 ( 4.0)	53 ( 2.2)	37 ( 2.3)	31 ( 2.1)	69 ( 4.6)
IOWA	55 ( 5.7)	38 ( 2.3)	24 ( 2.5)	23 ( 1.7)	45 ( 3.7)
KENTUCKY	77 ( 2.4)	62 ( 1.7)	43 ( 2.4)	42 ( 2.7)	78 ( 3.9)
LOUISIANA	82 ( 2.8)	74 ( 2.2)	58 ( 2.5)	59 ( 3.3)	78 ( 2.7)
MAINE	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
MARYLAND	70 ( 4.1)	66 ( 1.9)	47 ( 2.8)	37 ( 2.1)	67 ( 3.5)
MASSACHUSETTS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
MICHIGAN	71 ( 4.2)	57 ( 3.0)	40 ( 3.0)	35 ( 2.1)	64 ( 4.0)
MINNESOTA	62 ( 6.8)	45 ( 2.3)	23 ( 2.1)	23 ( 2.0)	54 ( 4.8)
MISSISSIPPI	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
MISSOURI	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
MONTANA	43 ( 4.3)	35 ( 2.9)	22 ( 2.7)	18 ( 2.0)	47 ( 9.6)
NEBRASKA	59 ( 6.6)	43 ( 3.1)	27 ( 2.4)	21 ( 1.7)	55 ( 4.8)
NEW MEXICO	77 ( 2.3)	68 ( 2.4)	49 ( 3.1)	38 ( 2.4)	83 ( 2.7)
NEW YORK	74 ( 4.4)	59 ( 2.2)	45 ( 3.0)	36 ( 1.6)	71 ( 4.0)
NORTH CAROLINA	80 ( 3.0)	73 ( 1.8)	52 ( 2.4)	46 ( 2.3)	85 ( 3.7)
NORTH DAKOTA	56 ( 7.7)	35 ( 3.3)	22 ( 3.4)	16 ( 1.8)	45 ( 6.6)
OREGON	63 ( 5.8)	55 ( 2.7)	31 ( 2.4)	28 ( 1.5)	59 ( 2.9)
RHODE ISLAND	75 ( 3.7)	61 ( 2.1)	42 ( 3.0)	36 ( 1.6)	80 ( 3.1)
SOUTH CAROLINA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
TENNESSEE	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
TEXAS	74 ( 2.6)	65 ( 2.3)	43 ( 2.9)	36 ( 2.0)	75 ( 3.4)
UTAH	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
VERMONT	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
VIRGINIA	76 ( 3.5)	63 ( 2.3)	42 ( 2.3)	31 ( 2.0)	70 ( 3.9)
WASHINGTON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
WEST VIRGINIA	78 ( 2.7)	65 ( 1.9)	50 ( 2.8)	40 ( 2.2)	78 ( 3.7)
WISCONSIN	62 ( 5.3)	40 ( 2.3)	29 ( 2.5)	24 ( 2.2)	59 ( 4.9)
WYOMING	59 ( 5.1)	49 ( 2.7)	29 ( 2.4)	26 ( 1.9)	71 ( 4.6)
<b>Other Jurisdictions</b>					
DDESS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
D <sub>o</sub> DDS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
GUAM	89 ( 3.6)	83 ( 1.6)	64 ( 4.3)	68 ( 2.0)	87 ( 1.8)

— State or other jurisdiction did not participate in the NAEP assessment year presented in this table.

... Characteristics of the sample do not permit a reliable estimate.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 4.9** (continued)

**1992 Mathematics Assessment**



POPULATION: 1992 Grade 8 Public School Students  
 REPORTED STATISTICS: Percentage of Students by Achievement Levels  
 BREAKDOWNS BY: Parents' Education Level

Achievement Level...	Advanced				
	Did Not Finish High School	High School Graduate	Some Education After High School	College Graduate	I Don't Know
What is the highest level of education either your mother or father obtained?					
JURISDICTIONS	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )
<b>Nation</b>					
NATION	1 ( ... )	1 ( 0.4 )	3 ( 0.7 )	5 ( 0.8 )	0 ( ... )
NORTHEAST	0 ( ... )	1 ( ... )	4 ( 1.5 )	9 ( 2.3 )	1 ( ... )
SOUTHEAST	0 ( ... )	1 ( ... )	1 ( 0.7 )	2 ( 1.0 )	0 ( ... )
CENTRAL	... ( ... )	1 ( ... )	3 ( 1.3 )	4 ( 1.3 )	0 ( ... )
WEST	0 ( ... )	1 ( 0.6 )	4 ( 1.9 )	6 ( 1.9 )	0 ( ... )
<b>States</b>					
ALABAMA	0 ( ... )	0 ( ... )	1 ( 0.4 )	2 ( 0.7 )	0 ( ... )
ALASKA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
ARIZONA	0 ( ... )	0 ( ... )	2 ( 1.0 )	3 ( 0.7 )	0 ( ... )
ARKANSAS	0 ( ... )	0 ( ... )	1 ( 0.7 )	1 ( 0.6 )	0 ( ... )
CALIFORNIA	0 ( ... )	0 ( ... )	1 ( ... )	5 ( 1.5 )	0 ( ... )
COLORADO	0 ( ... )	1 ( 0.4 )	2 ( 0.7 )	4 ( 0.8 )	0 ( ... )
CONNECTICUT	0 ( ... )	1 ( 0.5 )	1 ( ... )	6 ( 1.1 )	0 ( ... )
DELAWARE	1 ( ... )	0 ( ... )	2 ( 1.0 )	4 ( 0.8 )	0 ( ... )
DISTRICT OF COLUMBIA	0 ( ... )	0 ( ... )	0 ( ... )	2 ( 0.5 )	0 ( ... )
FLORIDA	0 ( ... )	0 ( ... )	1 ( 0.7 )	3 ( 0.6 )	1 ( ... )
GEORGIA	0 ( ... )	1 ( ... )	0 ( ... )	3 ( 0.7 )	0 ( ... )
HAWAII	1 ( ... )	1 ( 0.4 )	1 ( 0.7 )	4 ( 0.7 )	0 ( ... )
INDIANA	0 ( ... )	1 ( 0.4 )	2 ( 0.9 )	6 ( 1.1 )	0 ( ... )
IOWA	0 ( ... )	1 ( 0.6 )	3 ( 0.8 )	7 ( 1.2 )	0 ( ... )
KENTUCKY	0 ( ... )	0 ( ... )	1 ( 0.7 )	5 ( 1.0 )	0 ( ... )
LOUISIANA	0 ( ... )	0 ( ... )	0 ( ... )	1 ( 0.5 )	0 ( ... )
MAINE	0 ( ... )	1 ( ... )	4 ( 1.1 )	5 ( 0.7 )	1 ( ... )
MARYLAND	0 ( ... )	0 ( 0.3 )	2 ( 0.8 )	6 ( 1.1 )	0 ( ... )
MASSACHUSETTS	0 ( ... )	1 ( 0.3 )	1 ( 0.6 )	5 ( 1.0 )	0 ( ... )
MICHIGAN	0 ( ... )	0 ( 0.2 )	1 ( 0.6 )	5 ( 0.9 )	1 ( ... )
MINNESOTA	0 ( ... )	1 ( 0.5 )	4 ( 1.0 )	7 ( 1.1 )	1 ( ... )
MISSISSIPPI	0 ( ... )	0 ( ... )	0 ( ... )	1 ( 0.3 )	0 ( ... )
MISSOURI	0 ( ... )	1 ( 0.3 )	2 ( 0.7 )	4 ( 0.8 )	1 ( ... )
MONTANA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
NEBRASKA	0 ( ... )	1 ( ... )	2 ( 1.0 )	5 ( 1.0 )	0 ( ... )
NEW MEXICO	0 ( ... )	0 ( ... )	1 ( ... )	2 ( 0.7 )	0 ( ... )
NEW YORK	1 ( 0.8 )	1 ( ... )	2 ( 0.8 )	6 ( 1.1 )	1 ( ... )
NORTH CAROLINA	0 ( ... )	0 ( ... )	1 ( ... )	3 ( 0.6 )	0 ( ... )
NORTH DAKOTA	2 ( ... )	1 ( 0.4 )	2 ( 1.0 )	4 ( 0.7 )	2 ( ... )
OREGON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
RHODE ISLAND	0 ( ... )	0 ( ... )	1 ( 0.5 )	3 ( 0.7 )	0 ( ... )
SOUTH CAROLINA	1 ( ... )	0 ( ... )	0 ( ... )	4 ( 1.0 )	0 ( ... )
TENNESSEE	0 ( ... )	0 ( ... )	1 ( 0.5 )	2 ( 1.0 )	0 ( ... )
TEXAS	0 ( ... )	0 ( ... )	2 ( 0.8 )	8 ( 1.6 )	1 ( ... )
UTAH	0 ( ... )	0 ( ... )	2 ( 0.7 )	3 ( 0.6 )	1 ( ... )
VERMONT	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
VIRGINIA	0 ( ... )	0 ( 0.1 )	1 ( 0.6 )	6 ( 1.3 )	0 ( ... )
WASHINGTON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
WEST VIRGINIA	0 ( ... )	0 ( ... )	1 ( 0.4 )	1 ( 0.6 )	0 ( ... )
WISCONSIN	1 ( ... )	1 ( 0.7 )	2 ( 0.8 )	6 ( 1.0 )	1 ( ... )
WYOMING	0 ( ... )	0 ( ... )	2 ( 0.7 )	3 ( 0.7 )	1 ( ... )
<b>Other Jurisdictions</b>					
DDESS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
D <sub>o</sub> DDS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
GUAM	1 ( ... )	0 ( ... )	1 ( ... )	1 ( 0.4 )	0 ( ... )

— State or other jurisdiction did not participate in the NAEP assessment year presented in this table.

... Characteristics of the sample do not permit a reliable estimate.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.



**TABLE 4.9** (continued)

**1992 Mathematics Assessment**



POPULATION: 1992 Grade 8 Public School Students  
 REPORTED STATISTICS: Percentage of Students by Achievement Levels  
 BREAKDOWNS BY: Parents' Education Level

Achievement Level...	At or Above Proficient				
	Did Not Finish High School	High School Graduate	Some Education After High School	College Graduate	I Don't Know
What is the highest level of education either your mother or father obtained?					
JURISDICTIONS	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )
<b>Nation</b>					
NATION	6 ( 1.7)	10 ( 1.1)	20 ( 1.4)	31 ( 1.9)	9 ( 1.4)
NORTHEAST	8 ( 5.5)	11 ( 2.5)	18 ( 4.1)	39 ( 5.5)	8 ( 3.2)
SOUTHEAST	4 ( ... )	7 ( 1.1)	15 ( 2.0)	22 ( 2.2)	7 ( 2.3)
CENTRAL	... ( ... )	13 ( 2.5)	23 ( 2.3)	35 ( 4.0)	10 ( 4.4)
WEST	5 ( 2.8)	9 ( 2.4)	23 ( 3.1)	31 ( 3.3)	9 ( 2.3)
<b>States</b>					
ALABAMA	2 ( 1.4)	5 ( 0.9)	12 ( 2.1)	18 ( 2.1)	3 ( 1.7)
ALASKA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
ARIZONA	3 ( 1.3)	7 ( 1.6)	15 ( 2.1)	27 ( 2.2)	4 ( 1.7)
ARKANSAS	5 ( 1.3)	5 ( 0.8)	13 ( 2.1)	16 ( 1.8)	5 ( 2.0)
CALIFORNIA	3 ( 1.5)	7 ( 1.8)	16 ( 3.1)	28 ( 2.2)	6 ( 1.9)
COLORADO	5 ( 1.6)	10 ( 1.5)	22 ( 2.6)	32 ( 1.6)	6 ( 1.9)
CONNECTICUT	5 ( 2.0)	12 ( 1.3)	21 ( 3.2)	40 ( 1.8)	9 ( 2.0)
DELAWARE	6 ( 2.9)	6 ( 0.9)	16 ( 3.6)	25 ( 2.1)	5 ( 2.4)
DISTRICT OF COLUMBIA	2 ( 1.3)	1 ( 1.0)	3 ( 1.2)	9 ( 1.6)	2 ( 1.1)
FLORIDA	5 ( 1.9)	8 ( 1.5)	16 ( 1.9)	22 ( 2.0)	6 ( 1.6)
GEORGIA	4 ( 1.5)	6 ( 0.9)	14 ( 2.0)	22 ( 2.2)	4 ( 2.0)
HAWAII	6 ( 2.5)	6 ( 1.0)	18 ( 2.3)	21 ( 1.6)	7 ( 1.7)
INDIANA	5 ( 1.7)	9 ( 1.2)	22 ( 2.4)	34 ( 2.1)	6 ( 1.8)
IOWA	5 ( 2.8)	18 ( 1.6)	34 ( 2.5)	42 ( 1.7)	13 ( 2.8)
KENTUCKY	3 ( 1.1)	7 ( 1.1)	16 ( 2.0)	28 ( 2.7)	5 ( 2.2)
LOUISIANA	1 ( 0.6)	3 ( 0.9)	9 ( 1.6)	13 ( 2.0)	3 ( 1.7)
MAINE	8 ( 2.8)	13 ( 1.8)	26 ( 2.7)	37 ( 2.3)	13 ( 3.3)
MARYLAND	6 ( 2.5)	7 ( 1.3)	19 ( 2.5)	32 ( 2.2)	6 ( 2.5)
MASSACHUSETTS	4 ( 1.8)	11 ( 1.4)	19 ( 2.7)	35 ( 1.9)	6 ( 2.8)
MICHIGAN	4 ( 1.6)	10 ( 1.3)	19 ( 2.0)	29 ( 2.7)	8 ( 2.7)
MINNESOTA	6 ( 1.8)	18 ( 2.1)	32 ( 2.8)	40 ( 1.8)	19 ( 3.7)
MISSISSIPPI	2 ( 0.9)	4 ( 0.9)	7 ( 1.7)	11 ( 1.2)	3 ( 1.7)
MISSOURI	6 ( 2.3)	12 ( 1.7)	21 ( 2.0)	30 ( 2.3)	6 ( 2.4)
MONTANA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
NEBRASKA	4 ( 1.9)	14 ( 2.4)	27 ( 2.6)	37 ( 1.9)	8 ( 2.1)
NEW MEXICO	4 ( 1.4)	4 ( 0.9)	12 ( 1.5)	20 ( 1.7)	4 ( 1.9)
NEW YORK	4 ( 1.6)	11 ( 1.8)	21 ( 2.4)	30 ( 1.9)	6 ( 2.0)
NORTH CAROLINA	3 ( 1.5)	5 ( 0.9)	14 ( 1.5)	21 ( 1.9)	4 ( 1.6)
NORTH DAKOTA	9 ( 3.9)	16 ( 2.1)	28 ( 3.1)	37 ( 1.9)	17 ( 4.5)
OREGON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
RHODE ISLAND	6 ( 1.9)	6 ( 1.4)	15 ( 2.6)	25 ( 1.8)	2 ( ... )
SOUTH CAROLINA	5 ( 1.4)	5 ( 0.9)	16 ( 1.9)	26 ( 2.0)	7 ( 2.5)
TENNESSEE	4 ( 1.4)	6 ( 1.0)	14 ( 2.0)	19 ( 2.2)	6 ( 2.2)
TEXAS	5 ( 1.2)	7 ( 1.6)	21 ( 2.3)	33 ( 2.3)	6 ( 2.0)
UTAH	6 ( 3.2)	10 ( 1.9)	24 ( 2.2)	28 ( 1.5)	12 ( 2.9)
VERMONT	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
VIRGINIA	5 ( 2.0)	8 ( 1.0)	17 ( 1.9)	33 ( 2.0)	5 ( 1.9)
WASHINGTON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
WEST VIRGINIA	3 ( 1.0)	5 ( 0.9)	14 ( 2.1)	17 ( 1.8)	2 ( 1.1)
WISCONSIN	9 ( 2.6)	16 ( 1.8)	30 ( 2.0)	38 ( 2.1)	11 ( 2.6)
WYOMING	8 ( 2.8)	11 ( 1.9)	23 ( 2.5)	29 ( 1.4)	9 ( 2.8)
<b>Other Jurisdictions</b>					
DDESS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
D <sub>o</sub> DDS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
GUAM	3 ( 1.6)	3 ( 1.0)	6 ( 2.1)	11 ( 1.5)	3 ( 1.2)

— State or other jurisdiction did not participate in the NAEP assessment year presented in this table.

... Characteristics of the sample do not permit a reliable estimate.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 4.9** (continued)

**1992 Mathematics Assessment**



POPULATION: 1992 Grade 8 Public School Students  
 REPORTED STATISTICS: Percentage of Students by Achievement Levels  
 BREAKDOWNS BY: Parents' Education Level

Achievement Level...	At or Above Basic				
	Did Not Finish High School	High School Graduate	Some Education After High School	College Graduate	I Don't Know
What is the highest level of education either your mother or father obtained?					
JURISDICTIONS	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )
<b>Nation</b>					
NATION	34 ( 3.2)	45 ( 2.1)	60 ( 1.8)	70 ( 1.5)	38 ( 2.5)
NORTHEAST	29 ( 7.7)	47 ( 7.0)	56 ( 6.2)	69 ( 4.2)	36 ( 5.5)
SOUTHEAST	32 ( 7.6)	35 ( 2.7)	54 ( 3.4)	61 ( 2.9)	35 ( 5.8)
CENTRAL	... ( ... )	56 ( 3.4)	64 ( 3.3)	76 ( 3.5)	49 ( 6.6)
WEST	36 ( 3.9)	41 ( 3.8)	64 ( 3.5)	71 ( 2.9)	36 ( 3.6)
<b>States</b>					
ALABAMA	23 ( 2.5)	31 ( 2.5)	47 ( 3.2)	51 ( 2.8)	23 ( 3.9)
ALASKA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
ARIZONA	30 ( 3.7)	43 ( 3.1)	63 ( 2.5)	69 ( 2.6)	33 ( 4.1)
ARKANSAS	31 ( 3.1)	35 ( 2.4)	54 ( 2.8)	56 ( 2.8)	29 ( 4.7)
CALIFORNIA	26 ( 3.4)	40 ( 3.0)	58 ( 2.5)	67 ( 2.1)	29 ( 3.7)
COLORADO	36 ( 4.6)	50 ( 2.8)	71 ( 2.4)	75 ( 1.4)	41 ( 4.2)
CONNECTICUT	31 ( 4.2)	50 ( 2.3)	65 ( 2.8)	80 ( 1.5)	39 ( 4.3)
DELAWARE	37 ( 6.2)	37 ( 2.8)	59 ( 3.3)	65 ( 1.8)	35 ( 5.3)
DISTRICT OF COLUMBIA	13 ( 3.4)	13 ( 1.9)	28 ( 3.0)	32 ( 1.8)	16 ( 2.8)
FLORIDA	31 ( 3.6)	39 ( 2.7)	56 ( 2.9)	59 ( 2.2)	32 ( 3.6)
GEORGIA	31 ( 3.5)	36 ( 2.0)	57 ( 3.2)	62 ( 2.7)	29 ( 3.3)
HAWAII	31 ( 4.4)	34 ( 2.5)	58 ( 2.7)	57 ( 1.9)	35 ( 2.5)
INDIANA	35 ( 3.6)	50 ( 2.5)	69 ( 2.8)	73 ( 2.0)	35 ( 5.0)
IOWA	55 ( 5.0)	67 ( 2.2)	81 ( 2.1)	84 ( 1.5)	58 ( 5.1)
KENTUCKY	31 ( 2.7)	44 ( 2.3)	60 ( 2.5)	69 ( 1.9)	30 ( 4.4)
LOUISIANA	21 ( 3.2)	27 ( 2.3)	49 ( 2.7)	46 ( 3.1)	23 ( 3.7)
MAINE	47 ( 5.7)	59 ( 1.9)	76 ( 2.7)	83 ( 1.6)	57 ( 4.2)
MARYLAND	26 ( 4.9)	37 ( 2.5)	58 ( 2.9)	69 ( 1.8)	34 ( 4.4)
MASSACHUSETTS	33 ( 4.6)	51 ( 3.0)	65 ( 2.7)	76 ( 1.7)	32 ( 4.2)
MICHIGAN	36 ( 5.0)	46 ( 2.5)	65 ( 2.9)	69 ( 2.1)	38 ( 4.2)
MINNESOTA	42 ( 6.9)	60 ( 3.1)	79 ( 2.3)	83 ( 1.3)	58 ( 4.8)
MISSISSIPPI	19 ( 2.6)	26 ( 1.9)	45 ( 3.0)	43 ( 2.5)	18 ( 3.1)
MISSOURI	41 ( 4.1)	54 ( 2.8)	70 ( 2.2)	73 ( 1.8)	40 ( 4.1)
MONTANA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
NEBRASKA	34 ( 6.3)	60 ( 2.9)	73 ( 2.6)	81 ( 1.8)	48 ( 5.7)
NEW MEXICO	29 ( 3.8)	34 ( 1.8)	56 ( 2.4)	65 ( 2.2)	28 ( 3.1)
NEW YORK	30 ( 4.5)	47 ( 3.8)	65 ( 3.7)	70 ( 2.2)	29 ( 4.9)
NORTH CAROLINA	26 ( 3.3)	33 ( 2.1)	56 ( 3.3)	62 ( 1.8)	27 ( 3.8)
NORTH DAKOTA	47 ( 9.7)	62 ( 2.5)	82 ( 3.1)	85 ( 1.2)	66 ( 4.1)
OREGON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
RHODE ISLAND	29 ( 3.2)	45 ( 2.9)	66 ( 3.4)	70 ( 2.3)	25 ( 4.0)
SOUTH CAROLINA	32 ( 3.2)	33 ( 2.4)	62 ( 2.7)	61 ( 2.1)	34 ( 4.4)
TENNESSEE	31 ( 3.3)	37 ( 2.5)	57 ( 3.0)	57 ( 2.6)	31 ( 5.0)
TEXAS	34 ( 2.6)	40 ( 2.6)	64 ( 2.1)	71 ( 2.3)	29 ( 3.6)
UTAH	42 ( 7.1)	48 ( 3.1)	73 ( 2.3)	74 ( 1.4)	46 ( 5.6)
VERMONT	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
VIRGINIA	33 ( 4.6)	38 ( 2.4)	63 ( 2.9)	73 ( 1.9)	39 ( 4.2)
WASHINGTON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
WEST VIRGINIA	26 ( 3.2)	38 ( 1.8)	62 ( 2.5)	62 ( 2.1)	24 ( 3.0)
WISCONSIN	43 ( 5.6)	63 ( 2.6)	78 ( 2.2)	80 ( 2.6)	45 ( 5.9)
WYOMING	46 ( 5.9)	58 ( 2.0)	73 ( 2.8)	76 ( 1.4)	47 ( 4.0)
<b>Other Jurisdictions</b>					
DDESS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
D <sub>o</sub> DDS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
GUAM	14 ( 2.7)	19 ( 2.1)	35 ( 4.1)	38 ( 2.7)	16 ( 2.1)

— State or other jurisdiction did not participate in the NAEP assessment year presented in this table.

... Characteristics of the sample do not permit a reliable estimate.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 4.9** (continued)

**1992 Mathematics Assessment**



POPULATION: 1992 Grade 8 Public School Students  
 REPORTED STATISTICS: Percentage of Students by Achievement Levels  
 BREAKDOWNS BY: Parents' Education Level

Achievement Level...	Below Basic				
	Did Not Finish High School	High School Graduate	Some Education After High School	College Graduate	I Don't Know
What is the highest level of education either your mother or father obtained?					
JURISDICTIONS	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )
<b>Nation</b>					
NATION	66 ( 3.2)	55 ( 2.1)	40 ( 1.8)	30 ( 1.5)	62 ( 2.5)
NORTHEAST	71 ( 7.7)	53 ( 7.0)	44 ( 6.2)	31 ( 4.2)	64 ( 5.5)
SOUTHEAST	68 ( 7.6)	65 ( 2.7)	46 ( 3.4)	39 ( 2.9)	65 ( 5.8)
CENTRAL	... ( ... )	44 ( 3.4)	36 ( 3.3)	24 ( 3.5)	51 ( 6.6)
WEST	64 ( 3.9)	59 ( 3.8)	36 ( 3.5)	29 ( 2.9)	64 ( 3.6)
<b>States</b>					
ALABAMA	77 ( 2.5)	69 ( 2.5)	53 ( 3.2)	49 ( 2.8)	77 ( 3.9)
ALASKA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
ARIZONA	70 ( 3.7)	57 ( 3.1)	37 ( 2.5)	31 ( 2.6)	67 ( 4.1)
ARKANSAS	69 ( 3.1)	65 ( 2.4)	46 ( 2.8)	44 ( 2.8)	71 ( 4.7)
CALIFORNIA	74 ( 3.4)	60 ( 3.0)	42 ( 2.5)	33 ( 2.1)	71 ( 3.7)
COLORADO	64 ( 4.6)	50 ( 2.8)	29 ( 2.4)	25 ( 1.4)	59 ( 4.2)
CONNECTICUT	69 ( 4.2)	50 ( 2.3)	35 ( 2.8)	20 ( 1.5)	61 ( 4.3)
DELAWARE	63 ( 6.2)	63 ( 2.8)	41 ( 3.3)	35 ( 1.8)	65 ( 5.3)
DISTRICT OF COLUMBIA	87 ( 3.4)	87 ( 1.9)	72 ( 3.0)	68 ( 1.8)	84 ( 2.8)
FLORIDA	69 ( 3.6)	61 ( 2.7)	44 ( 2.9)	41 ( 2.2)	68 ( 3.6)
GEORGIA	69 ( 3.5)	64 ( 2.0)	43 ( 3.2)	38 ( 2.7)	71 ( 3.3)
HAWAII	69 ( 4.4)	66 ( 2.5)	42 ( 2.7)	43 ( 1.9)	65 ( 2.5)
INDIANA	65 ( 3.6)	50 ( 2.5)	31 ( 2.8)	27 ( 2.0)	65 ( 5.0)
IOWA	45 ( 5.0)	33 ( 2.2)	19 ( 2.1)	16 ( 1.5)	42 ( 5.1)
KENTUCKY	69 ( 2.7)	56 ( 2.3)	40 ( 2.5)	31 ( 1.9)	70 ( 4.4)
LOUISIANA	79 ( 3.2)	73 ( 2.3)	51 ( 2.7)	54 ( 3.1)	77 ( 3.7)
MAINE	53 ( 5.7)	41 ( 1.9)	24 ( 2.7)	17 ( 1.6)	43 ( 4.2)
MARYLAND	74 ( 4.9)	63 ( 2.5)	42 ( 2.9)	31 ( 1.8)	66 ( 4.4)
MASSACHUSETTS	67 ( 4.6)	49 ( 3.0)	35 ( 2.7)	24 ( 1.7)	68 ( 4.2)
MICHIGAN	64 ( 5.0)	54 ( 2.5)	35 ( 2.9)	31 ( 2.1)	62 ( 4.2)
MINNESOTA	58 ( 6.9)	40 ( 3.1)	21 ( 2.3)	17 ( 1.3)	42 ( 4.8)
MISSISSIPPI	81 ( 2.6)	74 ( 1.9)	55 ( 3.0)	57 ( 2.5)	82 ( 3.1)
MISSOURI	59 ( 4.1)	46 ( 2.8)	30 ( 2.2)	27 ( 1.8)	60 ( 4.1)
MONTANA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
NEBRASKA	66 ( 6.3)	40 ( 2.9)	27 ( 2.6)	19 ( 1.8)	52 ( 5.7)
NEW MEXICO	71 ( 3.8)	66 ( 1.8)	44 ( 2.4)	35 ( 2.2)	72 ( 3.1)
NEW YORK	70 ( 4.5)	53 ( 3.8)	35 ( 3.7)	30 ( 2.2)	71 ( 4.9)
NORTH CAROLINA	74 ( 3.3)	67 ( 2.1)	44 ( 3.3)	38 ( 1.8)	73 ( 3.8)
NORTH DAKOTA	53 ( 9.7)	38 ( 2.5)	18 ( 3.1)	15 ( 1.2)	34 ( 4.1)
OREGON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
RHODE ISLAND	71 ( 3.2)	55 ( 2.9)	34 ( 3.4)	30 ( 2.3)	75 ( 4.0)
SOUTH CAROLINA	68 ( 3.2)	67 ( 2.4)	38 ( 2.7)	39 ( 2.1)	66 ( 4.4)
TENNESSEE	69 ( 3.3)	63 ( 2.5)	43 ( 3.0)	43 ( 2.6)	69 ( 5.0)
TEXAS	66 ( 2.6)	60 ( 2.6)	36 ( 2.1)	29 ( 2.3)	71 ( 3.6)
UTAH	58 ( 7.1)	52 ( 3.1)	27 ( 2.3)	26 ( 1.4)	54 ( 5.6)
VERMONT	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
VIRGINIA	67 ( 4.6)	62 ( 2.4)	37 ( 2.9)	27 ( 1.9)	61 ( 4.2)
WASHINGTON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
WEST VIRGINIA	74 ( 3.2)	62 ( 1.8)	38 ( 2.5)	38 ( 2.1)	76 ( 3.0)
WISCONSIN	57 ( 5.6)	37 ( 2.6)	22 ( 2.2)	20 ( 2.6)	55 ( 5.9)
WYOMING	54 ( 5.9)	42 ( 2.0)	27 ( 2.8)	24 ( 1.4)	53 ( 4.0)
<b>Other Jurisdictions</b>					
DDESS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
D <sub>o</sub> DDS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
GUAM	86 ( 2.7)	81 ( 2.1)	65 ( 4.1)	62 ( 2.7)	84 ( 2.1)

— State or other jurisdiction did not participate in the NAEP assessment year presented in this table.

... Characteristics of the sample do not permit a reliable estimate.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 4.9** (continued)

**1996 Mathematics Assessment**



POPULATION: 1996 Grade 8 Public School Students  
 REPORTED STATISTICS: Percentage of Students by Achievement Levels  
 BREAKDOWNS BY: Parents' Education Level

Achievement Level...	Advanced				
	Did Not Finish High School	High School Graduate	Some Education After High School	College Graduate	I Don't Know
What is the highest level of education either your mother or father obtained?					
JURISDICTIONS	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )
<b>Nation</b>					
NATION	1 ( ... )	1 ( 0.5 )	4 ( 0.8 )	7 ( 1.2 )	1 ( 0.3 )
NORTHEAST	... ( ... )	2 ( ... )	6 ( 2.5 )	8 ( 4.6 )	1 ( ... )
SOUTHEAST	0 ( ... )	0 ( ... )	2 ( 1.0 )	5 ( 1.9 )	2 ( 1.1 )
CENTRAL	... ( ... )	1 ( ... )	4 ( 1.8 )	8 ( 1.7 )	1 ( ... )
WEST	0 ( ... )	1 ( ... )	3 ( 1.5 )	5 ( 1.1 )	0 ( ... )
<b>States</b>					
ALABAMA	0 ( ... )	0 ( ... )	1 ( ... )	3 ( 1.0 )	0 ( ... )
ALASKA†	... ( ... )	3 ( 1.2 )	6 ( 2.4 )	11 ( 2.1 )	1 ( ... )
ARIZONA	0 ( ... )	1 ( ... )	1 ( ... )	4 ( 0.9 )	0 ( ... )
ARKANSAS†	0 ( ... )	0 ( ... )	1 ( ... )	4 ( 1.0 )	0 ( ... )
CALIFORNIA	0 ( ... )	0 ( ... )	2 ( 0.8 )	6 ( 1.0 )	0 ( ... )
COLORADO	0 ( ... )	1 ( ... )	3 ( 0.9 )	5 ( 0.9 )	0 ( ... )
CONNECTICUT	0 ( ... )	2 ( 0.6 )	3 ( 1.1 )	8 ( 1.0 )	1 ( 0.7 )
DELAWARE	1 ( ... )	1 ( ... )	1 ( ... )	6 ( 1.4 )	1 ( ... )
DISTRICT OF COLUMBIA	0 ( ... )	0 ( ... )	0 ( ... )	3 ( 0.6 )	0 ( ... )
FLORIDA	0 ( ... )	0 ( ... )	1 ( 0.9 )	3 ( 0.9 )	0 ( ... )
GEORGIA	0 ( ... )	0 ( ... )	1 ( ... )	5 ( 1.0 )	0 ( ... )
HAWAII	2 ( ... )	1 ( 0.4 )	1 ( ... )	4 ( 0.8 )	2 ( 1.0 )
INDIANA	0 ( ... )	1 ( 0.5 )	3 ( 1.1 )	6 ( 1.0 )	1 ( ... )
IOWA†	2 ( ... )	1 ( 0.4 )	4 ( 1.2 )	6 ( 1.0 )	1 ( ... )
KENTUCKY	0 ( ... )	0 ( 0.2 )	1 ( ... )	4 ( 0.8 )	1 ( ... )
LOUISIANA	1 ( ... )	0 ( ... )	0 ( ... )	1 ( 0.5 )	0 ( ... )
MAINE	0 ( ... )	2 ( 0.9 )	4 ( 1.1 )	9 ( 1.4 )	1 ( ... )
MARYLAND†	1 ( ... )	1 ( 0.5 )	3 ( 0.9 )	10 ( 1.9 )	3 ( 1.5 )
MASSACHUSETTS	0 ( ... )	0 ( ... )	3 ( 1.2 )	8 ( 1.5 )	1 ( ... )
MICHIGAN†	0 ( ... )	1 ( 0.4 )	4 ( 1.3 )	7 ( 1.4 )	2 ( 1.0 )
MINNESOTA	1 ( ... )	1 ( 0.6 )	6 ( 1.6 )	9 ( 1.3 )	1 ( ... )
MISSISSIPPI	0 ( ... )	0 ( ... )	0 ( ... )	1 ( 0.4 )	0 ( ... )
MISSOURI	0 ( ... )	1 ( ... )	3 ( 1.1 )	4 ( 0.9 )	1 ( ... )
MONTANA†	1 ( ... )	2 ( 1.3 )	5 ( 1.8 )	7 ( 1.0 )	1 ( ... )
NEBRASKA	0 ( ... )	2 ( 0.7 )	5 ( 1.1 )	8 ( 1.1 )	2 ( ... )
NEW MEXICO	0 ( ... )	0 ( ... )	1 ( 0.7 )	4 ( 0.7 )	0 ( ... )
NEW YORK†	0 ( ... )	1 ( 0.6 )	2 ( 1.0 )	6 ( 0.9 )	1 ( 0.5 )
NORTH CAROLINA	0 ( ... )	1 ( 0.4 )	3 ( 1.4 )	5 ( 1.5 )	0 ( ... )
NORTH DAKOTA	1 ( ... )	1 ( 0.5 )	5 ( 1.8 )	6 ( 1.0 )	1 ( ... )
OREGON	1 ( ... )	1 ( 0.7 )	2 ( 1.0 )	8 ( 1.5 )	1 ( 0.7 )
RHODE ISLAND	0 ( ... )	1 ( 0.5 )	1 ( 0.6 )	5 ( 0.8 )	1 ( ... )
SOUTH CAROLINA†	0 ( 0.3 )	0 ( ... )	2 ( ... )	4 ( 0.7 )	0 ( ... )
TENNESSEE	0 ( ... )	1 ( 0.4 )	2 ( 0.9 )	4 ( 0.8 )	0 ( ... )
TEXAS	0 ( ... )	1 ( 0.6 )	2 ( 0.9 )	6 ( 0.9 )	0 ( ... )
UTAH	0 ( ... )	1 ( 0.5 )	2 ( 0.8 )	4 ( 0.7 )	1 ( ... )
VERMONT†	0 ( ... )	1 ( 0.6 )	2 ( 1.0 )	6 ( 1.0 )	2 ( ... )
VIRGINIA	1 ( ... )	0 ( ... )	1 ( ... )	6 ( 1.0 )	3 ( 1.2 )
WASHINGTON	1 ( ... )	1 ( 0.6 )	4 ( 1.6 )	6 ( 1.2 )	1 ( 1.0 )
WEST VIRGINIA	0 ( ... )	0 ( ... )	1 ( 0.6 )	3 ( 1.1 )	0 ( ... )
WISCONSIN†	1 ( ... )	3 ( 0.9 )	5 ( 1.3 )	8 ( 1.3 )	1 ( ... )
WYOMING	1 ( ... )	1 ( 0.8 )	1 ( 0.8 )	4 ( 1.0 )	0 ( ... )
<b>Other Jurisdictions</b>					
DDESS	... ( ... )	3 ( 1.5 )	3 ( 2.0 )	8 ( 2.0 )	2 ( ... )
DoDDS	... ( ... )	1 ( ... )	2 ( 1.1 )	5 ( 1.2 )	1 ( 0.8 )
GUAM	0 ( ... )	0 ( ... )	1 ( ... )	1 ( ... )	0 ( ... )

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).

... Characteristics of the sample do not permit a reliable estimate.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 4.9** (continued)

**1996 Mathematics Assessment**



POPULATION: 1996 Grade 8 Public School Students  
 REPORTED STATISTICS: Percentage of Students by Achievement Levels  
 BREAKDOWNS BY: Parents' Education Level

Achievement Level...	At or Above Proficient				
	Did Not Finish High School	High School Graduate	Some Education After High School	College Graduate	I Don't Know
What is the highest level of education either your mother or father obtained?					
JURISDICTIONS	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )
<b>Nation</b>					
NATION	8 ( 2.1)	12 ( 1.3)	26 ( 2.0)»	34 ( 2.2)	10 ( 1.5)
NORTHEAST	... ( ... )	18 ( 4.0)	26 ( 3.5)	38 ( 7.8)	9 ( 3.0)
SOUTHEAST	6 ( 2.4)	9 ( 2.2)	19 ( 3.9)	25 ( 3.6)	11 ( 3.0)
CENTRAL	... ( ... )	16 ( 3.4)	34 ( 6.2)	39 ( 3.5)»	10 ( 3.9)
WEST	11 ( 3.2)	9 ( 1.8)	24 ( 2.8)	33 ( 3.2)	10 ( 2.8)
<b>States</b>					
ALABAMA	3 ( 1.6)	5 ( 1.1)	12 ( 2.2)	22 ( 3.2)	3 ( 2.2)
ALASKA†	... ( ... )	16 ( 2.7)	30 ( 3.3)	44 ( 2.6)	14 ( 2.8)
ARIZONA	4 ( 1.6)	10 ( 2.1)	18 ( 2.5)	29 ( 1.8)»	5 ( 1.4)
ARKANSAS†	3 ( 1.3)	7 ( 1.4)	15 ( 2.3)	25 ( 2.4)	4 ( 2.0)
CALIFORNIA	3 ( 1.5)	7 ( 1.3)	19 ( 2.3)	30 ( 2.7)	5 ( 1.3)
COLORADO	4 ( 2.1)	12 ( 1.6)	26 ( 2.8)»	38 ( 2.0)»	9 ( 3.1)
CONNECTICUT	8 ( 3.1)	14 ( 1.9)	24 ( 2.4)	44 ( 2.2)»	12 ( 2.4)
DELAWARE	4 ( 2.4)	9 ( 2.0)	15 ( 2.1)	32 ( 2.0)	10 ( 2.8)
DISTRICT OF COLUMBIA	1 ( ... )	1 ( 0.7)	4 ( 1.4)	13 ( 1.7)	1 ( ... )
FLORIDA	3 ( ... )	10 ( 1.7)	17 ( 2.0)	27 ( 2.4)	9 ( 1.9)
GEORGIA	4 ( 1.8)	5 ( 1.0)	15 ( 2.0)	28 ( 3.4)	7 ( 3.4)
HAWAII	9 ( 4.1)	8 ( 1.5)	14 ( 2.0)	26 ( 1.9)»	9 ( 2.1)
INDIANA	5 ( 2.1)	13 ( 1.7)	29 ( 2.6)»	36 ( 2.5)»	10 ( 2.8)
IOWA†	12 ( 3.3)	18 ( 2.0)	34 ( 3.2)	42 ( 2.3)	14 ( 3.7)
KENTUCKY	3 ( 1.2)	10 ( 1.4)	16 ( 2.1)	30 ( 2.6)»	7 ( 2.3)
LOUISIANA	4 ( 1.7)	3 ( 1.0)	9 ( 1.7)	13 ( 2.3)	3 ( 1.3)
MAINE	6 ( 3.3)	17 ( 2.2)	30 ( 3.0)	44 ( 2.1)	15 ( 4.8)
MARYLAND†	4 ( 2.0)	12 ( 1.8)»	22 ( 2.3)»	36 ( 3.3)	14 ( 3.4)
MASSACHUSETTS	4 ( 2.0)	11 ( 1.9)	22 ( 2.9)	42 ( 2.3)	10 ( 2.5)
MICHIGAN†	6 ( 3.2)	15 ( 1.4)»	30 ( 2.5)»	40 ( 2.6)»	16 ( 3.7)
MINNESOTA	12 ( 5.0)	19 ( 2.5)»	35 ( 2.3)	45 ( 2.4)»	17 ( 4.0)
MISSISSIPPI	2 ( 1.3)	3 ( 0.8)	9 ( 2.3)	12 ( 1.4)	4 ( 1.5)
MISSOURI	7 ( 2.4)	13 ( 1.5)	24 ( 2.5)	33 ( 2.3)	8 ( 2.0)
MONTANA†	9 ( 2.9)	20 ( 2.6)	34 ( 2.9)	42 ( 2.3)	14 ( 4.7)
NEBRASKA	8 ( 3.2)	19 ( 2.2)	33 ( 3.2)	40 ( 1.6)	13 ( 3.2)
NEW MEXICO	4 ( 2.0)	6 ( 1.4)	16 ( 1.9)	27 ( 2.2)	4 ( 1.8)
NEW YORK†	9 ( 3.6)	14 ( 2.6)	19 ( 3.1)	32 ( 2.5)	8 ( 1.8)
NORTH CAROLINA	5 ( 1.8)	10 ( 1.6)»	20 ( 2.2)»	32 ( 2.4)»	8 ( 2.1)
NORTH DAKOTA	18 ( 5.4)	18 ( 1.9)	35 ( 3.6)	41 ( 1.8)	13 ( 2.5)
OREGON	9 ( 2.8)	13 ( 2.1)	25 ( 2.6)	40 ( 2.5)»	13 ( 2.5)
RHODE ISLAND	5 ( 2.2)	11 ( 1.9)	19 ( 3.2)	33 ( 2.3)»	9 ( 1.8)
SOUTH CAROLINA†	3 ( 1.6)	6 ( 1.3)	15 ( 2.7)	23 ( 2.4)	8 ( 1.9)
TENNESSEE	4 ( 1.5)	8 ( 1.1)	18 ( 2.3)	27 ( 3.0)	5 ( 2.4)
TEXAS	7 ( 1.9)	13 ( 2.0)»	22 ( 2.3)	34 ( 2.2)»	7 ( 1.8)
UTAH	6 ( 4.2)	9 ( 1.4)	25 ( 2.3)	33 ( 1.9)	11 ( 2.9)
VERMONT†	8 ( 4.6)	13 ( 1.6)	23 ( 3.9)	40 ( 2.0)	14 ( 5.1)
VIRGINIA	5 ( 1.9)	8 ( 1.3)	17 ( 2.7)	36 ( 1.9)	14 ( 4.0)
WASHINGTON	8 ( 2.1)	13 ( 2.6)	26 ( 2.5)	37 ( 1.9)	13 ( 2.2)
WEST VIRGINIA	3 ( 1.4)	8 ( 1.2)	16 ( 1.8)	24 ( 2.0)	7 ( 2.2)
WISCONSIN†	8 ( 3.5)	25 ( 2.7)	32 ( 3.0)	42 ( 2.4)	17 ( 3.6)
WYOMING	8 ( 3.1)	14 ( 1.7)	21 ( 2.1)	31 ( 1.7)	5 ( 2.2)
<b>Other Jurisdictions</b>					
DDESS	... ( ... )	12 ( 4.0)	22 ( 5.9)	29 ( 3.1)	10 ( 4.0)
DøDDS	... ( ... )	11 ( 2.7)	22 ( 3.5)	29 ( 1.6)	13 ( 3.5)
GUAM	3 ( ... )	4 ( 1.5)	11 ( 3.0)	8 ( 2.1)	3 ( ... )

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).

... Characteristics of the sample do not permit a reliable estimate.

» (») The value for the students was significantly higher (lower) than in the 1990 assessment at about the 95% confidence level using appropriate multiple comparison procedures.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 4.9** (continued)

**1996 Mathematics Assessment**



POPULATION: 1996 Grade 8 Public School Students  
 REPORTED STATISTICS: Percentage of Students by Achievement Levels  
 BREAKDOWNS BY: Parents' Education Level

Achievement Level...	At or Above Basic				
	Did Not Finish High School	High School Graduate	Some Education After High School	College Graduate	I Don't Know
What is the highest level of education either your mother or father obtained?					
JURISDICTIONS	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )
<b>Nation</b>					
NATION	44 ( 2.7)»	50 ( 2.1)»	71 ( 2.1)»>	72 ( 1.6)	41 ( 2.2)
NORTHEAST	... ( ... )	61 ( 6.1)	69 ( 4.0)	73 ( 5.7)	40 ( 4.8)
SOUTHEAST	36 ( 5.7)	44 ( 4.4)	65 ( 4.1)	64 ( 4.6)	43 ( 4.8)
CENTRAL	... ( ... )	56 ( 4.8)	76 ( 5.0)	77 ( 3.5)	45 ( 5.6)
WEST	47 ( 4.8)	45 ( 3.4)	70 ( 3.9)	71 ( 2.7)	38 ( 3.2)
<b>States</b>					
ALABAMA	29 ( 5.0)	33 ( 3.1)	56 ( 3.7)	60 ( 3.2)	27 ( 3.1)
ALASKA†	... ( ... )	56 ( 4.2)	73 ( 4.5)	80 ( 2.1)	51 ( 5.1)
ARIZONA	30 ( 4.1)	47 ( 3.3)	67 ( 3.2)»	74 ( 2.0)»	33 ( 3.9)
ARKANSAS†	29 ( 4.0)	46 ( 3.0)»	63 ( 3.4)	65 ( 2.6)	34 ( 4.1)
CALIFORNIA	32 ( 3.7)	37 ( 3.2)	63 ( 2.7)»	68 ( 2.5)	30 ( 2.9)
COLORADO	27 ( 5.6)	54 ( 2.6)»	74 ( 2.3)»	80 ( 1.7)»	43 ( 4.3)
CONNECTICUT	41 ( 5.9)	54 ( 2.4)	71 ( 3.2)	82 ( 1.5)»	54 ( 4.0)»
DELAWARE	29 ( 8.6)	47 ( 2.9)	59 ( 3.4)	67 ( 2.3)	37 ( 5.7)
DISTRICT OF COLUMBIA	11 ( 4.5)	9 ( 1.5)	26 ( 3.2)	30 ( 1.7)	15 ( 3.8)
FLORIDA	29 ( 4.5)	43 ( 2.8)»	61 ( 2.8)	67 ( 3.1)»	33 ( 3.2)
GEORGIA	31 ( 3.4)	34 ( 2.7)	61 ( 3.2)	67 ( 2.8)	34 ( 4.4)
HAWAII	37 (10.2)	39 ( 2.2)»	60 ( 3.9)	64 ( 1.7)»	34 ( 2.8)
INDIANA	42 ( 4.9)	59 ( 2.7)»	76 ( 3.0)»	79 ( 2.0)»	47 ( 5.0)
IOWA†	49 ( 8.7)	72 ( 3.3)	83 ( 2.1)	85 ( 1.8)»	54 ( 5.2)
KENTUCKY	37 ( 3.4)»	49 ( 2.6)»	64 ( 3.4)	73 ( 2.3)»	41 ( 5.3)»
LOUISIANA	28 ( 3.4)	29 ( 2.4)	50 ( 3.1)	49 ( 3.0)	28 ( 4.1)
MAINE	47 ( 7.3)	67 ( 3.1)	81 ( 2.4)	87 ( 1.5)	63 ( 5.9)
MARYLAND†	28 ( 4.0)	43 ( 2.6)	66 ( 3.5)»	68 ( 2.6)	48 ( 5.2)
MASSACHUSETTS	39 ( 6.2)	53 ( 3.7)	72 ( 3.3)	81 ( 2.1)	44 ( 4.3)
MICHIGAN†	42 ( 6.8)	56 ( 2.7)»	74 ( 2.8)»	75 ( 2.4)»	52 ( 5.2)
MINNESOTA	39 ( 5.6)	64 ( 3.4)	80 ( 2.5)	83 ( 1.5)	53 ( 5.2)
MISSISSIPPI	25 ( 2.6)	27 ( 2.2)	46 ( 3.1)	44 ( 2.1)	27 ( 4.1)
MISSOURI	45 ( 4.8)	55 ( 3.1)	75 ( 2.6)	72 ( 2.6)	47 ( 4.3)
MONTANA†	43 ( 5.7)	68 ( 3.2)	79 ( 2.3)	84 ( 1.9)	50 ( 6.6)
NEBRASKA	51 ( 6.0)	66 ( 2.9)	82 ( 2.3)»	83 ( 1.7)	54 ( 4.8)
NEW MEXICO	29 ( 2.6)	37 ( 3.2)	61 ( 2.9)	69 ( 2.5)	29 ( 4.2)
NEW YORK†	41 ( 6.5)	52 ( 2.8)»	65 ( 3.3)	74 ( 2.3)»	36 ( 4.8)
NORTH CAROLINA	33 ( 4.4)	45 ( 3.3)»	62 ( 2.3)»	68 ( 2.1)»	41 ( 3.9)»
NORTH DAKOTA	52 ( 8.0)	67 ( 3.2)	80 ( 2.4)	85 ( 1.1)	51 ( 5.2)
OREGON	44 ( 4.7)	51 ( 3.0)	74 ( 3.0)	79 ( 1.8)»	52 ( 4.3)
RHODE ISLAND	35 ( 4.4)	48 ( 2.8)	67 ( 3.1)	74 ( 2.5)»	42 ( 3.4)»
SOUTH CAROLINA†	32 ( 4.1)	34 ( 2.3)	61 ( 3.3)	60 ( 2.8)	37 ( 3.6)
TENNESSEE	37 ( 4.2)	44 ( 2.7)	60 ( 3.4)	67 ( 2.8)	37 ( 4.4)
TEXAS	38 ( 3.9)	49 ( 3.0)»	69 ( 3.8)	75 ( 2.3)»	38 ( 4.0)
UTAH	40 ( 8.0)	54 ( 2.8)	77 ( 2.4)	77 ( 1.5)	50 ( 4.3)
VERMONT†	38 ( 6.2)	60 ( 2.8)	75 ( 3.1)	82 ( 2.0)	54 ( 8.1)
VIRGINIA	30 ( 4.6)	43 ( 3.1)	63 ( 3.4)	75 ( 2.2)	48 ( 4.9)»
WASHINGTON	38 ( 5.5)	56 ( 3.4)	73 ( 2.6)	78 ( 1.7)	48 ( 3.9)
WEST VIRGINIA	31 ( 4.0)	46 ( 2.3)»	60 ( 2.9)	69 ( 2.1)»	40 ( 5.6)»
WISCONSIN†	52 ( 5.6)	70 ( 3.4)	79 ( 2.6)	84 ( 1.7)»	54 ( 5.3)
WYOMING	51 ( 5.7)	61 ( 2.8)	73 ( 2.3)	77 ( 1.6)	46 ( 4.5)
<b>Other Jurisdictions</b>					
DDESS	... ( ... )	43 ( 5.7)	70 ( 5.1)	63 ( 4.6)	40 ( 7.8)
DøDDS	... ( ... )	59 ( 3.3)	67 ( 2.5)	70 ( 1.7)	53 ( 4.4)
GUAM	18 ( 6.9)	22 ( 3.8)	43 ( 5.7)	36 ( 3.6)	24 ( 3.7)

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).  
 ... Characteristics of the sample do not permit a reliable estimate.  
 » (») The value for the students was significantly higher (lower) than in the 1990 assessment at about the 95% confidence level using appropriate multiple comparison procedures.  
 > (<) The value for the students was significantly higher (lower) than in the 1992 assessment at about the 95% confidence level using appropriate multiple comparison procedures.  
 SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 4.9** (continued) **1996 Mathematics Assessment**



POPULATION: 1996 Grade 8 Public School Students  
 REPORTED STATISTICS: Percentage of Students by Achievement Levels  
 BREAKDOWNS BY: Parents' Education Level

Achievement Level...	Below Basic				
	Did Not Finish High School	High School Graduate	Some Education After High School	College Graduate	I Don't Know
What is the highest level of education either your mother or father obtained?					
JURISDICTIONS	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )
<b>Nation</b>					
NATION	56 ( 2.7)«	50 ( 2.1)«	29 ( 2.1)«<	28 ( 1.6)	59 ( 2.2)
NORTHEAST	... ( ... )	39 ( 6.1)	31 ( 4.0)	27 ( 5.7)	60 ( 4.8)
SOUTHEAST	64 ( 5.7)	56 ( 4.4)	35 ( 4.1)	36 ( 4.6)	57 ( 4.8)
CENTRAL	... ( ... )	44 ( 4.8)	24 ( 5.0)	23 ( 3.5)	55 ( 5.6)
WEST	53 ( 4.8)	55 ( 3.4)	30 ( 3.9)	29 ( 2.7)	62 ( 3.2)
<b>States</b>					
ALABAMA	71 ( 5.0)	67 ( 3.1)	44 ( 3.7)	40 ( 3.2)	73 ( 3.1)
ALASKA†	... ( ... )	44 ( 4.2)	27 ( 4.5)	20 ( 2.1)	49 ( 5.1)
ARIZONA	70 ( 4.1)	53 ( 3.3)	33 ( 3.2)«	26 ( 2.0)«	67 ( 3.9)
ARKANSAS†	71 ( 4.0)	54 ( 3.0)«	37 ( 3.4)	35 ( 2.6)	66 ( 4.1)
CALIFORNIA	68 ( 3.7)	63 ( 3.2)	37 ( 2.7)«	32 ( 2.5)	70 ( 2.9)
COLORADO	73 ( 5.6)	46 ( 2.6)«	26 ( 2.3)«	20 ( 1.7)«	57 ( 4.3)
CONNECTICUT	59 ( 5.9)	46 ( 2.4)	29 ( 3.2)	18 ( 1.5)«	46 ( 4.0)«
DELAWARE	71 ( 8.6)	53 ( 2.9)	41 ( 3.4)	33 ( 2.3)	63 ( 5.7)
DISTRICT OF COLUMBIA	89 ( 4.5)	91 ( 1.5)	74 ( 3.2)	70 ( 1.7)	85 ( 3.8)
FLORIDA	71 ( 4.5)	57 ( 2.8)«	39 ( 2.8)	33 ( 3.1)«	67 ( 3.2)
GEORGIA	69 ( 3.4)	66 ( 2.7)	39 ( 3.2)	33 ( 2.8)	66 ( 4.4)
HAWAII	63 (10.2)	61 ( 2.2)«	40 ( 3.9)	36 ( 1.7)«	66 ( 2.8)
INDIANA	58 ( 4.9)	41 ( 2.7)«	24 ( 3.0)«	21 ( 2.0)«	53 ( 5.0)
IOWA†	51 ( 8.7)	28 ( 3.3)	17 ( 2.1)	15 ( 1.8)«	46 ( 5.2)
KENTUCKY	63 ( 3.4)«	51 ( 2.6)«	36 ( 3.4)	27 ( 2.3)«	59 ( 5.3)«
LOUISIANA	72 ( 3.4)	71 ( 2.4)	50 ( 3.1)	51 ( 3.0)	72 ( 4.1)
MAINE	53 ( 7.3)	33 ( 3.1)	19 ( 2.4)	13 ( 1.5)	37 ( 5.9)
MARYLAND†	72 ( 4.0)	57 ( 2.6)	34 ( 3.5)«	32 ( 2.6)	52 ( 5.2)
MASSACHUSETTS	61 ( 6.2)	47 ( 3.7)	28 ( 3.3)	19 ( 2.1)	56 ( 4.3)
MICHIGAN†	58 ( 6.8)	44 ( 2.7)«	26 ( 2.8)«	25 ( 2.4)«	48 ( 5.2)
MINNESOTA	61 ( 5.6)	36 ( 3.4)	20 ( 2.5)	17 ( 1.5)	47 ( 5.2)
MISSISSIPPI	75 ( 2.6)	73 ( 2.2)	54 ( 3.1)	56 ( 2.1)	73 ( 4.1)
MISSOURI	55 ( 4.8)	45 ( 3.1)	25 ( 2.6)	28 ( 2.6)	53 ( 4.3)
MONTANA†	57 ( 5.7)	32 ( 3.2)	21 ( 2.3)	16 ( 1.9)	50 ( 6.6)
NEBRASKA	49 ( 6.0)	34 ( 2.9)	18 ( 2.3)«	17 ( 1.7)	46 ( 4.8)
NEW MEXICO	71 ( 2.6)	63 ( 3.2)	39 ( 2.9)	31 ( 2.5)	71 ( 4.2)
NEW YORK†	59 ( 6.5)	48 ( 2.8)«	35 ( 3.3)	26 ( 2.3)«	64 ( 4.8)
NORTH CAROLINA	67 ( 4.4)	55 ( 3.3)«	38 ( 2.3)«	32 ( 2.1)«	59 ( 3.9)«
NORTH DAKOTA	48 ( 8.0)	33 ( 3.2)	20 ( 2.4)	15 ( 1.1)	49 ( 5.2)
OREGON	56 ( 4.7)	49 ( 3.0)	26 ( 3.0)	21 ( 1.8)«	48 ( 4.3)
RHODE ISLAND	65 ( 4.4)	52 ( 2.8)	33 ( 3.1)	26 ( 2.5)«	58 ( 3.4)«
SOUTH CAROLINA†	68 ( 4.1)	66 ( 2.3)	39 ( 3.3)	40 ( 2.8)	63 ( 3.6)
TENNESSEE	63 ( 4.2)	56 ( 2.7)	40 ( 3.4)	33 ( 2.8)	63 ( 4.4)
TEXAS	62 ( 3.9)	51 ( 3.0)«	31 ( 3.8)	25 ( 2.3)«	62 ( 4.0)
UTAH	60 ( 8.0)	46 ( 2.8)	23 ( 2.4)	23 ( 1.5)	50 ( 4.3)
VERMONT†	62 ( 6.2)	40 ( 2.8)	25 ( 3.1)	18 ( 2.0)	46 ( 8.1)
VIRGINIA	70 ( 4.6)	57 ( 3.1)	37 ( 3.4)	25 ( 2.2)	52 ( 4.9)«
WASHINGTON	62 ( 5.5)	44 ( 3.4)	27 ( 2.6)	22 ( 1.7)	52 ( 3.9)
WEST VIRGINIA	69 ( 4.0)	54 ( 2.3)«	40 ( 2.9)	31 ( 2.1)«	60 ( 5.6)«
WISCONSIN†	48 ( 5.6)	30 ( 3.4)	21 ( 2.6)	16 ( 1.7)«	46 ( 5.3)
WYOMING	49 ( 5.7)	39 ( 2.8)	27 ( 2.3)	23 ( 1.6)	54 ( 4.5)
<b>Other Jurisdictions</b>					
DDESS	... ( ... )	57 ( 5.7)	30 ( 5.1)	37 ( 4.6)	60 ( 7.8)
DøDDS	... ( ... )	41 ( 3.3)	33 ( 2.5)	30 ( 1.7)	47 ( 4.4)
GUAM	82 ( 6.9)	78 ( 3.8)	57 ( 5.7)	64 ( 3.6)	76 ( 3.7)

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).

... Characteristics of the sample do not permit a reliable estimate.

» (») The value for the students was significantly higher (lower) than in the 1990 assessment at about the 95% confidence level using appropriate multiple comparison procedures.

> (<) The value for the students was significantly higher (lower) than in the 1992 assessment at about the 95% confidence level using appropriate multiple comparison procedures.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 4.10**

**1996 Mathematics Assessment**



POPULATION:  
REPORTED STATISTICS:  
BREAKDOWNS BY:

1996 Grade 8 Public School Students  
Percentage of Students by Achievement Levels  
Title I Participation

Achievement Level...	Advanced		At or Above Proficient		At or Above Basic		Below Basic	
	Participated	Did Not Participate	Participated	Did Not Participate	Participated	Did Not Participate	Participated	Did Not Participate
Title I participation...	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )
<b>JURISDICTIONS</b>								
<b>Nation</b>								
NATION	0 ( ... )	4 ( 0.7 )	5 ( 2.3 )	25 ( 1.4 )	28 ( 3.9 )	66 ( 1.4 )	72 ( 3.9 )	34 ( 1.4 )
NORTHEAST	0 ( ... )	6 ( 2.5 )	2 ( 1.3 )	30 ( 4.4 )	30 ( 7.6 )	70 ( 3.7 )	70 ( 7.6 )	30 ( 3.7 )
SOUTHEAST	0 ( ... )	2 ( 0.8 )	5 ( 1.6 )	18 ( 2.5 )	25 ( 6.2 )	57 ( 3.9 )	75 ( 6.2 )	43 ( 3.9 )
CENTRAL	0 ( ... )	5 ( 1.1 )	1 ( ... )	31 ( 2.7 )	17 ( 4.9 )	73 ( 3.1 )	83 ( 4.9 )	27 ( 3.1 )
WEST	0 ( ... )	3 ( 0.7 )	9 ( 4.7 )	23 ( 2.0 )	33 ( 7.3 )	63 ( 1.8 )	67 ( 7.3 )	37 ( 1.8 )
<b>States</b>								
ALABAMA	0 ( ... )	1 ( 0.5 )	1 ( ... )	14 ( 2.1 )	15 ( 3.0 )	52 ( 2.9 )	85 ( 3.0 )	48 ( 2.9 )
ALASKA†	... ( ... )	7 ( 1.1 )	... ( ... )	30 ( 1.6 )	... ( ... )	68 ( 2.3 )	... ( ... )	32 ( 2.3 )
ARIZONA	1 ( 0.5 )	2 ( 0.4 )	5 ( 2.1 )	20 ( 1.3 )	31 ( 5.3 )	62 ( 1.9 )	69 ( 5.3 )	38 ( 1.9 )
ARKANSAS†	0 ( ... )	2 ( 0.4 )	3 ( 1.7 )	15 ( 1.1 )	26 ( 4.9 )	58 ( 1.9 )	74 ( 4.9 )	42 ( 1.9 )
CALIFORNIA	0 ( ... )	4 ( 0.6 )	1 ( 0.7 )	22 ( 1.9 )	20 ( 2.8 )	61 ( 2.5 )	80 ( 2.8 )	39 ( 2.5 )
COLORADO	... ( ... )	3 ( 0.5 )	... ( ... )	26 ( 1.3 )	... ( ... )	68 ( 1.2 )	... ( ... )	32 ( 1.2 )
CONNECTICUT	0 ( ... )	5 ( 0.6 )	4 ( 2.8 )	32 ( 1.6 )	33 ( 8.4 )	72 ( 1.8 )	67 ( 8.4 )	28 ( 1.8 )
DELAWARE	... ( ... )	3 ( 0.6 )	... ( ... )	19 ( 1.0 )	... ( ... )	55 ( 1.3 )	... ( ... )	45 ( 1.3 )
DISTRICT OF COLUMBIA	0 ( ... )	1 ( 0.3 )	0 ( ... )	6 ( 1.0 )	7 ( 2.4 )	22 ( 1.3 )	93 ( 2.4 )	78 ( 1.3 )
FLORIDA	0 ( ... )	2 ( 0.5 )	5 ( 1.8 )	18 ( 1.5 )	23 ( 4.0 )	58 ( 2.2 )	77 ( 4.0 )	42 ( 2.2 )
GEORGIA	0 ( ... )	2 ( 0.5 )	1 ( 0.7 )	18 ( 2.0 )	14 ( 3.4 )	56 ( 2.0 )	86 ( 3.4 )	44 ( 2.0 )
HAWAII	0 ( ... )	2 ( 0.4 )	3 ( 1.5 )	17 ( 1.0 )	26 ( 3.6 )	54 ( 1.6 )	74 ( 3.6 )	46 ( 1.6 )
INDIANA	... ( ... )	3 ( 0.5 )	... ( ... )	24 ( 1.7 )	... ( ... )	69 ( 2.0 )	... ( ... )	31 ( 2.0 )
IOWA†	... ( ... )	4 ( 0.6 )	... ( ... )	32 ( 1.8 )	... ( ... )	78 ( 1.4 )	... ( ... )	22 ( 1.4 )
KENTUCKY	0 ( ... )	2 ( 0.4 )	3 ( 0.8 )	19 ( 1.5 )	28 ( 2.8 )	65 ( 1.8 )	72 ( 2.8 )	35 ( 1.8 )
LOUISIANA	0 ( ... )	1 ( 0.2 )	2 ( 0.9 )	8 ( 1.2 )	21 ( 3.4 )	41 ( 2.2 )	79 ( 3.4 )	59 ( 2.2 )
MAINE	0 ( ... )	6 ( 0.8 )	4 ( 2.2 )	32 ( 1.7 )	40 ( 9.7 )	79 ( 1.4 )	60 ( 9.7 )	21 ( 1.4 )
MARYLAND†	0 ( ... )	6 ( 1.1 )	2 ( ... )	25 ( 2.3 )	12 ( 4.3 )	59 ( 2.1 )	88 ( 4.3 )	41 ( 2.1 )
MASSACHUSETTS	0 ( ... )	5 ( 0.9 )	5 ( 2.1 )	30 ( 2.0 )	30 ( 5.5 )	73 ( 2.2 )	70 ( 5.5 )	27 ( 2.2 )
MICHIGAN†	1 ( ... )	5 ( 0.9 )	8 ( 3.9 )	32 ( 1.9 )	34 ( 5.7 )	73 ( 2.1 )	66 ( 5.7 )	27 ( 2.1 )
MINNESOTA	0 ( ... )	6 ( 0.9 )	1 ( ... )	35 ( 1.8 )	30 ( 7.6 )	76 ( 1.5 )	70 ( 7.6 )	24 ( 1.5 )
MISSISSIPPI	0 ( ... )	1 ( 0.3 )	2 ( 0.6 )	10 ( 1.1 )	19 ( 2.0 )	44 ( 1.7 )	81 ( 2.0 )	56 ( 1.7 )
MISSOURI	0 ( ... )	2 ( 0.6 )	1 ( ... )	23 ( 1.5 )	18 ( 5.2 )	67 ( 2.0 )	82 ( 5.2 )	33 ( 2.0 )
MONTANA†	0 ( ... )	6 ( 0.6 )	3 ( 1.9 )	35 ( 1.5 )	33 ( 6.7 )	79 ( 1.7 )	67 ( 6.7 )	21 ( 1.7 )
NEBRASKA	... ( ... )	5 ( 0.7 )	... ( ... )	31 ( 1.4 )	... ( ... )	76 ( 1.1 )	... ( ... )	24 ( 1.1 )
NEW MEXICO	0 ( ... )	2 ( 0.3 )	1 ( ... )	17 ( 1.2 )	20 ( 3.4 )	56 ( 1.6 )	80 ( 3.4 )	44 ( 1.6 )
NEW YORK†	0 ( ... )	4 ( 0.6 )	2 ( ... )	26 ( 1.7 )	21 ( 3.1 )	68 ( 2.1 )	79 ( 3.1 )	32 ( 2.1 )
NORTH CAROLINA	0 ( ... )	3 ( 0.7 )	3 ( ... )	21 ( 1.3 )	25 ( 7.4 )	58 ( 1.7 )	75 ( 7.4 )	42 ( 1.7 )
NORTH DAKOTA	0 ( ... )	5 ( 0.8 )	4 ( 2.0 )	35 ( 1.5 )	39 ( 5.4 )	80 ( 1.3 )	61 ( 5.4 )	20 ( 1.3 )
OREGON	0 ( ... )	5 ( 0.8 )	1 ( ... )	28 ( 1.6 )	26 ( 5.0 )	69 ( 1.7 )	74 ( 5.0 )	31 ( 1.7 )
RHODE ISLAND	0 ( ... )	3 ( 0.5 )	2 ( ... )	22 ( 1.4 )	19 ( 3.8 )	63 ( 1.6 )	81 ( 3.8 )	37 ( 1.6 )
SOUTH CAROLINA†	1 ( ... )	2 ( 0.4 )	4 ( 2.0 )	14 ( 1.3 )	30 ( 5.6 )	50 ( 1.8 )	70 ( 5.6 )	50 ( 1.8 )
TENNESSEE	1 ( ... )	2 ( 0.3 )	1 ( ... )	16 ( 1.4 )	17 ( 6.8 )	55 ( 1.9 )	83 ( 6.8 )	45 ( 1.9 )
TEXAS	0 ( ... )	3 ( 0.5 )	4 ( 1.1 )	26 ( 1.9 )	31 ( 3.7 )	67 ( 1.9 )	69 ( 3.7 )	33 ( 1.9 )
UTAH	0 ( ... )	3 ( 0.4 )	2 ( ... )	25 ( 1.3 )	25 ( 7.3 )	71 ( 1.4 )	75 ( 7.3 )	29 ( 1.4 )
VERMONT†	0 ( ... )	4 ( 0.6 )	1 ( ... )	29 ( 1.4 )	33 ( 5.5 )	74 ( 1.7 )	67 ( 5.5 )	26 ( 1.7 )
VIRGINIA	... ( ... )	3 ( 0.4 )	... ( ... )	21 ( 1.2 )	... ( ... )	59 ( 1.9 )	... ( ... )	41 ( 1.9 )
WASHINGTON	0 ( ... )	4 ( 0.8 )	8 ( 2.0 )	27 ( 1.3 )	31 ( 5.1 )	69 ( 1.7 )	69 ( 5.1 )	31 ( 1.7 )
WEST VIRGINIA	0 ( ... )	1 ( 0.4 )	1 ( 0.8 )	15 ( 1.0 )	24 ( 4.3 )	57 ( 1.7 )	76 ( 4.3 )	43 ( 1.7 )
WISCONSIN†	0 ( ... )	6 ( 0.8 )	2 ( 1.4 )	35 ( 1.9 )	26 ( 3.9 )	80 ( 1.7 )	74 ( 3.9 )	20 ( 1.7 )
WYOMING	0 ( ... )	3 ( 0.6 )	3 ( ... )	22 ( 1.0 )	33 ( 7.0 )	69 ( 1.2 )	67 ( 7.0 )	31 ( 1.2 )
<b>Other Jurisdictions</b>								
DDESS	... ( ... )	5 ( 1.1 )	... ( ... )	21 ( 2.4 )	... ( ... )	57 ( 3.1 )	... ( ... )	43 ( 3.1 )
DoDDS	... ( ... )	3 ( 0.6 )	... ( ... )	23 ( 1.2 )	... ( ... )	66 ( 1.4 )	... ( ... )	34 ( 1.4 )
GUAM	... ( ... )	0 ( ... )	... ( ... )	6 ( 0.8 )	... ( ... )	29 ( 1.6 )	... ( ... )	71 ( 1.6 )

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).  
... Characteristics of the sample do not permit a reliable estimate.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.



**TABLE 4.11**

**1996 Mathematics Assessment**



POPULATION:  
REPORTED STATISTICS:  
BREAKDOWNS BY:

1996 Grade 8 Public School Students  
Percentage of Students by Achievement Levels  
Free/Reduced-Price Lunch Program Eligibility

Achievement Level...	Advanced			At or Above Proficient		
	Eligible	Not Eligible	Information Not Available	Eligible	Not Eligible	Information Not Available
Free/reduced-price lunch program eligibility...						
JURISDICTIONS	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )
<b>Nation</b>						
NATION	1 ( 0.3)	5 ( 0.9)	5 ( 1.5)	8 ( 1.1)	29 ( 1.7)	29 ( 4.6)
NORTHEAST	2 ( ... )	7 ( 3.3)	... ( ... )	12 ( 2.7)	34 ( 5.2)	... ( ... )
SOUTHEAST	0 ( ... )	3 ( 1.1)	2 ( ... )	5 ( 1.3)	21 ( 3.3)	23 ( 6.4)
CENTRAL	1 ( ... )	5 ( 1.3)	10 ( 2.4)	7 ( 2.9)	35 ( 2.7)	38 ( 5.9)
WEST	0 ( ... )	4 ( 0.9)	4 ( 2.0)	7 ( 1.5)	26 ( 2.3)	27 ( 6.8)
<b>States</b>						
ALABAMA	0 ( ... )	2 ( 0.6)	1 ( ... )	2 ( 0.6)	18 ( 2.6)	7 ( 2.0)
ALASKA†	3 ( 1.8)	6 ( 1.5)	8 ( 2.1)	16 ( 3.6)	33 ( 2.5)	32 ( 2.5)
ARIZONA	1 ( 0.5)	2 ( 0.6)	2 ( 0.8)	8 ( 1.8)	24 ( 1.8)	16 ( 2.7)
ARKANSAS†	0 ( ... )	2 ( 0.6)	1 ( ... )	5 ( 1.1)	18 ( 1.5)	12 ( 4.9)
CALIFORNIA	0 ( ... )	5 ( 0.9)	2 ( 0.8)	5 ( 1.1)	26 ( 2.3)	15 ( 3.8)
COLORADO	1 ( 0.6)	4 ( 0.7)	3 ( 1.2)	11 ( 1.5)	31 ( 1.6)	22 ( 3.8)
CONNECTICUT	1 ( 0.4)	6 ( 0.7)	4 ( ... )	9 ( 2.3)	36 ( 1.6)	34 ( 8.7)
DELAWARE	0 ( ... )	4 ( 0.8)	2 ( 1.0)	6 ( 1.5)	25 ( 1.3)	13 ( 1.6)
DISTRICT OF COLUMBIA	0 ( ... )	3 ( 0.8)	0 ( ... )	2 ( 0.8)	12 ( 2.1)	4 ( 0.8)
FLORIDA	0 ( ... )	3 ( 0.7)	1 ( ... )	6 ( 0.9)	25 ( 1.9)	19 ( 3.1)
GEORGIA	0 ( ... )	3 ( 0.8)	3 ( 1.2)	3 ( 0.8)	22 ( 2.8)	22 ( 4.2)
HAWAII	0 ( 0.3)	3 ( 0.5)	0 ( ... )	7 ( 1.3)	21 ( 1.3)	8 ( 1.9)
INDIANA	1 ( 0.6)	4 ( 0.6)	... ( ... )	8 ( 1.7)	28 ( 1.7)	... ( ... )
IOWA†	2 ( 0.7)	5 ( 0.7)	4 ( 1.1)	20 ( 3.0)	35 ( 2.0)	31 ( 7.3)
KENTUCKY	0 ( ... )	2 ( 0.6)	1 ( ... )	4 ( 1.1)	23 ( 1.8)	12 ( 3.2)
LOUISIANA	0 ( ... )	1 ( 0.4)	1 ( ... )	3 ( 0.8)	12 ( 1.8)	7 ( 4.3)
MAINE	2 ( 1.2)	7 ( 0.9)	5 ( 2.2)	18 ( 2.8)	35 ( 1.8)	30 ( 8.2)
MARYLAND†	1 ( 0.5)	7 ( 1.4)	7 ( 3.6)	6 ( 1.2)	31 ( 3.1)	26 ( 6.5)
MASSACHUSETTS	0 ( ... )	6 ( 1.1)	4 ( 2.1)	7 ( 1.5)	33 ( 2.2)	24 ( 7.4)
MICHIGAN†	1 ( ... )	5 ( 1.1)	5 ( 1.4)	10 ( 1.8)	34 ( 2.1)	28 ( 5.4)
MINNESOTA	2 ( 0.8)	7 ( 1.0)	8 ( 2.9)	20 ( 2.2)	37 ( 1.7)	41 ( 8.8)
MISSISSIPPI	0 ( ... )	1 ( 0.4)	0 ( ... )	2 ( 0.5)	13 ( 1.7)	7 ( 3.7)
MISSOURI	1 ( 0.4)	3 ( 0.6)	1 ( ... )	9 ( 1.8)	27 ( 1.4)	17 ( 7.3)
MONTANA†	2 ( 0.8)	6 ( 0.9)	5 ( 1.9)	17 ( 2.7)	38 ( 1.5)	34 ( 4.6)
NEBRASKA	2 ( 0.9)	6 ( 1.0)	5 ( 2.9)	19 ( 2.6)	35 ( 1.7)	34 ( 3.7)
NEW MEXICO	0 ( 0.2)	3 ( 0.5)	2 ( 0.7)	7 ( 0.9)	21 ( 1.8)	17 ( 2.9)
NEW YORK†	1 ( 0.5)	5 ( 0.8)	4 ( 2.6)	10 ( 1.5)	29 ( 2.1)	28 ( 6.3)
NORTH CAROLINA	0 ( 0.3)	4 ( 0.9)	2 ( ... )	6 ( 1.0)	28 ( 1.7)	14 ( 4.2)
NORTH DAKOTA	2 ( 0.9)	5 ( 1.1)	5 ( 1.6)	22 ( 2.5)	38 ( 1.6)	33 ( 4.2)
OREGON	1 ( 0.6)	6 ( 1.0)	4 ( 1.5)	12 ( 2.1)	32 ( 1.9)	23 ( 4.1)
RHODE ISLAND	0 ( ... )	3 ( 0.6)	1 ( ... )	8 ( 1.8)	26 ( 1.6)	10 ( 4.1)
SOUTH CAROLINA†	0 ( 0.2)	3 ( 0.6)	... ( ... )	5 ( 1.2)	21 ( 1.7)	... ( ... )
TENNESSEE	0 ( ... )	2 ( 0.6)	2 ( ... )	5 ( 1.0)	19 ( 1.9)	14 ( 4.0)
TEXAS	0 ( ... )	4 ( 0.7)	0 ( ... )	6 ( 1.2)	31 ( 1.9)	18 ( 4.4)
UTAH	1 ( 0.5)	3 ( 0.5)	2 ( 1.1)	17 ( 2.0)	27 ( 1.3)	24 ( 4.5)
VERMONT†	1 ( 0.7)	5 ( 0.8)	1 ( ... )	16 ( 2.1)	31 ( 1.5)	21 ( 4.3)
VIRGINIA	0 ( ... )	4 ( 0.6)	4 ( 2.1)	5 ( 1.2)	26 ( 1.4)	25 ( 5.9)
WASHINGTON	1 ( 0.5)	5 ( 0.9)	1 ( ... )	12 ( 1.7)	31 ( 1.4)	18 ( 5.1)
WEST VIRGINIA	0 ( ... )	2 ( 0.5)	4 ( ... )	6 ( 1.1)	18 ( 1.3)	22 ( 5.5)
WISCONSIN†	1 ( 0.8)	7 ( 1.0)	4 ( 1.5)	12 ( 2.3)	37 ( 2.0)	33 ( 4.8)
WYOMING	1 ( ... )	3 ( 0.7)	5 ( 2.5)	11 ( 1.5)	24 ( 1.3)	34 ( 4.1)
<b>Other Jurisdictions</b>						
DDESS	4 ( 1.6)	7 ( 2.1)	4 ( 2.4)	14 ( 3.5)	27 ( 3.4)	21 ( 4.9)
DoDDS	2 ( ... )	4 ( 1.3)	3 ( 0.5)	17 ( 3.8)	23 ( 1.6)	24 ( 1.7)
GUAM	0 ( ... )	1 ( ... )	... ( ... )	1 ( ... )	7 ( 1.0)	... ( ... )

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).  
... Characteristics of the sample do not permit a reliable estimate.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 4.11** (continued) **1996 Mathematics Assessment**



POPULATION: **1996 Grade 8 Public School Students**  
 REPORTED STATISTICS: **Percentage of Students by Achievement Levels**  
 BREAKDOWNS BY: **Free/Reduced-Price Lunch Program Eligibility**

Achievement Level...	At or Above Basic			Below Basic		
	Eligible	Not Eligible	Information Not Available	Eligible	Not Eligible	Information Not Available
Free/reduced-price lunch program eligibility...	Eligible	Not Eligible	Information Not Available	Eligible	Not Eligible	Information Not Available
JURISDICTIONS	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )
<b>Nation</b>						
NATION	39 ( 1.8)	71 ( 1.7)	69 ( 4.2)	61 ( 1.8)	29 ( 1.7)	31 ( 4.2)
NORTHEAST	48 ( 4.7)	74 ( 4.3)	... ( ... )	52 ( 4.7)	26 ( 4.3)	... ( ... )
SOUTHEAST	30 ( 3.1)	65 ( 4.4)	66 ( 8.9)	70 ( 3.1)	35 ( 4.4)	34 ( 8.9)
CENTRAL	39 ( 6.6)	77 ( 2.5)	79 ( 4.3)	61 ( 6.6)	23 ( 2.5)	21 ( 4.3)
WEST	40 ( 3.8)	67 ( 2.5)	66 ( 6.2)	60 ( 3.8)	33 ( 2.5)	34 ( 6.2)
<b>States</b>						
ALABAMA	22 ( 2.2)	60 ( 2.8)	43 (11.7)	78 ( 2.2)	40 ( 2.8)	57 (11.7)
ALASKA†	44 ( 4.7)	72 ( 3.6)	72 ( 2.7)	56 ( 4.7)	28 ( 3.6)	28 ( 2.7)
ARIZONA	37 ( 4.1)	70 ( 1.8)	54 ( 4.0)	63 ( 4.1)	31 ( 1.8)	46 ( 4.0)
ARKANSAS†	33 ( 3.5)	62 ( 2.0)	51 ( 7.6)	67 ( 3.5)	38 ( 2.0)	49 ( 7.6)
CALIFORNIA	32 ( 2.5)	67 ( 2.3)	49 ( 5.0)	68 ( 2.5)	33 ( 2.3)	51 ( 5.0)
COLORADO	46 ( 2.4)	75 ( 1.5)	60 ( 6.2)	54 ( 2.4)	25 ( 1.5)	40 ( 6.2)
CONNECTICUT	40 ( 4.4)	79 ( 1.5)	66 (11.8)	60 ( 4.4)	21 ( 1.5)	34 (11.8)
DELAWARE	33 ( 2.1)	64 ( 1.6)	52 ( 2.7)	67 ( 2.1)	36 ( 1.6)	48 ( 2.7)
DISTRICT OF COLUMBIA	14 ( 1.1)	30 ( 2.3)	21 ( 3.1)	86 ( 1.1)	70 ( 2.3)	79 ( 3.1)
FLORIDA	35 ( 2.3)	67 ( 2.3)	55 ( 5.9)	65 ( 2.3)	33 ( 2.3)	45 ( 5.9)
GEORGIA	26 ( 1.8)	64 ( 2.4)	60 ( 5.9)	74 ( 1.8)	36 ( 2.4)	40 ( 5.9)
HAWAII	35 ( 2.7)	59 ( 1.9)	42 ( 4.1)	65 ( 2.7)	41 ( 1.9)	58 ( 4.1)
INDIANA	42 ( 3.4)	76 ( 1.8)	... ( ... )	58 ( 3.4)	24 ( 1.8)	... ( ... )
IOWA†	64 ( 3.7)	81 ( 1.3)	76 ( 5.0)	36 ( 3.7)	19 ( 1.3)	24 ( 5.0)
KENTUCKY	38 ( 2.1)	68 ( 1.8)	50 ( 4.3)	62 ( 2.1)	32 ( 1.8)	50 ( 4.3)
LOUISIANA	24 ( 2.4)	54 ( 2.0)	36 ( 6.8)	76 ( 2.4)	46 ( 2.0)	64 ( 6.8)
MAINE	64 ( 2.9)	81 ( 1.5)	80 ( 6.6)	36 ( 2.9)	19 ( 1.5)	20 ( 6.6)
MARYLAND†	28 ( 2.7)	68 ( 2.1)	60 ( 8.6)	72 ( 2.7)	32 ( 2.1)	40 ( 8.6)
MASSACHUSETTS	41 ( 3.7)	76 ( 1.9)	59 (11.4)	59 ( 3.7)	24 ( 1.9)	41 (11.4)
MICHIGAN†	45 ( 4.1)	75 ( 2.0)	60 ( 7.7)	55 ( 4.1)	25 ( 2.0)	40 ( 7.7)
MINNESOTA	60 ( 2.4)	80 ( 1.5)	72 ( 6.1)	40 ( 2.4)	20 ( 1.5)	28 ( 6.1)
MISSISSIPPI	20 ( 1.5)	55 ( 2.0)	32 (11.2)	80 ( 1.5)	45 ( 2.0)	68 (11.2)
MISSOURI	46 ( 2.9)	72 ( 2.1)	55 (11.1)	54 ( 2.9)	28 ( 2.1)	45 (11.1)
MONTANA†	55 ( 3.3)	82 ( 1.6)	79 ( 2.5)	45 ( 3.3)	18 ( 1.6)	21 ( 2.5)
NEBRASKA	60 ( 2.4)	81 ( 1.1)	84 ( 3.5)	40 ( 2.4)	19 ( 1.1)	16 ( 3.5)
NEW MEXICO	36 ( 2.1)	64 ( 2.3)	53 ( 3.5)	64 ( 2.1)	36 ( 2.3)	47 ( 3.5)
NEW YORK†	42 ( 3.1)	75 ( 2.0)	58 ( 8.4)	58 ( 3.1)	25 ( 2.0)	42 ( 8.4)
NORTH CAROLINA	36 ( 2.4)	66 ( 2.1)	50 ( 7.5)	64 ( 2.4)	34 ( 2.1)	50 ( 7.5)
NORTH DAKOTA	67 ( 2.9)	82 ( 1.3)	75 ( 4.0)	33 ( 2.9)	18 ( 1.3)	25 ( 4.0)
OREGON	50 ( 3.1)	74 ( 1.8)	64 ( 3.5)	50 ( 3.1)	26 ( 1.8)	36 ( 3.5)
RHODE ISLAND	38 ( 2.8)	70 ( 1.7)	34 ( 7.2)	62 ( 2.8)	30 ( 1.7)	66 ( 7.2)
SOUTH CAROLINA†	30 ( 1.8)	63 ( 2.4)	... ( ... )	70 ( 1.8)	37 ( 2.4)	... ( ... )
TENNESSEE	32 ( 3.0)	63 ( 2.5)	46 ( 5.9)	68 ( 3.0)	37 ( 2.5)	54 ( 5.9)
TEXAS	36 ( 2.3)	74 ( 1.9)	66 ( 5.8)	64 ( 2.3)	26 ( 1.9)	34 ( 5.8)
UTAH	58 ( 3.2)	74 ( 1.5)	67 ( 3.4)	42 ( 3.2)	26 ( 1.5)	33 ( 3.4)
VERMONT†	55 ( 3.3)	76 ( 1.9)	75 ( 3.6)	45 ( 3.3)	24 ( 1.9)	25 ( 3.6)
VIRGINIA	29 ( 3.0)	67 ( 1.8)	67 ( 5.9)	71 ( 3.0)	33 ( 1.8)	33 ( 5.9)
WASHINGTON	45 ( 2.9)	74 ( 1.6)	73 ( 5.6)	55 ( 2.9)	26 ( 1.6)	27 ( 5.6)
WEST VIRGINIA	39 ( 2.4)	62 ( 1.7)	62 ( 6.0)	61 ( 2.4)	38 ( 1.7)	38 ( 6.0)
WISCONSIN†	51 ( 4.5)	82 ( 1.6)	77 ( 4.3)	49 ( 4.5)	18 ( 1.6)	23 ( 4.3)
WYOMING	54 ( 3.2)	72 ( 1.3)	78 ( 5.0)	46 ( 3.2)	28 ( 1.3)	22 ( 5.0)
<b>Other Jurisdictions</b>						
DDESS	48 ( 5.6)	64 ( 4.6)	56 ( 4.5)	52 ( 5.6)	36 ( 4.6)	44 ( 4.5)
DoDDS	56 ( 5.2)	66 ( 2.3)	67 ( 1.7)	44 ( 5.2)	34 ( 2.3)	33 ( 1.7)
GUAM	11 ( 2.7)	33 ( 1.8)	... ( ... )	89 ( 2.7)	67 ( 1.8)	... ( ... )

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).  
 ... Characteristics of the sample do not permit a reliable estimate.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 4.12**

**1992 Mathematics Assessment**



POPULATION:  
REPORTED STATISTICS:  
BREAKDOWNS BY:

1992 Grade 8 Public School Students  
Percentage of Students by Achievement Levels  
Type of Location

Achievement Level...	Advanced			At or Above Proficient		
	Central City	Urban Fringe/ Large Town	Rural/ Small Town	Central City	Urban Fringe/ Large Town	Rural/ Small Town
Type of location...						
JURISDICTIONS	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )
<b>Nation</b>						
NATION	2 ( 0.5 )	5 ( 0.8 )	1 ( 0.5 )	15 ( 1.8 )	25 ( 2.0 )	17 ( 1.5 )
NORTHEAST	1 ( 0.5 )	7 ( 1.5 )	... ( ... )	8 ( 1.4 )	30 ( 3.7 )	... ( ... )
SOUTHEAST	1 ( 0.4 )	2 ( 0.8 )	1 ( ... )	12 ( 2.0 )	19 ( 2.0 )	9 ( 1.4 )
CENTRAL	2 ( 1.0 )	4 ( 0.9 )	2 ( 1.1 )	18 ( 5.1 )	29 ( 5.4 )	24 ( 4.2 )
WEST	2 ( 1.2 )	5 ( 1.7 )	... ( ... )	18 ( 2.2 )	23 ( 3.8 )	... ( ... )
<b>States</b>						
ALABAMA	1 ( 0.8 )	1 ( 0.4 )	1 ( 0.2 )	13 ( 2.3 )	9 ( 1.7 )	9 ( 1.1 )
ALASKA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
ARIZONA	2 ( 0.4 )	1 ( ... )	0 ( ... )	16 ( 1.7 )	15 ( 2.3 )	13 ( 2.1 )
ARKANSAS	1 ( 0.6 )	1 ( ... )	1 ( 0.2 )	10 ( 2.1 )	15 ( 1.6 )	9 ( 0.9 )
CALIFORNIA	2 ( 0.8 )	2 ( 1.1 )	1 ( ... )	16 ( 2.1 )	16 ( 2.0 )	17 ( 4.8 )
COLORADO	3 ( 0.7 )	2 ( 0.6 )	1 ( 0.8 )	22 ( 1.7 )	22 ( 1.8 )	21 ( 3.4 )
CONNECTICUT	1 ( 0.7 )	4 ( 1.4 )	4 ( 0.8 )	13 ( 2.2 )	29 ( 3.0 )	35 ( 2.0 )
DELAWARE	3 ( 0.9 )	3 ( 0.7 )	0 ( ... )	14 ( 2.0 )	17 ( 1.5 )	11 ( 1.4 )
DISTRICT OF COLUMBIA	1 ( 0.2 )	... ( ... )	... ( ... )	4 ( 0.9 )	... ( ... )	... ( ... )
FLORIDA	2 ( 0.5 )	1 ( 0.4 )	2 ( 1.0 )	16 ( 2.3 )	14 ( 1.5 )	12 ( 2.6 )
GEORGIA	1 ( ... )	2 ( 0.5 )	1 ( 0.3 )	9 ( 1.6 )	19 ( 1.7 )	8 ( 1.2 )
HAWAII	3 ( 0.6 )	2 ( 0.7 )	1 ( 0.5 )	19 ( 1.3 )	12 ( 1.3 )	11 ( 1.2 )
INDIANA	2 ( 0.7 )	3 ( 1.2 )	3 ( 0.6 )	15 ( 1.8 )	25 ( 3.2 )	21 ( 1.9 )
IOWA	3 ( 1.1 )	6 ( 1.9 )	4 ( 0.8 )	26 ( 2.7 )	36 ( 4.0 )	32 ( 1.6 )
KENTUCKY	2 ( 1.2 )	2 ( 0.6 )	1 ( 0.3 )	15 ( 2.8 )	18 ( 2.6 )	11 ( 1.0 )
LOUISIANA	1 ( ... )	1 ( 0.3 )	0 ( ... )	8 ( 1.9 )	8 ( 1.7 )	6 ( 1.5 )
MAINE	3 ( 1.5 )	4 ( 1.0 )	3 ( 0.6 )	23 ( 2.8 )	31 ( 5.7 )	25 ( 1.7 )
MARYLAND	1 ( 0.6 )	4 ( 0.8 )	1 ( 0.5 )	11 ( 2.2 )	24 ( 1.9 )	18 ( 2.6 )
MASSACHUSETTS	0 ( ... )	4 ( 0.8 )	4 ( 1.3 )	10 ( 2.7 )	30 ( 2.5 )	27 ( 2.6 )
MICHIGAN	1 ( 0.6 )	3 ( 0.8 )	2 ( 0.6 )	11 ( 3.2 )	23 ( 2.5 )	20 ( 2.5 )
MINNESOTA	5 ( 1.7 )	5 ( 1.0 )	4 ( 0.6 )	30 ( 3.2 )	34 ( 1.6 )	27 ( 2.0 )
MISSISSIPPI	0 ( ... )	1 ( 0.4 )	0 ( 0.1 )	5 ( 1.2 )	10 ( 2.3 )	6 ( 0.7 )
MISSOURI	2 ( 0.7 )	3 ( 0.8 )	2 ( 0.4 )	16 ( 2.2 )	23 ( 2.3 )	18 ( 1.7 )
MONTANA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
NEBRASKA	3 ( 1.0 )	2 ( 0.8 )	3 ( 0.7 )	24 ( 3.0 )	26 ( 3.3 )	28 ( 2.2 )
NEW MEXICO	1 ( 0.4 )	1 ( ... )	1 ( 0.4 )	13 ( 1.3 )	10 ( 1.9 )	9 ( 1.3 )
NEW YORK	2 ( 0.8 )	5 ( 0.8 )	3 ( 1.0 )	9 ( 2.4 )	28 ( 1.8 )	23 ( 1.9 )
NORTH CAROLINA	2 ( 0.7 )	1 ( 0.5 )	1 ( 0.3 )	15 ( 1.6 )	12 ( 1.6 )	10 ( 1.4 )
NORTH DAKOTA	4 ( 1.0 )	3 ( 1.4 )	3 ( 0.6 )	32 ( 1.8 )	31 ( 4.1 )	28 ( 2.1 )
OREGON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
RHODE ISLAND	1 ( 0.4 )	1 ( 0.5 )	3 ( 0.9 )	10 ( 1.7 )	17 ( 1.6 )	23 ( 2.0 )
SOUTH CAROLINA	2 ( 0.7 )	2 ( 0.6 )	1 ( 0.5 )	16 ( 2.0 )	18 ( 2.2 )	12 ( 1.5 )
TENNESSEE	1 ( 0.7 )	2 ( 1.1 )	0 ( ... )	11 ( 2.1 )	16 ( 2.1 )	10 ( 1.2 )
TEXAS	3 ( 0.8 )	5 ( 1.4 )	2 ( 0.9 )	15 ( 1.7 )	24 ( 2.8 )	17 ( 2.5 )
UTAH	3 ( 0.7 )	2 ( 0.5 )	2 ( 0.6 )	24 ( 2.4 )	23 ( 1.6 )	19 ( 2.1 )
VERMONT	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
VIRGINIA	1 ( 0.5 )	5 ( 1.2 )	1 ( 0.5 )	16 ( 1.9 )	28 ( 2.0 )	9 ( 2.2 )
WASHINGTON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
WEST VIRGINIA	1 ( ... )	1 ( 0.6 )	0 ( 0.2 )	13 ( 2.2 )	13 ( 2.4 )	8 ( 0.7 )
WISCONSIN	3 ( 1.2 )	3 ( 0.7 )	3 ( 1.2 )	26 ( 3.9 )	29 ( 2.6 )	26 ( 1.9 )
WYOMING	2 ( 1.2 )	... ( ... )	2 ( 0.3 )	22 ( 2.4 )	... ( ... )	20 ( 1.2 )
<b>Other Jurisdictions</b>						
DDESS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
DoDDS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
GUAM	... ( ... )	... ( ... )	0 ( 0.1 )	... ( ... )	... ( ... )	6 ( 0.6 )

— State or other jurisdiction did not participate in the NAEP assessment year presented in this table.

... Characteristics of the sample do not permit a reliable estimate.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 4.12** (continued) **1992 Mathematics Assessment**



POPULATION: **1992 Grade 8 Public School Students**  
 REPORTED STATISTICS: **Percentage of Students by Achievement Levels**  
 BREAKDOWNS BY: **Type of Location**

Achievement Level...	At or Above Basic			Below Basic		
	Central City	Urban Fringe/ Large Town	Rural/ Small Town	Central City	Urban Fringe/ Large Town	Rural/ Small Town
Type of location...						
JURISDICTIONS	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )
<b>Nation</b>						
NATION	46 ( 3.5)	64 ( 2.3)	55 ( 2.2)	54 ( 3.5)	36 ( 2.3)	45 ( 2.2)
NORTHEAST	28 ( 3.1)	68 ( 4.8)	... ( ... )	72 ( 3.1)	32 ( 4.8)	... ( ... )
SOUTHEAST	38 ( 5.4)	57 ( 1.8)	44 ( 3.8)	62 ( 5.4)	43 ( 1.8)	56 ( 3.8)
CENTRAL	55 ( 6.8)	70 ( 6.9)	68 ( 4.7)	45 ( 6.8)	30 ( 6.9)	32 ( 4.7)
WEST	52 ( 5.7)	60 ( 3.8)	... ( ... )	48 ( 5.7)	40 ( 3.8)	... ( ... )
<b>States</b>						
ALABAMA	38 ( 4.9)	41 ( 3.4)	38 ( 2.2)	62 ( 4.9)	59 ( 3.4)	62 ( 2.2)
ALASKA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
ARIZONA	56 ( 2.6)	53 ( 3.9)	52 ( 3.7)	44 ( 2.6)	47 ( 3.9)	48 ( 3.7)
ARKANSAS	39 ( 4.4)	50 ( 4.1)	45 ( 2.2)	61 ( 4.4)	50 ( 4.1)	55 ( 2.2)
CALIFORNIA	47 ( 3.4)	51 ( 2.5)	53 ( 6.7)	53 ( 3.4)	49 ( 2.5)	47 ( 6.7)
COLORADO	60 ( 2.4)	66 ( 2.3)	65 ( 3.2)	40 ( 2.4)	34 ( 2.3)	35 ( 3.2)
CONNECTICUT	45 ( 3.6)	69 ( 2.6)	81 ( 2.3)	55 ( 3.6)	31 ( 2.6)	19 ( 2.3)
DELAWARE	47 ( 2.2)	56 ( 1.6)	49 ( 3.0)	53 ( 2.2)	44 ( 1.6)	51 ( 3.0)
DISTRICT OF COLUMBIA	22 ( 1.1)	... ( ... )	... ( ... )	78 ( 1.1)	... ( ... )	... ( ... )
FLORIDA	47 ( 4.0)	50 ( 2.3)	51 ( 5.0)	53 ( 4.0)	50 ( 2.3)	49 ( 5.0)
GEORGIA	39 ( 3.4)	59 ( 2.8)	42 ( 2.5)	61 ( 3.4)	41 ( 2.8)	58 ( 2.5)
HAWAII	51 ( 1.6)	44 ( 1.9)	45 ( 2.2)	49 ( 1.6)	56 ( 1.9)	55 ( 2.2)
INDIANA	48 ( 2.9)	68 ( 3.9)	65 ( 1.9)	52 ( 2.9)	32 ( 3.9)	35 ( 1.9)
IOWA	68 ( 3.3)	81 ( 3.1)	79 ( 1.5)	32 ( 3.3)	19 ( 3.1)	21 ( 1.5)
KENTUCKY	50 ( 4.0)	57 ( 3.7)	49 ( 1.8)	50 ( 4.0)	43 ( 3.7)	51 ( 1.8)
LOUISIANA	34 ( 3.8)	41 ( 3.3)	34 ( 3.1)	66 ( 3.8)	59 ( 3.3)	66 ( 3.1)
MAINE	70 ( 3.3)	80 ( 3.4)	71 ( 1.6)	30 ( 3.3)	20 ( 3.4)	29 ( 1.6)
MARYLAND	38 ( 4.7)	62 ( 2.0)	46 ( 3.4)	62 ( 4.7)	38 ( 2.0)	54 ( 3.4)
MASSACHUSETTS	41 ( 3.7)	72 ( 2.3)	71 ( 2.2)	59 ( 3.7)	28 ( 2.3)	29 ( 2.2)
MICHIGAN	35 ( 4.9)	67 ( 2.3)	67 ( 2.7)	65 ( 4.9)	33 ( 2.3)	33 ( 2.7)
MINNESOTA	65 ( 3.8)	76 ( 1.7)	75 ( 2.4)	35 ( 3.8)	24 ( 1.7)	25 ( 2.4)
MISSISSIPPI	30 ( 2.8)	42 ( 4.2)	32 ( 1.7)	70 ( 2.8)	58 ( 4.2)	68 ( 1.7)
MISSOURI	55 ( 4.0)	66 ( 2.6)	63 ( 2.2)	45 ( 4.0)	34 ( 2.6)	37 ( 2.2)
MONTANA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
NEBRASKA	63 ( 2.4)	69 ( 2.8)	74 ( 1.8)	37 ( 2.4)	31 ( 2.8)	26 ( 1.8)
NEW MEXICO	51 ( 2.2)	46 ( 3.0)	45 ( 2.2)	49 ( 2.2)	54 ( 3.0)	55 ( 2.2)
NEW YORK	34 ( 4.8)	73 ( 1.7)	72 ( 3.0)	66 ( 4.8)	27 ( 1.7)	28 ( 3.0)
NORTH CAROLINA	51 ( 2.3)	47 ( 3.3)	44 ( 2.1)	49 ( 2.3)	53 ( 3.3)	56 ( 2.1)
NORTH DAKOTA	80 ( 1.7)	79 ( 2.9)	77 ( 2.0)	20 ( 1.7)	21 ( 2.9)	23 ( 2.0)
OREGON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
RHODE ISLAND	45 ( 2.2)	57 ( 2.0)	73 ( 2.9)	55 ( 2.2)	43 ( 2.0)	27 ( 2.9)
SOUTH CAROLINA	47 ( 3.2)	56 ( 3.2)	42 ( 2.6)	53 ( 3.2)	44 ( 3.2)	58 ( 2.6)
TENNESSEE	41 ( 4.0)	55 ( 2.9)	46 ( 2.4)	59 ( 4.0)	45 ( 2.9)	54 ( 2.4)
TEXAS	48 ( 2.1)	60 ( 2.7)	53 ( 3.4)	52 ( 2.1)	40 ( 2.7)	47 ( 3.4)
UTAH	67 ( 2.5)	67 ( 1.8)	67 ( 2.9)	33 ( 2.5)	33 ( 1.8)	33 ( 2.9)
VERMONT	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
VIRGINIA	54 ( 2.9)	66 ( 2.8)	46 ( 3.6)	46 ( 2.9)	34 ( 2.8)	54 ( 3.6)
WASHINGTON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
WEST VIRGINIA	55 ( 3.4)	50 ( 3.7)	44 ( 1.7)	45 ( 3.4)	50 ( 3.7)	56 ( 1.7)
WISCONSIN	65 ( 5.9)	74 ( 2.6)	73 ( 2.8)	35 ( 5.9)	26 ( 2.6)	27 ( 2.8)
WYOMING	67 ( 2.6)	... ( ... )	66 ( 1.5)	33 ( 2.6)	... ( ... )	34 ( 1.5)
<b>Other Jurisdictions</b>						
DDESS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
DoDDS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
GUAM	... ( ... )	... ( ... )	25 ( 1.4)	... ( ... )	... ( ... )	75 ( 1.4)

— State or other jurisdiction did not participate in the NAEP assessment year presented in this table.

... Characteristics of the sample do not permit a reliable estimate.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 4.12** (continued) **1996 Mathematics Assessment**



POPULATION: **1996 Grade 8 Public School Students**  
 REPORTED STATISTICS: **Percentage of Students by Achievement Levels**  
 BREAKDOWNS BY: **Type of Location**

Achievement Level...	Advanced			At or Above Proficient		
	Central City	Urban Fringe/ Large Town	Rural/ Small Town	Central City	Urban Fringe/ Large Town	Rural/ Small Town
Type of location...						
JURISDICTIONS	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )
<b>Nation</b>						
NATION	3 ( 0.7 )	5 ( 1.4 )	3 ( 0.6 )	16 ( 1.7 )	26 ( 3.0 )	25 ( 1.7 )>
NORTHEAST	3 ( 1.3 )	7 ( 4.2 )	... ( ... )	18 ( 3.7 )	28 ( 8.1 )	... ( ... )
SOUTHEAST	2 ( 1.7 )	3 ( 1.7 )	2 ( 0.9 )	14 ( 5.4 )	18 ( 4.9 )	17 ( 2.8 )
CENTRAL	6 ( 3.1 )	5 ( 2.1 )	4 ( 1.2 )	25 ( 6.4 )	30 ( 5.6 )	28 ( 2.9 )
WEST	1 ( 0.7 )	4 ( 1.1 )	2 ( 0.8 )	13 ( 2.4 )	26 ( 3.7 )	23 ( 3.6 )
<b>States</b>						
ALABAMA	2 ( 0.8 )	1 ( 0.5 )	1 ( ... )	14 ( 4.1 )	13 ( 2.4 )	10 ( 1.9 )
ALASKA†	9 ( 2.4 )	... ( ... )	5 ( 1.1 )	35 ( 3.3 )	... ( ... )	27 ( 1.9 )
ARIZONA	2 ( 0.4 )	3 ( 0.9 )	0 ( ... )	18 ( 1.5 )	20 ( 2.9 )	11 ( 2.2 )
ARKANSAS†	2 ( 1.0 )	1 ( 0.9 )	2 ( 0.4 )	14 ( 2.3 )	15 ( 3.7 )	12 ( 1.3 )
CALIFORNIA	2 ( 0.6 )	4 ( 0.7 )	... ( ... )	14 ( 2.2 )	20 ( 2.1 )	... ( ... )
COLORADO	3 ( 0.8 )	4 ( 1.0 )	1 ( 0.8 )	24 ( 2.2 )	28 ( 2.2 )	22 ( 2.7 )
CONNECTICUT	2 ( 0.9 )	7 ( 1.5 )	6 ( 1.3 )	14 ( 2.8 )	35 ( 2.9 )	37 ( 2.9 )
DELAWARE	2 ( 0.9 )	4 ( 0.8 )	3 ( 1.1 )	19 ( 1.7 )	20 ( 1.2 )	18 ( 2.7 )
DISTRICT OF COLUMBIA	1 ( 0.3 )	... ( ... )	... ( ... )	5 ( 0.8 )	... ( ... )	... ( ... )
FLORIDA	2 ( 0.9 )	2 ( 0.5 )	1 ( ... )	18 ( 3.0 )	17 ( 1.5 )	16 ( 3.2 )
GEORGIA	2 ( ... )	3 ( 0.9 )	1 ( 0.4 )	8 ( 2.8 )	23 ( 3.3 )	10 ( 2.0 )
HAWAII	4 ( 0.9 )	2 ( 0.6 )	2 ( 0.6 )	20 ( 1.8 )	15 ( 1.6 )	14 ( 1.6 )
INDIANA	3 ( 1.1 )	4 ( 1.0 )	2 ( 0.5 )	22 ( 3.1 )	27 ( 3.5 )	23 ( 2.1 )
IOWA†	4 ( 1.1 )	7 ( 1.6 )	3 ( 0.7 )	28 ( 3.5 )	37 ( 3.9 )	32 ( 2.2 )
KENTUCKY	3 ( 0.9 )	2 ( 1.3 )	1 ( 0.4 )	23 ( 3.2 )	20 ( 4.0 )	13 ( 1.2 )
LOUISIANA	1 ( 0.5 )	0 ( ... )	0 ( ... )	8 ( 2.0 )	9 ( 2.1 )	5 ( 1.5 )
MAINE	5 ( 1.5 )	10 ( 3.8 )	5 ( 0.7 )	29 ( 3.5 )	43 ( 5.6 )	30 ( 1.8 )
MARYLAND†	1 ( 0.6 )	7 ( 1.5 )	2 ( 0.9 )	12 ( 3.2 )	30 ( 3.1 )	18 ( 3.3 )
MASSACHUSETTS	1 ( 0.4 )	6 ( 1.3 )	7 ( 2.7 )	13 ( 2.5 )	35 ( 2.7 )	31 ( 4.3 )
MICHIGAN†	4 ( 1.6 )	5 ( 1.2 )	4 ( 1.2 )	20 ( 4.1 )	32 ( 2.6 )	30 ( 2.6 )
MINNESOTA	5 ( 2.0 )	8 ( 1.7 )	4 ( 0.6 )	32 ( 6.2 )	40 ( 3.0 )	30 ( 1.9 )
MISSISSIPPI	1 ( ... )	1 ( 0.4 )	0 ( 0.2 )	10 ( 2.6 )	11 ( 2.0 )	6 ( 0.8 )
MISSOURI	3 ( 1.6 )	2 ( 0.7 )	2 ( 0.6 )	18 ( 5.2 )	23 ( 2.3 )	21 ( 2.0 )
MONTANA†	6 ( 1.4 )	... ( ... )	5 ( 0.7 )	34 ( 2.3 )	... ( ... )	32 ( 1.8 )
NEBRASKA	6 ( 1.5 )	8 ( 2.0 )	4 ( 0.9 )	27 ( 1.8 )	39 ( 3.4 )	31 ( 2.0 )
NEW MEXICO	2 ( 0.6 )	2 ( 0.5 )	1 ( 0.4 )	16 ( 1.7 )	12 ( 2.9 )	13 ( 1.6 )
NEW YORK†	2 ( 0.6 )	5 ( 0.8 )	1 ( ... )	13 ( 1.7 )	31 ( 2.4 )	23 ( 2.7 )
NORTH CAROLINA	5 ( 1.4 )	2 ( 0.8 )	2 ( 0.8 )	26 ( 3.0 )	16 ( 2.1 )	18 ( 1.7 )
NORTH DAKOTA	6 ( 1.5 )	... ( ... )	4 ( 0.6 )	36 ( 2.6 )	... ( ... )	32 ( 1.9 )
OREGON	7 ( 1.8 )	5 ( 1.1 )	2 ( 0.6 )	32 ( 4.5 )	31 ( 2.4 )	18 ( 1.7 )
RHODE ISLAND	1 ( 0.5 )	3 ( 0.7 )	5 ( 1.7 )	13 ( 1.3 )	22 ( 1.7 )	32 ( 2.7 )
SOUTH CAROLINA†	3 ( 1.2 )	2 ( 0.7 )	1 ( 0.3 )	17 ( 2.8 )	17 ( 1.9 )	10 ( 1.6 )
TENNESSEE	2 ( 0.7 )	3 ( 0.6 )	1 ( 0.3 )	12 ( 2.8 )	22 ( 2.5 )	11 ( 1.6 )
TEXAS	2 ( 0.7 )	4 ( 1.1 )	2 ( 0.6 )	19 ( 2.5 )	25 ( 3.2 )	20 ( 2.7 )
UTAH	3 ( 0.8 )	3 ( 0.5 )	2 ( 0.7 )	23 ( 2.5 )	26 ( 1.8 )	23 ( 2.0 )
VERMONT†	... ( ... )	4 ( 2.7 )	4 ( 0.7 )	... ( ... )	24 ( 5.4 )	28 ( 1.5 )
VIRGINIA	3 ( 1.0 )	5 ( 0.8 )	1 ( 0.3 )	17 ( 2.5 )	31 ( 2.0 )	12 ( 1.5 )
WASHINGTON	4 ( 1.2 )	4 ( 1.0 )	3 ( 1.1 )	24 ( 2.8 )	29 ( 1.8 )	22 ( 3.1 )
WEST VIRGINIA	2 ( 0.8 )	1 ( 0.8 )	1 ( 0.5 )	17 ( 1.8 )	17 ( 1.9 )	12 ( 1.2 )
WISCONSIN†	3 ( 0.9 )	7 ( 1.7 )	5 ( 1.3 )	24 ( 3.9 )	37 ( 3.1 )	34 ( 2.5 )
WYOMING	2 ( 1.4 )	... ( ... )	3 ( 0.5 )	18 ( 1.6 )	... ( ... )	23 ( 1.3 )
<b>Other Jurisdictions</b>						
DDESS	... ( ... )	5 ( 1.4 )	4 ( 2.8 )	... ( ... )	23 ( 3.3 )	17 ( 6.1 )
DoDDS	... ( ... )	... ( ... )	... ( ... )	... ( ... )	... ( ... )	... ( ... )
GUAM	... ( ... )	... ( ... )	... ( ... )	... ( ... )	... ( ... )	... ( ... )

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).  
 ... Characteristics of the sample do not permit a reliable estimate.  
 > (<) The value for the students was significantly higher (lower) than in the 1992 assessment at about the 95% confidence level using appropriate multiple comparison procedures.  
 SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 4.12** (continued) **1996 Mathematics Assessment**



POPULATION: 1996 Grade 8 Public School Students  
 REPORTED STATISTICS: Percentage of Students by Achievement Levels  
 BREAKDOWNS BY: Type of Location

Achievement Level...	At or Above Basic			Below Basic		
	Central City	Urban Fringe/ Large Town	Rural/ Small Town	Central City	Urban Fringe/ Large Town	Rural/ Small Town
Type of location...						
JURISDICTIONS	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )
<b>Nation</b>						
NATION	47 ( 2.8)	64 ( 2.8)	69 ( 2.6)>	53 ( 2.8)	36 ( 2.8)	31 ( 2.6)<
NORTHEAST	52 ( 4.8)>	65 ( 5.9)	... ( ... )	48 ( 4.8)<	35 ( 5.9)	... ( ... )
SOUTHEAST	44 ( 8.5)	59 ( 8.6)	58 ( 5.3)	56 ( 8.5)	41 ( 8.6)	42 ( 5.3)
CENTRAL	54 (11.6)	66 ( 7.2)	74 ( 4.0)	46 (11.6)	34 ( 7.2)	26 ( 4.0)
WEST	46 ( 4.8)	64 ( 3.2)	68 ( 4.1)	54 ( 4.8)	36 ( 3.2)	32 ( 4.1)
<b>States</b>						
ALABAMA	40 ( 5.1)	53 ( 5.4)	45 ( 3.9)	60 ( 5.1)	47 ( 5.4)	55 ( 3.9)
ALASKA†	70 ( 3.0)	... ( ... )	66 ( 3.0)	30 ( 3.0)	... ( ... )	34 ( 3.0)
ARIZONA	57 ( 2.8)	63 ( 3.9)	45 ( 5.8)	43 ( 2.8)	37 ( 3.9)	55 ( 5.8)
ARKANSAS†	52 ( 3.8)	60 ( 4.6)	51 ( 2.6)	48 ( 3.8)	40 ( 4.6)	49 ( 2.6)
CALIFORNIA	45 ( 3.5)	56 ( 2.9)	... ( ... )	55 ( 3.5)	44 ( 2.9)	... ( ... )
COLORADO	62 ( 2.5)	70 ( 2.2)	68 ( 3.1)	38 ( 2.5)	30 ( 2.2)	32 ( 3.1)
CONNECTICUT	45 ( 3.8)	76 ( 2.5)	81 ( 2.2)	55 ( 3.8)	24 ( 2.5)	19 ( 2.2)
DELAWARE	54 ( 2.2)	58 ( 2.1)	52 ( 2.7)	46 ( 2.2)	42 ( 2.1)	48 ( 2.7)
DISTRICT OF COLUMBIA	20 ( 1.2)	... ( ... )	... ( ... )	80 ( 1.2)	... ( ... )	... ( ... )
FLORIDA	52 ( 4.6)	53 ( 2.4)	61 ( 3.6)	48 ( 4.6)	47 ( 2.4)	39 ( 3.6)
GEORGIA	35 ( 4.9)	62 ( 3.5)	44 ( 2.9)	65 ( 4.9)	38 ( 3.5)	56 ( 2.9)
HAWAII	58 ( 2.2)	51 ( 2.9)	47 ( 1.9)	42 ( 2.2)	49 ( 2.9)	53 ( 1.9)
INDIANA	62 ( 3.5)	74 ( 5.8)	69 ( 2.2)	38 ( 3.5)	26 ( 5.8)	31 ( 2.2)
IOWA†	73 ( 3.0)	83 ( 3.2)	79 ( 2.0)	27 ( 3.0)	17 ( 3.2)	21 ( 2.0)
KENTUCKY	61 ( 4.0)	60 ( 4.2)	54 ( 2.1)	39 ( 4.0)	40 ( 4.2)	46 ( 2.1)
LOUISIANA	34 ( 3.7)	46 ( 3.1)	35 ( 3.8)	66 ( 3.7)	54 ( 3.1)	65 ( 3.8)
MAINE	75 ( 3.1)	86 ( 3.4)	76 ( 1.8)	25 ( 3.1)	14 ( 3.4)	24 ( 1.8)
MARYLAND†	35 ( 4.9)	65 ( 3.0)	60 ( 4.4)	65 ( 4.9)	35 ( 3.0)	40 ( 4.4)
MASSACHUSETTS	49 ( 4.5)	78 ( 2.6)	72 ( 4.2)	51 ( 4.5)	22 ( 2.6)	28 ( 4.2)
MICHIGAN†	50 ( 5.9)	74 ( 2.6)	73 ( 2.7)	50 ( 5.9)	26 ( 2.6)	27 ( 2.7)
MINNESOTA	65 ( 3.9)	79 ( 2.3)	75 ( 2.0)	35 ( 3.9)	21 ( 2.3)	25 ( 2.0)
MISSISSIPPI	36 ( 5.9)	50 ( 4.4)	33 ( 1.6)	64 ( 5.9)	50 ( 4.4)	67 ( 1.6)
MISSOURI	49 ( 5.8)	68 ( 2.9)	66 ( 3.6)	51 ( 5.8)	32 ( 2.9)	34 ( 3.6)
MONTANA†	79 ( 2.2)	... ( ... )	74 ( 2.1)	21 ( 2.2)	... ( ... )	26 ( 2.1)
NEBRASKA	67 ( 2.1)	84 ( 1.7)>	78 ( 1.7)	33 ( 2.1)	16 ( 1.7)<	22 ( 1.7)
NEW MEXICO	53 ( 2.6)	44 ( 3.6)	51 ( 2.4)	47 ( 2.6)	56 ( 3.6)	49 ( 2.4)
NEW YORK†	43 ( 2.9)	75 ( 2.5)	75 ( 5.1)	57 ( 2.9)	25 ( 2.5)	25 ( 5.1)
NORTH CAROLINA	62 ( 2.7)	55 ( 2.8)	53 ( 3.2)	38 ( 2.7)	45 ( 2.8)	47 ( 3.2)
NORTH DAKOTA	75 ( 2.0)	... ( ... )	79 ( 1.4)	25 ( 2.0)	... ( ... )	21 ( 1.4)
OREGON	68 ( 4.5)	72 ( 2.4)	62 ( 2.0)	32 ( 4.5)	28 ( 2.4)	38 ( 2.0)
RHODE ISLAND	48 ( 2.0)	64 ( 2.4)	75 ( 2.6)	52 ( 2.0)	36 ( 2.4)	25 ( 2.6)
SOUTH CAROLINA†	52 ( 4.1)	57 ( 2.6)	40 ( 2.8)	48 ( 4.1)	43 ( 2.6)	60 ( 2.8)
TENNESSEE	38 ( 4.1)	64 ( 3.9)	54 ( 2.3)	62 ( 4.1)	36 ( 3.9)	46 ( 2.3)
TEXAS	55 ( 2.7)	66 ( 4.4)	61 ( 3.9)	45 ( 2.7)	34 ( 4.4)	39 ( 3.9)
UTAH	65 ( 2.9)	70 ( 1.8)	72 ( 2.9)	35 ( 2.9)	30 ( 1.8)	28 ( 2.9)
VERMONT†	... ( ... )	62 ( 4.8)	74 ( 1.8)	... ( ... )	38 ( 4.8)	26 ( 1.8)
VIRGINIA	50 ( 4.3)	71 ( 1.9)	50 ( 3.1)	50 ( 4.3)	29 ( 1.9)	50 ( 3.1)
WASHINGTON	62 ( 3.4)	72 ( 2.2)	61 ( 3.9)	38 ( 3.4)	28 ( 2.2)	39 ( 3.9)
WEST VIRGINIA	57 ( 4.3)	57 ( 3.1)	52 ( 2.0)	43 ( 4.3)	43 ( 3.1)	48 ( 2.0)
WISCONSIN†	61 ( 4.3)	83 ( 2.7)	81 ( 2.6)	39 ( 4.3)	17 ( 2.7)	19 ( 2.6)
WYOMING	67 ( 3.8)	... ( ... )	69 ( 1.3)	33 ( 3.8)	... ( ... )	31 ( 1.3)
<b>Other Jurisdictions</b>						
DDESS	... ( ... )	57 ( 3.8)	58 ( 6.7)	... ( ... )	43 ( 3.8)	42 ( 6.7)
DoDDS	... ( ... )	... ( ... )	... ( ... )	... ( ... )	... ( ... )	... ( ... )
GUAM	... ( ... )	... ( ... )	... ( ... )	... ( ... )	... ( ... )	... ( ... )

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).  
 ... Characteristics of the sample do not permit a reliable estimate.  
 > (<) The value for the students was significantly higher (lower) than in the 1992 assessment at about the 95% confidence level using appropriate multiple comparison procedures.  
 SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

## Chapter 5

# *School Characteristics Related to Mathematics Instruction*

### *Overview*

NAEP collected information on school programs and conditions, instructional practices, and resource availability. Such characteristics have been associated with students' success in mathematics.

The variables reported in Chapter 5 reflect information from the questionnaires completed by principals and teachers of the public school students in the NAEP 1996 mathematics assessment. Principals were asked whether mathematics receives special emphasis in school-wide goals and objectives, if the school uses parents as aides in classrooms, and the degree to which student absenteeism is a problem in their school. Teachers were asked about the availability of instructional materials and curriculum specialists, and how many school hours per week were designated as preparation time.

In all cases, analyses are done at the student level. School and teacher-reported results are given in terms of the percentage of students who attend schools or who have teachers reporting particular practices.

**TABLE 5.1**

**1996 Mathematics Assessment**



POPULATION:

1996 Grade 4 Public School Students

REPORTED STATISTICS:

Percentage of Students and Average Mathematics Scale Score

SCHOOLS' REPORTS ON:

The Identification of Mathematics as an Instructional Priority

Has your school identified mathematics as a priority in the last two years?

Yes

No

**JURISDICTIONS**

PCT ( SE )

SS ( SE )

PCT ( SE )

SS ( SE )

**Nation**

NATION	76 ( 3.9)	222 ( 1.2)	24 ( 3.9)	220 ( 3.1)
NORTHEAST	86 ( 4.0)	228 ( 2.9)	14 ( 4.0)	225 ( 5.1)!
SOUTHEAST	88 ( 5.7)	216 ( 3.0)	12 ( 5.7)	215 ( 4.6)!
CENTRAL	60 ( 10.1)	226 ( 2.3)!	40 ( 10.1)	232 ( 2.3)!
WEST	73 ( 8.2)	221 ( 2.0)	27 ( 8.2)	209 ( 5.2)!

**States**

ALABAMA	75 ( 4.7)	211 ( 1.5)	25 ( 4.7)	210 ( 3.9)
ALASKA†	70 ( 4.3)	228 ( 1.5)	30 ( 4.3)	217 ( 3.3)
ARIZONA	77 ( 4.5)	218 ( 2.4)	23 ( 4.5)	217 ( 2.9)
ARKANSAS†	65 ( 6.3)	214 ( 2.3)	35 ( 6.3)	216 ( 2.0)!
CALIFORNIA	75 ( 4.5)	205 ( 2.2)	25 ( 4.5)	211 ( 4.2)
COLORADO	63 ( 4.2)	223 ( 1.5)	37 ( 4.2)	230 ( 2.7)
CONNECTICUT	74 ( 5.1)	232 ( 1.7)	26 ( 5.1)	235 ( 3.2)!
DELAWARE	75 ( 0.3)	216 ( 0.7)	25 ( 0.3)	211 ( 1.4)
DISTRICT OF COLUMBIA	98 ( 0.0)	186 ( 1.4)	2 ( 0.0)	... ( ... )
FLORIDA	81 ( 4.4)	214 ( 1.6)	19 ( 4.4)	221 ( 3.3)!
GEORGIA	79 ( 4.2)	215 ( 2.1)	21 ( 4.2)	220 ( 2.3)
HAWAII	65 ( 4.8)	218 ( 2.4)	35 ( 4.8)	212 ( 2.6)
INDIANA	67 ( 5.3)	227 ( 1.4)	33 ( 5.3)	235 ( 2.0)
IOWA†	56 ( 5.6)	230 ( 1.6)	44 ( 5.6)	228 ( 2.0)
KENTUCKY	83 ( 4.2)	219 ( 1.5)	17 ( 4.2)	227 ( 3.3)!
LOUISIANA	77 ( 4.3)	208 ( 1.6)	23 ( 4.3)	216 ( 3.4)!
MAINE	68 ( 5.0)	233 ( 1.5)	32 ( 5.0)	233 ( 1.3)
MARYLAND	84 ( 4.6)	220 ( 1.8)	16 ( 4.6)	225 ( 4.6)!
MASSACHUSETTS	83 ( 4.0)	229 ( 1.8)	17 ( 4.0)	226 ( 3.2)!
MICHIGAN†	89 ( 4.1)	227 ( 1.7)	11 ( 4.1)	231 ( 4.7)!
MINNESOTA	70 ( 5.1)	233 ( 1.4)	30 ( 5.1)	236 ( 2.6)
MISSISSIPPI	84 ( 4.2)	207 ( 1.4)	16 ( 4.2)	212 ( 2.4)!
MISSOURI	49 ( 5.5)	225 ( 2.3)	51 ( 5.5)	225 ( 1.5)
MONTANA†	47 ( 6.3)	226 ( 1.9)	53 ( 6.3)	228 ( 2.2)
NEBRASKA	58 ( 5.1)	228 ( 1.9)	42 ( 5.1)	229 ( 2.0)
NEVADA†	91 ( 3.0)	218 ( 1.4)	9 ( 3.0)	216 ( 4.3)!
NEW JERSEY†	81 ( 5.1)	227 ( 2.2)	19 ( 5.1)	230 ( 2.7)!
NEW MEXICO	76 ( 5.2)	214 ( 1.9)	24 ( 5.2)	215 ( 5.7)!
NEW YORK†	69 ( 4.7)	218 ( 1.8)	31 ( 4.7)	234 ( 2.0)
NORTH CAROLINA	68 ( 5.0)	224 ( 1.8)	32 ( 5.0)	224 ( 2.2)
NORTH DAKOTA	57 ( 4.6)	232 ( 1.5)	43 ( 4.6)	230 ( 2.2)
OREGON	68 ( 5.1)	222 ( 1.8)	32 ( 5.1)	224 ( 1.8)
PENNSYLVANIA†	61 ( 5.7)	224 ( 2.1)	39 ( 5.7)	228 ( 2.8)
RHODE ISLAND	77 ( 4.1)	220 ( 1.7)	23 ( 4.1)	223 ( 3.6)
SOUTH CAROLINA†	89 ( 3.8)	213 ( 1.5)	11 ( 3.8)	217 ( 5.2)!
TENNESSEE	71 ( 5.3)	219 ( 2.0)	29 ( 5.3)	221 ( 2.6)
TEXAS	95 ( 2.5)	228 ( 1.7)	5 ( 2.5)	240 ( 6.5)!
UTAH	77 ( 4.2)	227 ( 1.4)	23 ( 4.2)	224 ( 2.5)
VERMONT†	65 ( 4.9)	226 ( 1.5)	35 ( 4.9)	223 ( 2.3)
VIRGINIA	82 ( 3.8)	224 ( 1.8)	18 ( 3.8)	218 ( 3.8)!
WASHINGTON	67 ( 5.2)	224 ( 1.4)	33 ( 5.2)	225 ( 2.6)
WEST VIRGINIA	89 ( 3.4)	224 ( 1.1)	11 ( 3.4)	221 ( 2.7)!
WISCONSIN	58 ( 5.8)	233 ( 2.1)	42 ( 5.8)	232 ( 2.0)
WYOMING	55 ( 4.3)	223 ( 1.7)	45 ( 4.3)	225 ( 1.6)

**Other Jurisdictions**

DDESS	98 ( 0.0)	224 ( 1.0)	2 ( 0.0)	... ( ... )
DoDDS	98 ( 0.6)	223 ( 0.7)	2 ( 0.6)	... ( ... )
GUAM	94 ( 0.4)	188 ( 1.2)	6 ( 0.4)	... ( ... )

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).

... Characteristics of the sample do not permit a reliable estimate.

! Interpret with caution — the nature of the sample does not allow accurate determination of the variability of this statistic.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.



**TABLE 5.2**

**1992 Mathematics Assessment**



POPULATION: **1992 Grade 4 Public School Students**  
 REPORTED STATISTICS: **Percentage of Students and Average Mathematics Scale Score**  
 TEACHERS' REPORTS ON: **Availability of Resources**

*How well are you provided with instructional materials and the resources you need to teach?*

**I Get Some or None of the Resources I Need**

**I Get Most of the Resources I Need**

**I Get All of the Resources I Need**

**JURISDICTIONS**

PCT ( SE )

SS ( SE )

PCT ( SE )

SS ( SE )

PCT ( SE )

SS ( SE )

**Nation**

NATION	37 ( 3.5)	214 ( 2.0)	52 ( 3.0)	221 ( 1.2)	11 ( 1.7)	222 ( 2.7)
NORTHEAST	44 ( 6.1)	216 ( 4.2)	45 ( 5.4)	229 ( 3.3)	11 ( 3.3)	234 ( 3.8)!
SOUTHEAST	41 ( 5.3)	208 ( 2.8)	46 ( 5.0)	211 ( 2.8)	13 ( 2.8)	207 ( 3.0)!
CENTRAL	35 (10.6)	222 ( 4.1)!	54 ( 7.8)	226 ( 2.1)	11 ( 4.6)	227 ( 6.3)!
WEST	32 ( 4.7)	212 ( 3.2)	58 ( 4.8)	221 ( 2.1)	10 ( 2.3)	226 ( 4.4)!

**States**

ALABAMA	53 ( 3.3)	208 ( 2.0)	39 ( 3.2)	211 ( 2.3)	8 ( 1.9)	210 ( 4.6)!
ALASKA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
ARIZONA	48 ( 3.6)	213 ( 1.5)	43 ( 3.2)	217 ( 1.8)	10 ( 1.7)	219 ( 3.7)
ARKANSAS	43 ( 4.4)	209 ( 1.9)	48 ( 4.4)	212 ( 1.3)	9 ( 1.5)	211 ( 2.6)
CALIFORNIA	46 ( 3.3)	203 ( 2.2)	49 ( 3.3)	213 ( 2.5)	5 ( 1.2)	211 ( 5.5)!
COLORADO	34 ( 3.2)	219 ( 1.7)	55 ( 2.9)	222 ( 1.6)	11 ( 2.1)	226 ( 4.2)
CONNECTICUT	31 ( 3.1)	220 ( 2.2)	59 ( 3.2)	232 ( 1.5)	10 ( 1.8)	228 ( 3.5)
DELAWARE	51 ( 0.8)	217 ( 1.1)	42 ( 0.9)	219 ( 1.2)	7 ( 0.4)	221 ( 3.1)
DISTRICT OF COLUMBIA	77 ( 0.7)	189 ( 0.8)	21 ( 0.7)	204 ( 2.0)	2 ( 0.1)	... ( ... )
FLORIDA	34 ( 3.0)	211 ( 2.6)	54 ( 2.9)	217 ( 1.6)	12 ( 1.9)	215 ( 3.0)
GEORGIA	36 ( 3.8)	213 ( 1.9)	54 ( 3.8)	216 ( 1.9)	10 ( 1.7)	216 ( 3.6)
HAWAII	53 ( 3.3)	214 ( 1.7)	43 ( 3.1)	215 ( 1.7)	5 ( 1.1)	210 ( 4.4)!
INDIANA	36 ( 3.9)	221 ( 1.8)	53 ( 3.5)	220 ( 1.4)	11 ( 2.4)	224 ( 2.5)!
IOWA	23 ( 3.3)	226 ( 2.1)	62 ( 3.7)	231 ( 1.3)	15 ( 2.9)	232 ( 2.5)!
KENTUCKY	36 ( 3.6)	212 ( 1.5)	56 ( 3.9)	218 ( 1.5)	9 ( 2.1)	213 ( 3.1)!
LOUISIANA	53 ( 3.5)	201 ( 2.1)	41 ( 3.3)	209 ( 1.9)	6 ( 1.6)	209 ( 6.6)!
MAINE	41 ( 3.9)	229 ( 1.4)	52 ( 3.9)	234 ( 1.6)	7 ( 1.8)	232 ( 3.5)!
MARYLAND	47 ( 3.3)	213 ( 2.3)	46 ( 3.0)	221 ( 2.1)	7 ( 1.5)	229 ( 3.1)!
MASSACHUSETTS	47 ( 3.7)	221 ( 1.8)	47 ( 3.5)	232 ( 1.6)	6 ( 1.8)	220 ( 7.4)!
MICHIGAN	48 ( 3.7)	219 ( 2.4)	45 ( 3.6)	223 ( 2.4)	7 ( 1.9)	225 ( 5.5)!
MINNESOTA	31 ( 3.1)	226 ( 2.0)	58 ( 3.2)	228 ( 1.1)	10 ( 2.2)	235 ( 2.8)!
MISSISSIPPI	52 ( 3.9)	200 ( 1.9)	42 ( 3.7)	203 ( 2.0)	6 ( 2.0)	207 ( 3.2)!
MISSOURI	33 ( 4.1)	219 ( 2.4)	56 ( 3.9)	223 ( 1.3)	11 ( 2.2)	229 ( 3.9)
MONTANA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
NEBRASKA	17 ( 2.5)	224 ( 2.5)	67 ( 3.2)	225 ( 1.6)	15 ( 2.5)	227 ( 2.3)
NEVADA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
NEW JERSEY	38 ( 3.4)	220 ( 2.9)	47 ( 3.7)	232 ( 1.5)	15 ( 3.0)	231 ( 3.7)!
NEW MEXICO	48 ( 3.5)	212 ( 2.2)	47 ( 3.5)	214 ( 1.6)	5 ( 1.3)	217 ( 3.7)!
NEW YORK	40 ( 2.9)	211 ( 2.6)	49 ( 3.4)	223 ( 1.9)	11 ( 2.3)	221 ( 3.0)!
NORTH CAROLINA	52 ( 3.3)	212 ( 1.3)	44 ( 3.1)	215 ( 1.7)	4 ( 1.2)	219 ( 3.8)!
NORTH DAKOTA	42 ( 4.2)	227 ( 1.5)	50 ( 4.1)	230 ( 1.1)	8 ( 2.4)	229 ( 2.2)!
OREGON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
PENNSYLVANIA	33 ( 3.6)	217 ( 2.4)	56 ( 3.5)	228 ( 1.7)	10 ( 2.1)	234 ( 4.0)
RHODE ISLAND	57 ( 3.5)	213 ( 2.2)	41 ( 3.4)	218 ( 1.9)	2 ( 1.0)	... ( ... )
SOUTH CAROLINA	37 ( 3.3)	210 ( 2.2)	54 ( 3.3)	214 ( 1.5)	9 ( 1.7)	215 ( 4.7)
TENNESSEE	50 ( 4.0)	208 ( 1.8)	43 ( 3.7)	214 ( 1.8)	7 ( 2.0)	214 ( 5.0)!
TEXAS	32 ( 3.0)	215 ( 2.1)	54 ( 3.3)	219 ( 2.0)	14 ( 2.1)	222 ( 2.0)
UTAH	53 ( 3.6)	223 ( 1.4)	41 ( 3.5)	226 ( 1.4)	6 ( 1.4)	221 ( 3.7)!
VERMONT	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
VIRGINIA	35 ( 3.6)	214 ( 1.8)	54 ( 3.6)	223 ( 1.7)	11 ( 1.8)	226 ( 3.1)
WASHINGTON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
WEST VIRGINIA	38 ( 2.7)	214 ( 1.4)	51 ( 3.0)	216 ( 1.7)	11 ( 1.8)	214 ( 3.0)
WISCONSIN	30 ( 3.2)	227 ( 2.1)	60 ( 2.8)	230 ( 1.3)	10 ( 2.0)	229 ( 2.8)!
WYOMING	18 ( 2.5)	228 ( 1.9)	66 ( 3.1)	225 ( 1.1)	16 ( 2.3)	228 ( 1.5)

**Other Jurisdictions**

DDESS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
DoDDS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
GUAM	63 ( 1.0)	190 ( 1.0)	32 ( 1.0)	197 ( 1.8)	4 ( 0.8)	206 ( 4.1)

— State or other jurisdiction did not participate in the NAEP assessment year presented in this table.  
 ... Characteristics of the sample do not permit a reliable estimate.  
 ! Interpret with caution — the nature of the sample does not allow accurate determination of the variability of this statistic.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 5.2** (continued) **1996 Mathematics Assessment**



POPULATION: **1996 Grade 4 Public School Students**  
 REPORTED STATISTICS: **Percentage of Students and Average Mathematics Scale Score**  
 TEACHERS' REPORTS ON: **Availability of Resources**

*How well are you provided with instructional materials and the resources you need to teach?*

**I Get Some or None of the Resources I Need**

**I Get Most of the Resources I Need**

**I Get All of the Resources I Need**

JURISDICTIONS	PCT ( SE )		SS ( SE )		PCT ( SE )		SS ( SE )		PCT ( SE )		SS ( SE )	
<b>Nation</b>												
NATION	34 ( 2.5)	221 ( 1.5)>	55 ( 2.2)	224 ( 1.5)	12 ( 1.8)	224 ( 2.3)						
NORTHEAST	36 ( 5.7)	219 ( 5.0)!	46 ( 2.7)	233 ( 3.2)	18 ( 4.8)	230 ( 3.5)!						
SOUTHEAST	28 ( 4.8)	213 ( 3.7)	58 ( 3.9)	218 ( 3.1)	14 ( 3.5)	214 ( 4.6)!						
CENTRAL	34 ( 6.4)	228 ( 2.4)!	57 ( 5.9)	232 ( 2.6)	10 ( 2.6)	235 ( 4.7)!						
WEST	36 ( 3.6)	222 ( 2.5)	56 ( 3.5)	218 ( 3.1)	8 ( 3.3)	217 ( 2.4)!						
<b>States</b>												
ALABAMA	36 ( 4.2)<	203 ( 2.1)	56 ( 4.0)>	216 ( 1.3)	8 ( 1.5)	218 ( 4.2)						
ALASKA†	39 ( 2.6)	224 ( 2.4)	45 ( 3.5)	223 ( 2.4)	16 ( 3.0)	224 ( 3.1)						
ARIZONA	40 ( 2.8)	216 ( 2.6)	49 ( 2.8)	219 ( 2.5)	11 ( 1.9)	227 ( 4.6)						
ARKANSAS†	31 ( 4.1)	213 ( 2.0)	52 ( 3.8)	216 ( 2.1)	17 ( 3.1)	220 ( 3.2)						
CALIFORNIA	42 ( 3.1)	207 ( 2.6)	45 ( 3.4)	209 ( 2.4)	13 ( 2.6)	218 ( 3.7)!						
COLORADO	35 ( 3.5)	225 ( 2.3)	51 ( 3.1)	227 ( 1.5)	14 ( 2.3)	225 ( 3.9)						
CONNECTICUT	25 ( 2.9)	218 ( 2.6)	59 ( 3.1)	236 ( 1.5)	16 ( 2.3)	239 ( 3.4)						
DELAWARE	40 ( 1.1)<	218 ( 1.2)	53 ( 1.1)>	214 ( 1.0)<	7 ( 0.4)	207 ( 3.7)						
DISTRICT OF COLUMBIA	71 ( 0.8)<	185 ( 1.2)	25 ( 0.8)>	191 ( 2.7)<	4 ( 0.3)>	210 ( 3.8)						
FLORIDA	30 ( 3.3)	214 ( 2.0)	53 ( 3.2)	219 ( 1.6)	17 ( 2.0)	211 ( 2.7)						
GEORGIA	29 ( 2.8)	210 ( 2.7)	54 ( 3.1)	218 ( 1.6)	17 ( 2.3)	218 ( 3.5)						
HAWAII	47 ( 3.1)	211 ( 2.2)	45 ( 3.0)	220 ( 1.8)	8 ( 1.7)	219 ( 4.9)						
INDIANA	26 ( 3.3)	223 ( 1.8)	61 ( 3.8)	231 ( 1.4)>	14 ( 2.8)	231 ( 1.7)!						
IOWA†	26 ( 3.9)	227 ( 1.7)	62 ( 3.7)	229 ( 1.5)	12 ( 3.2)	235 ( 2.6)!						
KENTUCKY	13 ( 2.6)<	219 ( 3.3)!	69 ( 3.3)	220 ( 1.3)	18 ( 3.1)	220 ( 3.4)						
LOUISIANA	41 ( 3.7)	203 ( 2.1)	46 ( 3.3)	213 ( 1.6)	14 ( 2.4)	212 ( 2.5)						
MAINE	33 ( 3.9)	233 ( 1.8)	54 ( 3.7)	232 ( 1.4)	13 ( 2.8)	235 ( 2.0)!						
MARYLAND	41 ( 4.1)	216 ( 2.3)	45 ( 3.8)	225 ( 2.4)	14 ( 2.3)	230 ( 4.1)						
MASSACHUSETTS	39 ( 3.6)	225 ( 1.8)	52 ( 3.6)	232 ( 1.8)	9 ( 2.0)	232 ( 3.3)!						
MICHIGAN†	39 ( 3.8)	223 ( 1.8)	48 ( 4.2)	229 ( 1.9)	13 ( 2.0)	224 ( 4.4)						
MINNESOTA	28 ( 3.1)	226 ( 1.7)	55 ( 3.1)	235 ( 1.4)>	17 ( 2.7)	237 ( 2.8)						
MISSISSIPPI	32 ( 3.8)<	208 ( 2.3)>	55 ( 3.7)	208 ( 1.8)	12 ( 2.5)	207 ( 3.3)!						
MISSOURI	21 ( 2.8)	222 ( 2.4)	64 ( 3.1)	225 ( 1.3)	15 ( 2.6)	229 ( 3.5)						
MONTANA†	23 ( 3.5)	227 ( 2.4)	61 ( 4.1)	228 ( 1.6)	15 ( 3.3)	228 ( 3.0)!						
NEBRASKA	18 ( 2.8)	222 ( 2.6)	61 ( 4.1)	228 ( 1.7)	21 ( 3.3)	230 ( 2.9)						
NEVADA†	30 ( 3.4)	217 ( 2.8)	55 ( 3.3)	218 ( 1.8)	16 ( 2.4)	218 ( 2.8)						
NEW JERSEY†	27 ( 3.9)	219 ( 3.2)	57 ( 3.3)	231 ( 2.0)	17 ( 3.2)	231 ( 4.0)						
NEW MEXICO	42 ( 3.7)	211 ( 2.9)	49 ( 3.4)	217 ( 1.8)	9 ( 2.2)	218 ( 4.5)!						
NEW YORK†	34 ( 3.0)	215 ( 2.3)	51 ( 2.7)	229 ( 1.7)	15 ( 2.3)	223 ( 3.6)						
NORTH CAROLINA	28 ( 3.2)<	221 ( 2.5)>	60 ( 3.2)>	225 ( 1.3)>	12 ( 2.3)>	226 ( 4.5)						
NORTH DAKOTA	35 ( 3.4)	229 ( 2.1)	57 ( 3.7)	233 ( 1.2)	7 ( 2.3)	235 ( 2.9)!						
OREGON	38 ( 3.0)	223 ( 2.2)	53 ( 2.8)	224 ( 1.7)	9 ( 2.0)	225 ( 3.2)!						
PENNSYLVANIA†	29 ( 3.4)	218 ( 2.4)	55 ( 3.6)	230 ( 1.6)	15 ( 2.9)	232 ( 3.1)						
RHODE ISLAND	59 ( 3.2)	219 ( 1.5)	37 ( 3.5)	222 ( 2.5)	4 ( 1.1)	225 ( 3.7)!						
SOUTH CAROLINA†	34 ( 3.4)	211 ( 1.9)	52 ( 3.8)	215 ( 1.8)	14 ( 2.4)	212 ( 4.2)						
TENNESSEE	33 ( 3.5)<	217 ( 2.0)>	52 ( 3.6)	222 ( 1.8)>	15 ( 2.3)>	218 ( 3.2)						
TEXAS	22 ( 3.1)	221 ( 3.0)	53 ( 3.3)	229 ( 1.3)>	25 ( 2.8)>	233 ( 2.9)>						
UTAH	36 ( 3.3)<	224 ( 2.3)	55 ( 3.6)>	229 ( 1.3)	9 ( 1.9)	226 ( 4.0)!						
VERMONT†	33 ( 3.1)	223 ( 2.0)	54 ( 3.3)	226 ( 1.6)	13 ( 2.6)	226 ( 3.6)						
VIRGINIA	28 ( 2.8)	218 ( 2.4)	53 ( 3.7)	223 ( 1.6)	19 ( 2.7)	228 ( 2.9)						
WASHINGTON	39 ( 3.1)	225 ( 1.6)	47 ( 2.8)	224 ( 1.8)	14 ( 1.9)	226 ( 2.9)						
WEST VIRGINIA	30 ( 3.9)	222 ( 2.0)>	57 ( 3.9)	224 ( 1.4)>	14 ( 2.5)	224 ( 3.0)						
WISCONSIN	20 ( 3.0)	229 ( 1.8)	65 ( 4.3)	231 ( 1.3)	15 ( 3.1)	234 ( 3.1)!						
WYOMING	14 ( 2.6)	221 ( 3.3)	65 ( 3.5)	223 ( 1.7)	21 ( 2.9)	223 ( 2.0)						
<b>Other Jurisdictions</b>												
DDESS	15 ( 0.8)	221 ( 3.5)	63 ( 1.0)	225 ( 1.1)	22 ( 0.6)	226 ( 2.4)						
DoDDS	15 ( 1.3)	222 ( 1.9)	64 ( 1.6)	224 ( 1.2)	21 ( 1.4)	224 ( 1.6)						
GUAM	75 ( 1.2)>	188 ( 2.1)	21 ( 1.1)<	191 ( 2.8)	3 ( 0.6)	... ( ... )						

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).  
 ... Characteristics of the sample do not permit a reliable estimate.  
 > (<) The value for the students was significantly higher (lower) than in the 1992 assessment at about the 95% confidence level using appropriate multiple comparison procedures.  
 ! Interpret with caution — the nature of the sample does not allow accurate determination of the variability of this statistic.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 5.3**

**1992 and 1996 Mathematics Assessment**



POPULATION:

1992 and 1996 Grade 4 Public School Students

REPORTED STATISTICS:

Percentage of Students and Average Mathematics Scale Score

TEACHERS' REPORTS ON:

Availability of Curriculum Specialists to Help or Advise

NAEP assessment year...	1992				1996			
	Yes		No		Yes		No	
Is there a curriculum specialist available to help or advise you in mathematics?								
JURISDICTIONS	PCT ( SE)	SS ( SE)	PCT ( SE)	SS ( SE)	PCT ( SE)	SS ( SE)	PCT ( SE)	SS ( SE)
<b>Nation</b>								
NATION	50 ( 3.3)	218 ( 1.3)	50 ( 3.3)	219 ( 1.6)	46 ( 3.6)	221 ( 2.1)	54 ( 3.6)	224 ( 1.4)
NORTHEAST	45 ( 8.3)	223 ( 2.9)!	55 ( 8.3)	223 ( 4.1)	53 ( 9.0)	225 ( 5.9)!	47 ( 9.0)	228 ( 4.0)!
SOUTHEAST	55 ( 5.2)	206 ( 2.2)	45 ( 5.2)	213 ( 2.8)	46 ( 8.4)	215 ( 4.9)	54 ( 8.4)	217 ( 3.8)
CENTRAL	47 ( 7.1)	222 ( 2.1)	53 ( 7.1)	227 ( 2.3)	36 ( 6.0)	231 ( 4.4)	64 ( 6.0)	231 ( 1.5)
WEST	52 ( 6.3)	222 ( 2.3)	48 ( 6.3)	214 ( 3.5)	48 ( 5.7)	217 ( 2.7)	52 ( 5.7)	221 ( 3.0)
<b>States</b>								
ALABAMA	50 ( 4.2)	208 ( 2.1)	50 ( 4.2)	211 ( 1.8)	38 ( 3.5)	212 ( 1.9)	62 ( 3.5)	212 ( 1.8)
ALASKA†	— ( —)	— ( —)	— ( —)	— ( —)	51 ( 3.9)	222 ( 2.5)	49 ( 3.9)	226 ( 2.3)
ARIZONA	46 ( 3.6)	219 ( 1.6)	54 ( 3.6)	212 ( 1.6)	46 ( 4.2)	217 ( 2.2)	54 ( 4.2)	219 ( 2.6)
ARKANSAS†	29 ( 3.3)	209 ( 2.5)	71 ( 3.3)	211 ( 1.1)	32 ( 3.7)	216 ( 2.4)	68 ( 3.7)	217 ( 1.8)
CALIFORNIA	42 ( 3.2)	209 ( 2.4)	58 ( 3.2)	208 ( 2.0)	42 ( 5.3)	212 ( 4.2)	58 ( 5.3)	207 ( 1.6)
COLORADO	39 ( 4.0)	221 ( 2.1)	61 ( 4.0)	221 ( 1.3)	44 ( 3.7)	222 ( 1.8)	56 ( 3.7)	229 ( 1.3)>
CONNECTICUT	56 ( 3.7)	226 ( 1.7)	44 ( 3.7)	230 ( 2.0)	59 ( 4.7)	235 ( 1.8)>	41 ( 4.7)	229 ( 2.4)
DELAWARE	34 ( 1.4)	215 ( 1.3)	66 ( 1.4)	220 ( 1.1)	41 ( 1.3)>	216 ( 1.3)	59 ( 1.3)<	215 ( 1.2)<
DISTRICT OF COLUMBIA	52 ( 0.7)	194 ( 0.9)	48 ( 0.7)	189 ( 0.9)	59 ( 0.8)>	185 ( 1.7)<	41 ( 0.8)<	191 ( 1.8)
FLORIDA	67 ( 3.4)	215 ( 1.6)	33 ( 3.4)	212 ( 2.2)	58 ( 3.6)	216 ( 1.7)	42 ( 3.6)	216 ( 2.2)
GEORGIA	78 ( 2.6)	214 ( 1.4)	22 ( 2.6)	218 ( 2.2)	69 ( 3.4)	215 ( 1.9)	31 ( 3.4)	218 ( 2.3)
HAWAII	75 ( 2.7)	215 ( 1.4)	25 ( 2.7)	212 ( 2.6)	43 ( 2.8)<	219 ( 1.7)	57 ( 2.8)>	212 ( 2.1)
INDIANA	19 ( 2.6)	216 ( 2.7)	81 ( 2.6)	222 ( 1.0)	17 ( 2.7)	233 ( 2.6)>	83 ( 2.7)	229 ( 1.1)>
IOWA†	64 ( 3.6)	230 ( 1.4)	36 ( 3.6)	230 ( 1.5)	59 ( 4.6)	229 ( 1.7)	41 ( 4.6)	230 ( 1.5)
KENTUCKY	40 ( 3.9)	215 ( 1.9)	60 ( 3.9)	215 ( 1.3)	52 ( 4.8)	220 ( 1.7)	48 ( 4.8)	221 ( 1.8)>
LOUISIANA	63 ( 3.5)	206 ( 1.9)	37 ( 3.5)	204 ( 2.8)	58 ( 3.7)	210 ( 1.5)	42 ( 3.7)	209 ( 1.9)
MAINE	24 ( 3.1)	230 ( 2.0)	76 ( 3.1)	232 ( 1.1)	23 ( 3.9)	232 ( 2.2)	77 ( 3.9)	233 ( 1.2)
MARYLAND	56 ( 3.5)	221 ( 1.6)	44 ( 3.5)	213 ( 2.3)	67 ( 3.5)	221 ( 1.8)	33 ( 3.5)	224 ( 3.2)
MASSACHUSETTS	32 ( 4.0)	225 ( 2.8)	68 ( 4.0)	227 ( 1.5)	37 ( 4.5)	229 ( 2.2)	63 ( 4.5)	230 ( 1.7)
MICHIGAN†	43 ( 4.3)	216 ( 2.7)	57 ( 4.3)	225 ( 2.0)	47 ( 4.1)	220 ( 2.3)	53 ( 4.1)	231 ( 1.5)
MINNESOTA	31 ( 3.7)	228 ( 2.5)	69 ( 3.7)	229 ( 1.0)	38 ( 4.3)	234 ( 2.0)	62 ( 4.3)	232 ( 1.1)
MISSISSIPPI	46 ( 3.9)	203 ( 1.8)	54 ( 3.9)	200 ( 2.0)	41 ( 3.4)	207 ( 1.7)	59 ( 3.4)	209 ( 2.0)>
MISSOURI	32 ( 3.7)	219 ( 2.7)	68 ( 3.7)	224 ( 1.3)	39 ( 4.3)	227 ( 1.9)	61 ( 4.3)	224 ( 1.2)
MONTANA†	— ( —)	— ( —)	— ( —)	— ( —)	29 ( 3.5)	224 ( 2.7)	71 ( 3.5)	229 ( 1.4)
NEBRASKA	34 ( 3.0)	226 ( 2.1)	66 ( 3.0)	225 ( 1.6)	41 ( 4.0)	227 ( 1.8)	59 ( 4.0)	227 ( 1.5)
NEVADA†	— ( —)	— ( —)	— ( —)	— ( —)	61 ( 3.3)	219 ( 1.4)	39 ( 3.3)	216 ( 2.5)
NEW JERSEY†	59 ( 4.0)	224 ( 2.2)	41 ( 4.0)	231 ( 1.9)	58 ( 4.3)	226 ( 2.1)	42 ( 4.3)	230 ( 2.4)
NEW MEXICO	29 ( 4.1)	215 ( 2.8)	71 ( 4.1)	212 ( 1.4)	28 ( 3.1)	213 ( 2.6)	72 ( 3.1)	215 ( 2.1)
NEW YORK†	56 ( 3.8)	214 ( 1.9)	44 ( 3.8)	224 ( 2.4)	55 ( 4.0)	222 ( 1.6)>	45 ( 4.0)	225 ( 2.4)
NORTH CAROLINA	65 ( 3.9)	215 ( 1.2)	35 ( 3.9)	213 ( 1.7)	62 ( 4.1)	224 ( 1.7)>	38 ( 4.1)	224 ( 2.0)>
NORTH DAKOTA	13 ( 2.6)	227 ( 2.8)!	87 ( 2.6)	229 ( 0.8)	24 ( 3.2)	231 ( 2.1)	76 ( 3.2)	232 ( 1.2)
OREGON	— ( —)	— ( —)	— ( —)	— ( —)	33 ( 3.9)	222 ( 2.3)	67 ( 3.9)	224 ( 1.5)
PENNSYLVANIA†	40 ( 4.1)	225 ( 2.1)	60 ( 4.1)	224 ( 1.8)	42 ( 4.7)	223 ( 2.1)	58 ( 4.7)	229 ( 1.8)
RHODE ISLAND	25 ( 3.3)	216 ( 2.7)	75 ( 3.3)	215 ( 1.8)	32 ( 3.1)	218 ( 2.3)	68 ( 3.1)	222 ( 1.8)>
SOUTH CAROLINA†	81 ( 3.3)	213 ( 1.3)	19 ( 3.3)	212 ( 2.2)	70 ( 3.7)	214 ( 1.7)	30 ( 3.7)	212 ( 2.2)
TENNESSEE	45 ( 3.4)	210 ( 2.3)	55 ( 3.4)	212 ( 1.4)	44 ( 4.1)	218 ( 2.3)	56 ( 4.1)	221 ( 2.0)>
TEXAS	68 ( 3.7)	219 ( 1.7)	32 ( 3.7)	217 ( 1.9)	69 ( 2.9)	229 ( 1.4)>	31 ( 2.9)	228 ( 2.6)>
UTAH	49 ( 3.0)	226 ( 1.3)	51 ( 3.0)	222 ( 1.3)	53 ( 4.0)	226 ( 1.8)	47 ( 4.0)	227 ( 1.6)
VERMONT†	— ( —)	— ( —)	— ( —)	— ( —)	21 ( 2.8)	224 ( 2.5)	79 ( 2.8)	225 ( 1.5)
VIRGINIA	56 ( 3.8)	222 ( 1.8)	44 ( 3.8)	219 ( 1.9)	71 ( 2.8)>	224 ( 1.5)	29 ( 2.8)<	221 ( 2.4)
WASHINGTON	— ( —)	— ( —)	— ( —)	— ( —)	42 ( 3.7)	225 ( 1.7)	58 ( 3.7)	225 ( 1.7)
WEST VIRGINIA	53 ( 3.6)	215 ( 1.4)	47 ( 3.6)	215 ( 1.6)	58 ( 4.3)	223 ( 1.6)>	42 ( 4.3)	224 ( 1.6)>
WISCONSIN	39 ( 3.4)	228 ( 2.0)	61 ( 3.4)	229 ( 1.3)	43 ( 4.2)	235 ( 1.7)>	57 ( 4.2)	229 ( 1.5)
WYOMING	44 ( 3.5)	225 ( 1.4)	56 ( 3.5)	226 ( 1.1)	40 ( 2.9)	221 ( 2.1)	60 ( 2.9)	224 ( 1.7)
<b>Other Jurisdictions</b>								
DDESS	— ( —)	— ( —)	— ( —)	— ( —)	48 ( 1.0)	225 ( 1.5)	52 ( 1.0)	224 ( 1.2)
DoDDS	— ( —)	— ( —)	— ( —)	— ( —)	80 ( 1.6)	224 ( 0.9)	20 ( 1.6)	222 ( 1.4)
GUAM	41 ( 1.4)	195 ( 1.5)	59 ( 1.4)	190 ( 1.0)	20 ( 1.0)<	189 ( 3.1)	80 ( 1.0)>	189 ( 1.4)

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).

— State or other jurisdiction did not participate in the NAEP assessment year presented in this table.

> (<) The value for the students was significantly higher (lower) than in the 1992 assessment at about the 95% confidence level using appropriate multiple comparison procedures.

! Interpret with caution — the nature of the sample does not allow accurate determination of the variability of this statistic.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 5.4**

**1996 Mathematics Assessment**



POPULATION:

1996 Grade 4 Public School Students

REPORTED STATISTICS:

Percentage of Students and Average Mathematics Scale Score

TEACHERS' REPORTS ON:

School Hours Designated As Preparation Time Per Week

JURISDICTIONS	Less than Hour		One to Two Hours		Three to Four Hours		Five Hours or More	
	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )
<b>Nation</b>								
NATION	7 ( 1.4)	219 ( 4.2)!	21 ( 2.1)	222 ( 2.5)	45 ( 2.5)	226 ( 1.4)	27 ( 2.6)	221 ( 2.1)
NORTHEAST	1 ( ... )	... ( ... )	16 ( 4.9)	228 ( 3.5)!	50 ( 6.0)	229 ( 3.1)	32 ( 5.6)	226 ( 3.7)
SOUTHEAST	8 ( 3.5)	224 ( 6.9)!	28 ( 3.5)	214 ( 3.6)	43 ( 3.5)	218 ( 4.4)	21 ( 4.4)	212 ( 4.4)!
CENTRAL	3 ( 1.8)	... ( ... )	12 ( 2.1)	234 ( 4.4)	56 ( 5.1)	232 ( 2.3)	29 ( 6.1)	227 ( 3.1)!
WEST	12 ( 3.4)	217 ( 4.7)!	27 ( 4.5)	220 ( 4.2)	36 ( 5.1)	221 ( 2.4)	25 ( 4.5)	216 ( 4.3)!
<b>States</b>								
ALABAMA	8 ( 1.6)	215 ( 3.8)!	25 ( 3.1)	210 ( 2.6)	44 ( 3.3)	210 ( 1.6)	23 ( 3.0)	215 ( 2.3)
ALASKA†	8 ( 2.4)	222 ( 7.2)!	28 ( 2.9)	224 ( 2.3)	39 ( 3.4)	226 ( 2.3)	25 ( 3.1)	220 ( 3.7)
ARIZONA	7 ( 1.6)	207 ( 4.9)!	22 ( 3.2)	222 ( 3.5)	39 ( 3.5)	218 ( 3.4)	32 ( 3.2)	218 ( 2.9)
ARKANSAS†	21 ( 4.6)	218 ( 3.5)!	35 ( 4.5)	217 ( 2.4)	30 ( 3.8)	216 ( 2.8)	15 ( 3.3)	209 ( 4.4)!
CALIFORNIA	23 ( 3.7)	211 ( 4.4)	35 ( 4.2)	208 ( 2.8)	20 ( 3.6)	206 ( 4.1)	22 ( 3.5)	213 ( 4.9)
COLORADO	2 ( 0.8)	... ( ... )	14 ( 2.3)	228 ( 2.3)	57 ( 3.6)	224 ( 1.6)	27 ( 2.9)	228 ( 2.1)
CONNECTICUT	2 ( 0.8)	... ( ... )	30 ( 3.6)	229 ( 2.2)	52 ( 3.5)	234 ( 1.8)	15 ( 2.2)	231 ( 2.9)
DELAWARE	2 ( 0.3)	... ( ... )	12 ( 0.6)	209 ( 1.8)	52 ( 1.2)	215 ( 1.2)	34 ( 1.1)	218 ( 1.3)
DISTRICT OF COLUMBIA	3 ( 0.1)	182 ( 5.0)	24 ( 0.7)	186 ( 2.7)	49 ( 0.9)	187 ( 1.1)	25 ( 0.7)	189 ( 2.6)
FLORIDA	3 ( 0.9)	220 ( 4.0)!	12 ( 1.5)	216 ( 3.9)	33 ( 2.7)	216 ( 2.3)	51 ( 2.7)	217 ( 1.4)
GEORGIA	8 ( 1.9)	215 ( 3.6)!	26 ( 2.6)	214 ( 1.9)	36 ( 2.8)	216 ( 2.6)	30 ( 3.2)	216 ( 2.3)
HAWAII	7 ( 1.4)	221 ( 5.4)	6 ( 1.2)	212 ( 5.5)!	40 ( 2.4)	217 ( 2.5)	47 ( 2.7)	214 ( 1.6)
INDIANA	3 ( 1.3)	225 ( 2.6)!	16 ( 3.6)	226 ( 2.5)!	48 ( 4.3)	230 ( 1.8)	33 ( 3.7)	230 ( 1.6)
IOWA†	6 ( 1.9)	225 ( 4.1)!	22 ( 3.8)	228 ( 2.1)	45 ( 4.3)	231 ( 1.7)	27 ( 3.9)	228 ( 2.2)
KENTUCKY	7 ( 2.2)	219 ( 4.9)!	18 ( 3.1)	220 ( 2.7)	49 ( 4.5)	220 ( 1.6)	26 ( 3.7)	221 ( 3.2)
LOUISIANA	14 ( 2.5)	211 ( 3.4)	36 ( 3.2)	203 ( 1.8)	33 ( 3.1)	212 ( 1.7)	17 ( 3.0)	215 ( 3.5)
MAINE	13 ( 3.1)	237 ( 2.9)!	47 ( 3.8)	230 ( 1.8)	26 ( 3.1)	233 ( 2.2)	13 ( 2.7)	237 ( 2.0)!
MARYLAND	11 ( 2.6)	201 ( 4.6)!	16 ( 3.0)	212 ( 4.2)	45 ( 4.2)	228 ( 2.6)	28 ( 3.6)	225 ( 3.1)
MASSACHUSETTS	2 ( 0.9)	... ( ... )	36 ( 4.1)	227 ( 2.5)	52 ( 3.7)	231 ( 1.4)	10 ( 1.9)	229 ( 4.3)
MICHIGAN†	6 ( 2.1)	219 ( 5.2)!	25 ( 3.1)	226 ( 2.3)	42 ( 4.0)	225 ( 2.8)	27 ( 3.5)	228 ( 2.8)
MINNESOTA	2 ( 0.7)	222 ( 5.5)!	8 ( 2.2)	229 ( 3.6)!	36 ( 3.1)	232 ( 1.7)	54 ( 3.3)	234 ( 1.6)
MISSISSIPPI	3 ( 0.8)	201 ( 4.7)!	34 ( 3.3)	209 ( 2.6)	33 ( 3.4)	210 ( 2.3)	30 ( 3.4)	206 ( 1.7)
MISSOURI	2 ( 0.7)	... ( ... )	13 ( 2.3)	225 ( 2.7)	50 ( 3.2)	227 ( 1.6)	36 ( 3.2)	223 ( 1.9)
MONTANA†	3 ( 1.3)	219 ( 5.0)!	27 ( 3.9)	229 ( 2.5)	48 ( 4.1)	228 ( 1.3)	22 ( 2.7)	230 ( 2.7)
NEBRASKA	5 ( 1.8)	234 ( 4.7)!	19 ( 3.7)	221 ( 3.3)!	41 ( 3.7)	224 ( 1.8)	36 ( 3.6)	234 ( 1.6)
NEVADA†	4 ( 1.2)	211 ( 6.4)!	9 ( 1.9)	221 ( 4.2)!	44 ( 3.2)	219 ( 1.7)	43 ( 3.6)	217 ( 2.2)
NEW JERSEY†	1 ( 0.6)	... ( ... )	22 ( 3.3)	228 ( 2.7)	59 ( 3.7)	227 ( 1.9)	17 ( 2.6)	228 ( 3.7)
NEW MEXICO	20 ( 2.9)	214 ( 2.9)	35 ( 2.9)	212 ( 2.5)	23 ( 2.9)	217 ( 3.3)	22 ( 2.4)	215 ( 3.8)
NEW YORK†	1 ( 0.6)	... ( ... )	9 ( 2.2)	231 ( 3.9)!	57 ( 3.3)	226 ( 1.5)	32 ( 2.8)	217 ( 2.5)
NORTH CAROLINA	9 ( 1.8)	224 ( 3.8)!	25 ( 3.2)	220 ( 2.2)	33 ( 3.4)	227 ( 1.6)	34 ( 3.5)	225 ( 2.3)
NORTH DAKOTA	5 ( 1.4)	239 ( 3.4)!	22 ( 2.9)	232 ( 1.9)	45 ( 3.5)	232 ( 1.5)	28 ( 3.2)	228 ( 2.0)
OREGON	4 ( 1.6)	220 ( 7.1)!	19 ( 2.5)	226 ( 2.8)	41 ( 2.8)	224 ( 1.9)	36 ( 3.0)	222 ( 1.9)
PENNSYLVANIA†	3 ( 1.4)	232 ( 16.6)!	8 ( 1.7)	229 ( 3.4)!	60 ( 4.1)	226 ( 1.7)	29 ( 3.7)	227 ( 2.1)
RHODE ISLAND	5 ( 1.2)	212 ( 5.1)!	32 ( 3.1)	215 ( 2.6)	53 ( 3.3)	224 ( 1.6)	11 ( 1.4)	222 ( 2.8)
SOUTH CAROLINA†	3 ( 0.9)	215 ( 4.4)!	15 ( 2.2)	216 ( 2.8)	51 ( 3.2)	213 ( 2.1)	31 ( 3.0)	213 ( 2.1)
TENNESSEE	7 ( 1.6)	219 ( 3.7)!	30 ( 3.3)	218 ( 2.5)	39 ( 3.6)	223 ( 1.8)	24 ( 3.2)	217 ( 2.4)
TEXAS	4 ( 1.1)	223 ( 5.3)!	10 ( 2.4)	227 ( 3.5)!	47 ( 3.8)	227 ( 2.5)	39 ( 3.0)	231 ( 1.9)
UTAH	9 ( 2.4)	220 ( 5.0)!	45 ( 3.7)	229 ( 1.6)	27 ( 2.7)	227 ( 2.3)	19 ( 2.8)	223 ( 2.5)
VERMONT†	5 ( 1.6)	213 ( 6.8)!	23 ( 3.2)	223 ( 2.5)	47 ( 4.1)	225 ( 1.6)	25 ( 3.5)	228 ( 2.4)
VIRGINIA	7 ( 1.9)	218 ( 4.0)!	35 ( 3.3)	219 ( 2.3)	36 ( 3.5)	225 ( 1.8)	23 ( 2.6)	225 ( 2.6)
WASHINGTON	2 ( 0.8)	... ( ... )	30 ( 2.7)	226 ( 2.0)	46 ( 3.1)	225 ( 1.7)	22 ( 2.7)	224 ( 1.7)
WEST VIRGINIA	2 ( 1.1)	219 ( 9.1)!	23 ( 4.0)	221 ( 2.6)	54 ( 4.0)	224 ( 1.5)	20 ( 3.5)	225 ( 1.8)
WISCONSIN	5 ( 1.6)	209 ( 8.6)!	17 ( 2.5)	225 ( 3.4)	42 ( 2.9)	233 ( 1.5)	36 ( 2.8)	236 ( 1.6)
WYOMING	7 ( 1.8)	222 ( 4.5)!	23 ( 3.1)	224 ( 2.4)	48 ( 3.8)	223 ( 2.1)	22 ( 3.0)	223 ( 1.9)
<b>Other Jurisdictions</b>								
DDESS	3 ( 0.6)	... ( ... )	7 ( 0.7)	220 ( 4.1)	32 ( 1.0)	228 ( 1.9)	58 ( 1.0)	223 ( 1.3)
DoDDS	10 ( 1.1)	222 ( 1.9)	7 ( 1.4)	221 ( 2.6)	54 ( 2.1)	224 ( 1.4)	29 ( 1.7)	223 ( 1.2)
GUAM	22 ( 1.4)	188 ( 2.8)	37 ( 1.4)	190 ( 2.7)	19 ( 1.0)	189 ( 3.7)	22 ( 1.2)	187 ( 2.4)

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).

... Characteristics of the sample do not permit a reliable estimate.

! Interpret with caution — the nature of the sample does not allow accurate determination of the variability of this statistic.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 5.5**

**1992 Mathematics Assessment**



POPULATION:

1992 Grade 4 Public School Students

REPORTED STATISTICS:

Percentage of Students and Average Mathematics Scale Score

SCHOOLS' REPORTS ON:

Involving Parents as Aides in Classrooms

Does your school use parents as aides in classrooms?	No		Yes, Occasionally		Yes, Routinely	
	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )
<b>JURISDICTIONS</b>						
<b>Nation</b>						
NATION	11 ( 2.5)	212 ( 4.5)!	42 ( 3.3)	216 ( 1.4)	47 ( 3.4)	223 ( 1.5)
NORTHEAST	12 ( 5.8)	222 ( 7.4)!	42 ( 8.0)	222 ( 4.3)	46 ( 8.8)	226 ( 2.6)!
SOUTHEAST	8 ( ... )	... ( ... )	47 ( 6.2)	209 ( 2.0)	44 ( 6.0)	216 ( 4.1)
CENTRAL	12 ( 5.5)	... ( ... )	44 ( 6.0)	224 ( 3.2)	44 ( 5.3)	223 ( 2.6)
WEST	11 ( 3.2)	209 ( 4.1)!	37 ( 5.3)	208 ( 1.5)	53 ( 6.5)	226 ( 2.3)
<b>States</b>						
ALABAMA	20 ( 4.1)	207 ( 3.7)!	50 ( 5.3)	206 ( 2.1)	30 ( 4.3)	213 ( 3.2)
ALASKA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
ARIZONA	2 ( 1.5)	... ( ... )	34 ( 5.0)	212 ( 2.3)	63 ( 4.9)	218 ( 1.7)
ARKANSAS	23 ( 4.0)	203 ( 2.2)	45 ( 4.9)	211 ( 2.1)	32 ( 3.8)	215 ( 1.6)
CALIFORNIA	3 ( 1.6)	... ( ... )	36 ( 4.5)	196 ( 2.9)	61 ( 4.7)	214 ( 1.9)
COLORADO	1 ( ... )	... ( ... )	24 ( 4.3)	215 ( 2.7)	75 ( 4.2)	223 ( 1.2)
CONNECTICUT	12 ( 3.2)	229 ( 3.3)!	46 ( 4.6)	223 ( 2.2)	42 ( 4.1)	231 ( 2.0)
DELAWARE	9 ( 0.1)	... ( ... )	68 ( 0.3)	218 ( 1.0)	23 ( 0.2)	221 ( 1.5)
DISTRICT OF COLUMBIA	1 ( 0.0)	... ( ... )	15 ( 0.2)	191 ( 1.7)	84 ( 0.2)	193 ( 0.6)
FLORIDA	2 ( 1.4)	... ( ... )	33 ( 4.9)	205 ( 2.3)	65 ( 4.8)	218 ( 1.9)
GEORGIA	16 ( 3.8)	207 ( 3.1)!	53 ( 5.7)	213 ( 2.2)	31 ( 4.4)	225 ( 2.3)
HAWAII	8 ( 2.3)	212 ( 6.7)!	63 ( 5.7)	214 ( 1.9)	30 ( 5.3)	216 ( 2.1)
INDIANA	9 ( 3.0)	219 ( 3.9)!	46 ( 5.3)	221 ( 1.9)	45 ( 4.7)	223 ( 1.5)
IOWA	12 ( 3.2)	227 ( 2.6)!	47 ( 5.4)	231 ( 1.5)	41 ( 5.2)	229 ( 1.8)
KENTUCKY	14 ( 3.1)	210 ( 2.1)!	55 ( 4.8)	213 ( 1.5)	32 ( 4.3)	221 ( 2.0)
LOUISIANA	14 ( 3.4)	210 ( 3.0)!	48 ( 4.5)	201 ( 2.3)	38 ( 4.7)	208 ( 3.3)
MAINE	5 ( 2.3)	227 ( 7.6)!	53 ( 6.3)	230 ( 1.4)	43 ( 6.3)	234 ( 1.5)
MARYLAND	3 ( 1.5)	... ( ... )	30 ( 4.1)	208 ( 3.3)	67 ( 4.2)	222 ( 1.8)
MASSACHUSETTS	10 ( 2.9)	216 ( 6.4)!	46 ( 5.5)	225 ( 2.1)	44 ( 5.2)	231 ( 1.6)
MICHIGAN	3 ( 1.5)	218 ( 4.2)!	46 ( 5.5)	218 ( 2.9)	51 ( 5.7)	222 ( 2.7)
MINNESOTA	8 ( 1.9)	232 ( 3.1)!	51 ( 4.6)	226 ( 1.4)	42 ( 4.8)	230 ( 1.9)
MISSISSIPPI	39 ( 4.7)	202 ( 2.1)	45 ( 5.1)	202 ( 2.1)	16 ( 3.9)	200 ( 4.9)!
MISSOURI	12 ( 3.0)	211 ( 4.9)!	47 ( 4.5)	220 ( 1.8)	42 ( 4.7)	228 ( 1.6)
MONTANA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
NEBRASKA	14 ( 3.1)	226 ( 3.4)!	53 ( 4.9)	224 ( 1.7)	33 ( 4.9)	227 ( 1.9)
NEVADA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
NEW JERSEY	49 ( 4.8)	226 ( 1.9)	37 ( 4.5)	227 ( 3.1)	15 ( 3.7)	234 ( 4.3)!
NEW MEXICO	6 ( 2.2)	207 ( 4.3)!	40 ( 5.7)	211 ( 1.8)	54 ( 5.7)	216 ( 2.2)
NEW YORK	33 ( 5.8)	220 ( 2.9)	37 ( 5.2)	219 ( 2.5)	30 ( 5.6)	216 ( 3.6)
NORTH CAROLINA	16 ( 3.6)	211 ( 3.6)!	53 ( 5.0)	213 ( 1.7)	32 ( 4.8)	215 ( 2.1)
NORTH DAKOTA	22 ( 3.4)	229 ( 2.0)	61 ( 4.6)	229 ( 1.0)	16 ( 4.2)	228 ( 2.5)!
OREGON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
PENNSYLVANIA	19 ( 4.0)	226 ( 3.0)!	40 ( 4.6)	224 ( 1.8)	42 ( 5.1)	224 ( 2.8)
RHODE ISLAND	18 ( 3.6)	207 ( 4.3)!	51 ( 5.6)	216 ( 2.1)	31 ( 5.3)	220 ( 3.3)
SOUTH CAROLINA	11 ( 3.2)	209 ( 4.8)!	55 ( 5.5)	210 ( 1.7)	34 ( 4.7)	218 ( 2.1)
TENNESSEE	10 ( 3.3)	213 ( 4.6)!	47 ( 5.2)	211 ( 2.0)	43 ( 5.6)	211 ( 2.6)
TEXAS	11 ( 3.6)	216 ( 3.4)!	57 ( 5.4)	216 ( 2.0)	32 ( 4.5)	222 ( 1.8)
UTAH	0 ( ... )	... ( ... )	29 ( 4.2)	219 ( 1.9)	71 ( 4.2)	226 ( 1.0)
VERMONT	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
VIRGINIA	3 ( 1.4)	... ( ... )	43 ( 5.0)	218 ( 1.6)	55 ( 5.0)	224 ( 2.4)
WASHINGTON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
WEST VIRGINIA	11 ( 2.8)	216 ( 3.3)!	47 ( 4.6)	215 ( 1.4)	41 ( 4.6)	216 ( 1.9)
WISCONSIN	8 ( 2.7)	225 ( 5.4)!	48 ( 4.9)	229 ( 1.7)	44 ( 4.9)	229 ( 1.6)
WYOMING	7 ( 2.2)	219 ( 4.1)!	49 ( 5.1)	225 ( 1.5)	43 ( 5.0)	227 ( 1.2)
<b>Other Jurisdictions</b>						
DDESS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
DoDDS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
GUAM	8 ( 0.2)	... ( ... )	74 ( 0.2)	191 ( 0.9)	18 ( 0.2)	204 ( 2.4)

— State or other jurisdiction did not participate in the NAEP assessment year presented in this table.

... Characteristics of the sample do not permit a reliable estimate.

! Interpret with caution — the nature of the sample does not allow accurate determination of the variability of this statistic.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 5.5** (continued) **1996 Mathematics Assessment**



POPULATION: **1996 Grade 4 Public School Students**  
 REPORTED STATISTICS: **Percentage of Students and Average Mathematics Scale Score**  
 SCHOOLS' REPORTS ON: **Involving Parents as Aides in Classrooms**

Does your school use parents as aides in classrooms?	No		Yes, Occasionally		Yes, Routinely	
	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )
<b>JURISDICTIONS</b>						
<b>Nation</b>						
NATION	8 ( 1.7)	219 ( 3.7)!	44 ( 4.8)	219 ( 2.1)	48 ( 4.9)	225 ( 1.9)
NORTHEAST	10 ( 3.4)	231 ( 5.9)!	32 (10.1)	221 ( 2.4)!	58 (10.5)	231 ( 5.1)
SOUTHEAST	13 ( 4.9)	203 ( 4.2)!	43 (10.6)	213 ( 2.6)!	43 (10.9)	223 ( 4.8)!
CENTRAL	4 ( ... )	... ( ... )	56 (11.4)	229 ( 3.1)!	41 (11.4)	229 ( 3.0)!
WEST	8 ( 2.4)	226 ( 6.0)!	42 ( 7.2)	213 ( 4.7)	51 ( 7.4)	220 ( 2.4)
<b>States</b>						
ALABAMA	12 ( 3.7)	209 ( 5.7)!	68 ( 5.1)	208 ( 1.7)	20 ( 4.5)	219 ( 3.9)!
ALASKA†	5 ( 1.4)	202 (10.7)!	22 ( 3.7)	219 ( 2.4)	73 ( 3.8)	227 ( 1.5)
ARIZONA	6 ( 2.8)	... ( ... )	28 ( 5.1)	213 ( 3.3)	66 ( 5.2)	220 ( 2.4)
ARKANSAS†	19 ( 4.7)	209 ( 3.5)!	59 ( 6.4)	218 ( 1.9)	22 ( 5.1)	218 ( 4.9)!
CALIFORNIA	3 ( 2.1)	... ( ... )	38 ( 5.6)	202 ( 2.9)	59 ( 5.4)	211 ( 2.8)
COLORADO	3 ( 1.8)	... ( ... )	42 ( 4.4)>	219 ( 2.5)	54 ( 4.6)<	231 ( 1.6)>
CONNECTICUT	14 ( 4.0)	237 ( 3.6)!	49 ( 5.2)	227 ( 2.0)	37 ( 5.0)	239 ( 2.6)
DELAWARE	25 ( 0.5)>	214 ( 1.5)	40 ( 0.4)<	217 ( 1.2)	35 ( 0.4)>	214 ( 1.2)<
DISTRICT OF COLUMBIA	1 ( 0.2)	... ( ... )	22 ( 0.3)>	193 ( 2.3)	76 ( 0.3)<	182 ( 1.4)<
FLORIDA	10 ( 3.2)	217 ( 6.1)!	40 ( 5.5)	209 ( 2.8)	49 ( 5.6)	220 ( 2.3)
GEORGIA	11 ( 3.3)	218 ( 3.0)!	56 ( 4.8)	212 ( 2.1)	32 ( 4.3)	222 ( 3.3)
HAWAII	4 ( 1.8)	... ( ... )	59 ( 4.5)	213 ( 2.6)	37 ( 4.5)	220 ( 2.8)
INDIANA	10 ( 3.3)	228 ( 4.7)!	46 ( 5.9)	230 ( 1.5)>	43 ( 5.2)	230 ( 1.8)>
IOWA†	11 ( 3.0)	224 ( 2.1)!	52 ( 5.0)	229 ( 1.6)	37 ( 4.7)	231 ( 2.0)
KENTUCKY	15 ( 3.9)	222 ( 2.5)!	53 ( 5.3)	219 ( 1.9)	32 ( 5.0)	222 ( 2.7)
LOUISIANA	23 ( 4.8)	208 ( 3.6)!	55 ( 4.9)	209 ( 1.7)>	22 ( 4.6)	212 ( 4.0)!
MAINE	5 ( 2.7)	... ( ... )	44 ( 5.3)	232 ( 1.6)	51 ( 5.5)	234 ( 1.6)
MARYLAND	8 ( 3.2)	211 ( 7.4)!	29 ( 4.7)	217 ( 3.2)	62 ( 4.9)	224 ( 2.7)
MASSACHUSETTS	12 ( 4.1)	233 ( 5.1)!	59 ( 5.3)	229 ( 1.8)	28 ( 4.7)	226 ( 2.8)
MICHIGAN†	4 ( 2.0)	... ( ... )	36 ( 5.6)	223 ( 3.0)	61 ( 5.6)	231 ( 2.2)
MINNESOTA	7 ( 3.0)	239 ( 3.9)!	43 ( 5.6)	231 ( 1.3)>	50 ( 5.7)	235 ( 1.9)
MISSISSIPPI	50 ( 5.3)	203 ( 1.9)	43 ( 5.1)	212 ( 2.1)>	7 ( 3.0)	221 ( 6.8)!
MISSOURI	16 ( 3.7)	221 ( 3.2)!	47 ( 5.3)	222 ( 2.1)	36 ( 4.8)	230 ( 1.8)
MONTANA†	10 ( 3.2)	231 ( 3.3)!	52 ( 6.3)	224 ( 2.2)	38 ( 5.9)	231 ( 1.9)
NEBRASKA	19 ( 3.5)	230 ( 2.8)	47 ( 5.1)	228 ( 2.0)	34 ( 5.2)	226 ( 3.6)
NEVADA†	0 ( ... )	... ( ... )	36 ( 4.7)	210 ( 2.6)	64 ( 4.7)	222 ( 1.4)
NEW JERSEY†	28 ( 5.0)<	224 ( 4.4)	50 ( 5.8)	228 ( 2.6)	21 ( 4.7)	231 ( 4.6)!
NEW MEXICO	7 ( 3.3)	199 (17.8)!	49 ( 5.7)	212 ( 2.4)	44 ( 5.9)	218 ( 2.3)
NEW YORK†	27 ( 5.0)	226 ( 3.8)	47 ( 5.7)	221 ( 2.8)	26 ( 5.0)	224 ( 4.0)!
NORTH CAROLINA	15 ( 3.9)	220 ( 1.9)!	60 ( 5.2)	224 ( 1.9)>	25 ( 4.9)	229 ( 2.6)!
NORTH DAKOTA	17 ( 3.1)	231 ( 3.2)	58 ( 4.3)	231 ( 1.7)	25 ( 3.3)	231 ( 2.0)
OREGON	6 ( 2.7)	218 ( 7.7)!	20 ( 3.8)	214 ( 3.5)	74 ( 4.2)	225 ( 1.5)
PENNSYLVANIA†	19 ( 4.4)	229 ( 3.0)!	36 ( 5.6)	221 ( 2.0)	44 ( 5.5)	229 ( 2.4)
RHODE ISLAND	23 ( 4.4)	219 ( 3.7)!	46 ( 4.7)	218 ( 2.7)	31 ( 4.7)	225 ( 2.1)
SOUTH CAROLINA†	21 ( 4.6)	207 ( 2.8)!	47 ( 6.3)	212 ( 2.4)	33 ( 5.8)	220 ( 2.4)
TENNESSEE	15 ( 3.5)	211 ( 4.3)!	59 ( 4.9)	221 ( 1.6)>	26 ( 4.3)	223 ( 4.3)
TEXAS	7 ( 2.7)	231 ( 6.2)!	55 ( 5.1)	230 ( 2.6)>	38 ( 5.4)	227 ( 2.7)
UTAH	2 ( 1.4)	... ( ... )	26 ( 4.7)	225 ( 2.6)	72 ( 4.8)	227 ( 1.2)
VERMONT†	12 ( 2.8)	223 ( 3.6)!	44 ( 4.3)	222 ( 2.3)	44 ( 4.8)	228 ( 1.9)
VIRGINIA	16 ( 3.7)>	222 ( 4.9)!	42 ( 4.6)	219 ( 2.5)	41 ( 4.4)	226 ( 1.9)
WASHINGTON	4 ( 1.9)	223 ( 4.9)!	27 ( 4.5)	217 ( 3.1)	69 ( 4.9)	228 ( 1.2)
WEST VIRGINIA	15 ( 4.2)	222 ( 3.9)!	43 ( 5.5)	222 ( 2.1)>	41 ( 5.1)	225 ( 1.5)>
WISCONSIN	9 ( 2.7)	220 ( 4.1)!	46 ( 5.9)	232 ( 2.1)	45 ( 5.7)	235 ( 2.0)
WYOMING	8 ( 2.7)	224 ( 5.2)!	42 ( 4.6)	224 ( 1.7)	50 ( 4.5)	224 ( 1.8)
<b>Other Jurisdictions</b>						
DDESS	10 ( 0.1)	... ( ... )	34 ( 0.4)	223 ( 2.1)	56 ( 0.4)	225 ( 1.7)
DoDDS	3 ( 0.5)	... ( ... )	23 ( 2.1)	223 ( 1.5)	74 ( 2.1)	224 ( 0.7)
GUAM	27 ( 0.5)>	191 ( 3.1)	53 ( 0.6)<	189 ( 2.0)	20 ( 0.6)	185 ( 2.8)<

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).  
 ... Characteristics of the sample do not permit a reliable estimate.  
 > (<) The value for the students was significantly higher (lower) than in the 1992 assessment at about the 95% confidence level using appropriate multiple comparison procedures.  
 ! Interpret with caution — the nature of the sample does not allow accurate determination of the variability of this statistic.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 5.6**

**1992 Mathematics Assessment**



POPULATION:

1992 Grade 4 Public School Students

REPORTED STATISTICS:

Percentage of Students and Average Mathematics Scale Score

SCHOOLS' REPORTS ON:

Student Absenteeism

To what degree is student absenteeism a problem in your school?	Not a Problem		Minor		Moderate to Serious	
	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )
<b>JURISDICTIONS</b>						
<b>Nation</b>						
NATION	31 ( 2.7)	226 ( 1.7)	54 ( 3.1)	219 ( 1.4)	15 ( 2.2)	202 ( 2.1)
NORTHEAST	42 ( 6.2)	232 ( 3.5)	43 ( 7.6)	221 ( 3.7)!	14 ( 5.4)	206 ( 6.8)!
SOUTHEAST	29 ( 4.9)	217 ( 2.9)	57 ( 5.4)	210 ( 3.2)	14 ( 4.6)	198 ( 3.3)!
CENTRAL	39 ( 6.9)	228 ( 3.3)	54 ( 7.0)	223 ( 2.6)	7 ( 2.7)	199 ( 6.2)!
WEST	16 ( 3.7)	222 ( 2.9)!	60 ( 5.0)	222 ( 2.2)	24 ( 4.8)	204 ( 3.0)!
<b>States</b>						
ALABAMA	21 ( 3.9)	210 ( 4.4)	59 ( 5.2)	209 ( 2.3)	19 ( 4.2)	204 ( 2.2)!
ALASKA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
ARIZONA	16 ( 4.0)	216 ( 4.8)!	50 ( 4.8)	217 ( 2.1)	34 ( 5.1)	212 ( 2.1)
ARKANSAS	22 ( 3.8)	213 ( 2.0)	55 ( 5.0)	210 ( 1.3)	23 ( 3.8)	208 ( 3.0)
CALIFORNIA	21 ( 4.5)	220 ( 3.9)!	53 ( 5.1)	208 ( 2.3)	26 ( 4.5)	199 ( 3.3)
COLORADO	45 ( 4.6)	225 ( 1.7)	36 ( 4.6)	222 ( 1.5)	20 ( 2.8)	209 ( 2.6)
CONNECTICUT	51 ( 4.6)	236 ( 1.4)	36 ( 4.9)	223 ( 2.5)	13 ( 2.8)	206 ( 5.2)!
DELAWARE	23 ( 0.3)	215 ( 2.0)	70 ( 0.3)	219 ( 0.9)	7 ( 0.1)	... ( ... )
DISTRICT OF COLUMBIA	31 ( 0.3)	205 ( 1.1)	41 ( 0.3)	191 ( 0.9)	28 ( 0.3)	180 ( 1.4)
FLORIDA	28 ( 4.1)	216 ( 2.9)	58 ( 4.5)	215 ( 2.2)	14 ( 3.4)	202 ( 4.2)!
GEORGIA	23 ( 4.2)	220 ( 3.1)	65 ( 5.3)	215 ( 2.0)	12 ( 3.5)	209 ( 5.4)!
HAWAII	19 ( 4.0)	222 ( 2.9)!	62 ( 5.0)	215 ( 1.7)	19 ( 3.8)	206 ( 3.0)
INDIANA	33 ( 4.7)	225 ( 2.0)	58 ( 5.1)	220 ( 1.1)	9 ( 2.7)	214 ( 4.8)!
IOWA	41 ( 4.3)	233 ( 1.3)	52 ( 4.6)	230 ( 1.7)	8 ( 2.4)	218 ( 3.0)!
KENTUCKY	24 ( 4.3)	218 ( 2.1)	50 ( 4.7)	217 ( 1.7)	26 ( 4.0)	209 ( 1.7)
LOUISIANA	22 ( 4.3)	212 ( 3.6)	56 ( 5.2)	204 ( 2.2)	22 ( 4.1)	198 ( 4.4)
MAINE	52 ( 5.2)	233 ( 1.6)	46 ( 5.3)	230 ( 1.4)	2 ( 1.1)	... ( ... )
MARYLAND	31 ( 4.2)	228 ( 2.3)	51 ( 4.8)	217 ( 1.9)	18 ( 3.6)	201 ( 4.8)!
MASSACHUSETTS	49 ( 5.4)	231 ( 1.4)	45 ( 5.6)	224 ( 2.6)	6 ( 2.1)	206 ( 5.8)!
MICHIGAN	31 ( 4.4)	232 ( 2.4)	46 ( 5.0)	220 ( 2.4)	23 ( 4.0)	204 ( 4.1)
MINNESOTA	47 ( 4.5)	231 ( 1.1)	47 ( 5.1)	228 ( 1.9)	6 ( 2.0)	208 ( 3.0)!
MISSISSIPPI	16 ( 3.7)	200 ( 3.9)!	60 ( 5.2)	204 ( 1.7)	24 ( 4.4)	198 ( 2.8)
MISSOURI	19 ( 4.2)	223 ( 3.1)!	63 ( 5.5)	225 ( 1.6)	18 ( 4.4)	214 ( 3.9)!
MONTANA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
NEBRASKA	38 ( 4.6)	227 ( 2.1)	53 ( 4.7)	227 ( 1.4)	9 ( 2.7)	211 ( 4.7)!
NEVADA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
NEW JERSEY	59 ( 5.1)	232 ( 2.0)	33 ( 4.8)	224 ( 3.1)	8 ( 2.8)	203 ( 6.7)!
NEW MEXICO	24 ( 5.4)	218 ( 3.3)!	42 ( 5.7)	216 ( 2.0)	34 ( 5.8)	207 ( 1.8)
NEW YORK	41 ( 5.7)	225 ( 2.3)	43 ( 5.5)	219 ( 2.5)	16 ( 3.7)	200 ( 3.2)!
NORTH CAROLINA	20 ( 3.8)	220 ( 1.9)	62 ( 4.7)	213 ( 1.7)	18 ( 3.2)	206 ( 2.6)
NORTH DAKOTA	54 ( 5.4)	230 ( 1.0)	41 ( 4.7)	227 ( 1.2)	5 ( 2.6)	... ( ... )
OREGON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
PENNSYLVANIA	40 ( 5.6)	231 ( 2.0)	46 ( 5.7)	223 ( 2.1)	13 ( 3.5)	209 ( 5.6)!
RHODE ISLAND	47 ( 5.3)	217 ( 2.6)	46 ( 5.2)	215 ( 2.4)	7 ( 3.0)	203 ( 9.7)!
SOUTH CAROLINA	38 ( 4.6)	215 ( 2.3)	52 ( 4.5)	211 ( 1.8)	11 ( 2.9)	211 ( 3.9)!
TENNESSEE	19 ( 4.1)	215 ( 3.8)!	67 ( 4.1)	211 ( 1.8)	14 ( 3.1)	204 ( 3.1)!
TEXAS	25 ( 4.8)	223 ( 3.2)!	57 ( 5.1)	217 ( 1.7)	18 ( 3.6)	213 ( 3.0)!
UTAH	20 ( 4.2)	226 ( 2.1)!	64 ( 4.5)	225 ( 1.2)	16 ( 2.8)	219 ( 2.3)
VERMONT	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
VIRGINIA	36 ( 4.8)	227 ( 3.0)	57 ( 4.8)	218 ( 1.7)	7 ( 2.7)	207 ( 3.2)!
WASHINGTON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
WEST VIRGINIA	30 ( 3.9)	218 ( 1.6)	56 ( 4.2)	214 ( 1.3)	15 ( 3.1)	216 ( 4.1)!
WISCONSIN	43 ( 4.8)	232 ( 1.4)	49 ( 4.8)	229 ( 1.7)	8 ( 2.4)	209 ( 4.9)!
WYOMING	34 ( 4.5)	226 ( 1.4)	56 ( 4.9)	226 ( 1.2)	11 ( 3.2)	219 ( 2.9)!
<b>Other Jurisdictions</b>						
DDESS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
DoDDS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
GUAM	0 ( ... )	... ( ... )	73 ( 0.2)	192 ( 1.1)	27 ( 0.2)	194 ( 1.9)

— State or other jurisdiction did not participate in the NAEP assessment year presented in this table.

... Characteristics of the sample do not permit a reliable estimate.

! Interpret with caution — the nature of the sample does not allow accurate determination of the variability of this statistic.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 5.6** (continued) **1996 Mathematics Assessment**



POPULATION: **1996 Grade 4 Public School Students**  
 REPORTED STATISTICS: **Percentage of Students and Average Mathematics Scale Score**  
 SCHOOLS' REPORTS ON: **Student Absenteeism**

To what degree is student absenteeism a problem in your school?

Not a Problem	Minor	Moderate to Serious
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JURISDICTIONS	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )
<b>Nation</b>						
NATION	43 ( 4.1)	230 ( 1.8)	44 ( 4.3)	218 ( 2.3)	13 ( 2.3)	210 ( 3.1)
NORTHEAST	62 ( 9.6)	234 ( 2.7)	38 ( 9.6)	216 ( 7.1)!	0 ( ... )	... ( ... )
SOUTHEAST	22 ( 6.6)	219 ( 7.9)!	52 ( 9.3)	219 ( 3.2)	27 ( 7.2)	208 ( 4.3)!
CENTRAL	49 ( 6.7)	235 ( 2.5)	43 ( 7.8)	227 ( 3.0)	8 ( 2.7)	... ( ... )
WEST	40 ( 8.2)	226 ( 3.2)!	44 ( 7.4)	213 ( 4.6)	15 ( 4.6)	213 ( 6.2)!
<b>States</b>						
ALABAMA	32 ( 5.5)	215 ( 3.2)	50 ( 5.5)	210 ( 2.1)	18 ( 4.0)	202 ( 3.3)!
ALASKA†	24 ( 3.4)	228 ( 3.4)	45 ( 4.5)	223 ( 2.7)	31 ( 4.0)	222 ( 2.6)
ARIZONA	16 ( 4.1)	236 ( 3.8)!	54 ( 5.5)	217 ( 2.4)	30 ( 4.4)	208 ( 2.3)
ARKANSAS†	25 ( 4.8)	220 ( 2.5)	60 ( 5.5)	215 ( 2.2)	14 ( 4.3)	208 ( 4.1)!
CALIFORNIA	21 ( 4.8)	213 ( 7.6)!	46 ( 5.8)	210 ( 2.4)	33 ( 5.4)	199 ( 3.2)
COLORADO	46 ( 5.2)	230 ( 1.8)	44 ( 5.2)	224 ( 2.4)	11 ( 3.3)	216 ( 5.0)!
CONNECTICUT	46 ( 5.2)	238 ( 2.2)	48 ( 5.5)	230 ( 2.2)	5 ( 2.2)	206 ( 5.4)!
DELAWARE	53 ( 0.4)>	217 ( 1.1)	32 ( 0.4)<	212 ( 1.3)<	15 ( 0.5)>	208 ( 1.7)
DISTRICT OF COLUMBIA	29 ( 0.4)<	202 ( 2.2)	55 ( 0.4)>	181 ( 2.6)<	16 ( 0.3)<	171 ( 3.3)
FLORIDA	34 ( 4.8)	220 ( 2.4)	41 ( 4.7)	216 ( 2.9)	25 ( 4.4)	207 ( 3.1)
GEORGIA	38 ( 5.4)	221 ( 2.7)	44 ( 5.3)	216 ( 1.8)	18 ( 4.3)	204 ( 3.6)!
HAWAII	38 ( 3.9)>	221 ( 3.7)	44 ( 4.8)	213 ( 1.7)	18 ( 3.9)	209 ( 5.0)!
INDIANA	41 ( 4.7)	233 ( 1.8)>	48 ( 4.8)	229 ( 1.4)>	11 ( 3.1)	222 ( 6.5)!
IOWA†	45 ( 5.4)	233 ( 1.8)	44 ( 5.8)	228 ( 1.6)	12 ( 3.2)	218 ( 3.9)!
KENTUCKY	26 ( 4.2)	227 ( 3.0)	42 ( 5.6)	221 ( 2.2)	32 ( 4.9)	215 ( 1.8)
LOUISIANA	49 ( 5.1)>	212 ( 2.4)	40 ( 5.1)	208 ( 2.1)	12 ( 3.1)	207 ( 4.2)!
MAINE	56 ( 5.2)	236 ( 1.2)	41 ( 5.0)	229 ( 1.8)	3 ( 1.8)	... ( ... )
MARYLAND	37 ( 5.3)	234 ( 2.9)	45 ( 5.8)	217 ( 2.5)	18 ( 4.3)	206 ( 4.8)!
MASSACHUSETTS	53 ( 5.7)	234 ( 2.2)	39 ( 5.4)	225 ( 1.9)	7 ( 2.8)	210 ( 3.3)!
MICHIGAN†	56 ( 5.9)>	233 ( 2.3)	33 ( 5.4)	225 ( 2.6)	11 ( 3.3)	208 ( 5.1)!
MINNESOTA	50 ( 5.5)	237 ( 1.6)>	38 ( 5.4)	232 ( 1.7)	11 ( 3.3)	224 ( 3.6)!
MISSISSIPPI	32 ( 5.0)	212 ( 3.0)	52 ( 4.5)	208 ( 1.8)	16 ( 3.6)	201 ( 3.0)!
MISSOURI	37 ( 4.9)	226 ( 1.8)	52 ( 4.8)	225 ( 2.1)	10 ( 3.2)	217 ( 3.7)!
MONTANA†	45 ( 4.7)	229 ( 2.0)	41 ( 5.3)	231 ( 2.0)	14 ( 3.8)	214 ( 3.4)!
NEBRASKA	55 ( 4.4)	230 ( 2.0)	37 ( 4.3)	227 ( 2.2)	8 ( 2.6)	216 ( 6.8)!
NEVADA†	22 ( 5.0)	221 ( 4.5)!	53 ( 5.7)	219 ( 2.2)	25 ( 4.9)	212 ( 2.4)
NEW JERSEY†	66 ( 5.4)	234 ( 2.2)	26 ( 4.6)	218 ( 3.6)	9 ( 3.3)	201 ( 7.2)!
NEW MEXICO	27 ( 4.9)	217 ( 3.4)	51 ( 5.4)	218 ( 1.9)	22 ( 4.4)	201 ( 4.8)!
NEW YORK†	59 ( 4.7)	231 ( 1.5)	32 ( 5.1)	219 ( 3.4)	10 ( 2.5)	190 ( 5.3)!
NORTH CAROLINA	31 ( 3.9)	226 ( 2.3)	55 ( 5.1)	226 ( 1.8)>	14 ( 3.6)	218 ( 3.5)!
NORTH DAKOTA	69 ( 3.6)	231 ( 1.4)	27 ( 3.3)	233 ( 1.7)	4 ( 1.8)	209 (12.6)!
OREGON	30 ( 5.0)	230 ( 2.3)	51 ( 5.4)	221 ( 2.0)	20 ( 4.1)	215 ( 3.5)!
PENNSYLVANIA†	55 ( 5.6)	229 ( 1.9)	37 ( 5.5)	225 ( 2.8)	8 ( 2.1)	211 ( 4.7)!
RHODE ISLAND	58 ( 4.5)	225 ( 2.1)	35 ( 4.1)	215 ( 2.6)	7 ( 2.4)	206 ( 4.1)!
SOUTH CAROLINA†	37 ( 5.5)	214 ( 2.7)	47 ( 5.9)	215 ( 2.2)	16 ( 3.4)	208 ( 3.5)!
TENNESSEE	30 ( 5.0)	223 ( 3.0)	57 ( 5.7)	218 ( 2.2)	13 ( 3.7)	217 ( 4.5)!
TEXAS	42 ( 5.0)	231 ( 3.0)	40 ( 5.9)	231 ( 2.8)>	18 ( 4.2)	219 ( 3.1)!
UTAH	28 ( 5.1)	232 ( 1.9)	57 ( 4.6)	224 ( 1.7)	15 ( 3.9)	224 ( 2.7)!
VERMONT†	65 ( 4.7)	226 ( 1.5)	30 ( 4.6)	225 ( 2.9)	5 ( 2.0)	213 ( 4.3)!
VIRGINIA	44 ( 5.6)	229 ( 2.4)	48 ( 5.3)	219 ( 2.2)	8 ( 2.9)	208 ( 4.9)!
WASHINGTON	37 ( 4.6)	227 ( 2.3)	52 ( 4.3)	225 ( 1.6)	11 ( 3.1)	215 ( 2.5)!
WEST VIRGINIA	43 ( 4.8)	223 ( 2.0)	53 ( 5.1)	224 ( 1.4)>	4 ( 2.0)	228 ( 5.9)!
WISCONSIN	49 ( 5.4)	238 ( 1.4)>	40 ( 5.2)	229 ( 1.8)	10 ( 2.8)	213 ( 6.2)!
WYOMING	45 ( 4.2)	226 ( 1.5)	47 ( 4.1)	223 ( 1.9)	8 ( 1.9)	217 ( 4.5)!
<b>Other Jurisdictions</b>						
DDESS	48 ( 0.5)	222 ( 1.5)	52 ( 0.5)	226 ( 1.3)	0 ( ... )	... ( ... )
DoDDS	79 ( 1.6)	224 ( 0.8)	19 ( 1.6)	222 ( 2.2)	2 ( 0.0)	... ( ... )
GUAM	16 ( 0.3)	190 ( 2.9)	55 ( 0.6)<	191 ( 1.2)	29 ( 0.5)>	184 ( 2.4)<

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).  
 ... Characteristics of the sample do not permit a reliable estimate.  
 > (<) The value for the students was significantly higher (lower) than in the 1992 assessment at about the 95% confidence level using appropriate multiple comparison procedures.  
 ! Interpret with caution — the nature of the sample does not allow accurate determination of the variability of this statistic.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.



**TABLE 5.7**

**1996 Mathematics Assessment**



POPULATION:

1996 Grade 8 Public School Students

REPORTED STATISTICS:

Percentage of Students and Average Mathematics Scale Score

SCHOOLS' REPORTS ON:

The Identification of Mathematics as an Instructional Priority

Has your school identified mathematics as a priority in the last two years?

Yes

No

**JURISDICTIONS**

PCT ( SE )

SS ( SE )

PCT ( SE )

SS ( SE )

**Nation**

NATION	74 ( 3.3)	270 ( 1.7)	26 ( 3.3)	275 ( 2.3)
NORTHEAST	80 ( 8.0)	274 ( 5.4)	20 ( 8.0)	... ( ... )
SOUTHEAST	78 ( 5.3)	264 ( 3.5)	22 ( 5.3)	269 ( 3.6)!
CENTRAL	56 ( 8.5)	276 ( 4.3)	44 ( 8.5)	279 ( 3.9)
WEST	81 ( 5.7)	269 ( 2.5)	19 ( 5.7)	271 ( 5.2)!

**States**

ALABAMA	71 ( 5.1)	254 ( 2.3)	29 ( 5.1)	265 ( 4.6)
ALASKA†	29 ( 3.2)	277 ( 4.6)	71 ( 3.2)	279 ( 2.1)
ARIZONA	68 ( 6.5)	268 ( 1.7)	32 ( 6.5)	272 ( 3.5)!
ARKANSAS†	63 ( 7.7)	262 ( 2.2)	37 ( 7.7)	263 ( 3.0)!
CALIFORNIA	78 ( 4.9)	261 ( 2.1)	22 ( 4.9)	264 ( 5.4)!
COLORADO	69 ( 4.1)	276 ( 1.4)	31 ( 4.1)	274 ( 2.7)
CONNECTICUT	73 ( 4.6)	277 ( 2.0)	27 ( 4.6)	289 ( 2.5)
DELAWARE	71 ( 0.5)	263 ( 1.2)	29 ( 0.5)	272 ( 2.3)
DISTRICT OF COLUMBIA	85 ( 0.4)	234 ( 1.6)	15 ( 0.4)	221 ( 3.6)
FLORIDA	76 ( 4.6)	261 ( 2.6)	24 ( 4.6)	271 ( 3.3)!
GEORGIA	80 ( 4.6)	261 ( 2.1)	20 ( 4.6)	265 ( 3.9)!
HAWAII	69 ( 0.5)	263 ( 1.2)	31 ( 0.5)	262 ( 1.8)
INDIANA	50 ( 5.7)	276 ( 2.9)	50 ( 5.7)	274 ( 1.7)
IOWA†	27 ( 4.6)	283 ( 2.2)	73 ( 4.6)	284 ( 1.5)
KENTUCKY	88 ( 3.5)	267 ( 1.2)	12 ( 3.5)	274 ( 5.0)!
LOUISIANA	72 ( 4.8)	248 ( 1.9)	28 ( 4.8)	265 ( 2.4)
MAINE	57 ( 3.7)	284 ( 1.9)	43 ( 3.7)	284 ( 1.6)
MARYLAND†	79 ( 5.3)	269 ( 2.5)	21 ( 5.3)	275 ( 5.4)!
MASSACHUSETTS	58 ( 5.7)	276 ( 3.1)	42 ( 5.7)	282 ( 2.7)
MICHIGAN†	77 ( 5.7)	275 ( 2.2)	23 ( 5.7)	282 ( 4.1)!
MINNESOTA	45 ( 5.7)	287 ( 2.3)	55 ( 5.7)	283 ( 2.0)
MISSISSIPPI	74 ( 4.4)	249 ( 1.7)	26 ( 4.4)	253 ( 2.6)
MISSOURI	39 ( 5.1)	269 ( 2.9)	61 ( 5.1)	275 ( 2.0)
MONTANA†	27 ( 4.0)	280 ( 2.9)	73 ( 4.0)	284 ( 1.6)
NEBRASKA	41 ( 3.8)	281 ( 1.5)	59 ( 3.8)	284 ( 1.2)
NEW MEXICO	62 ( 3.8)	264 ( 1.4)	38 ( 3.8)	263 ( 2.2)
NEW YORK†	66 ( 6.4)	263 ( 3.0)	34 ( 6.4)	281 ( 3.2)!
NORTH CAROLINA	77 ( 4.7)	267 ( 2.0)	23 ( 4.7)	270 ( 3.1)!
NORTH DAKOTA	34 ( 3.0)	284 ( 1.6)	66 ( 3.0)	284 ( 1.1)
OREGON	65 ( 5.4)	277 ( 2.3)	35 ( 5.4)	274 ( 2.3)
RHODE ISLAND	66 ( 0.5)	267 ( 1.2)	34 ( 0.5)	269 ( 1.3)
SOUTH CAROLINA†	78 ( 4.8)	261 ( 2.0)	22 ( 4.8)	261 ( 3.2)!
TENNESSEE	70 ( 4.7)	262 ( 2.0)	30 ( 4.7)	267 ( 2.0)
TEXAS	95 ( 3.2)	271 ( 1.5)	5 ( 3.2)	286 (15.2)!
UTAH	54 ( 2.4)	276 ( 1.4)	46 ( 2.4)	278 ( 2.0)
VERMONT†	46 ( 3.4)	283 ( 1.5)	54 ( 3.4)	275 ( 1.2)
VIRGINIA	81 ( 3.8)	269 ( 1.8)	19 ( 3.8)	273 ( 2.8)!
WASHINGTON	57 ( 5.8)	277 ( 2.1)	43 ( 5.8)	274 ( 2.4)
WEST VIRGINIA	75 ( 4.6)	265 ( 1.3)	25 ( 4.6)	263 ( 2.4)
WISCONSIN†	47 ( 5.5)	279 ( 2.8)	53 ( 5.5)	285 ( 1.8)
WYOMING	41 ( 0.7)	276 ( 1.0)	59 ( 0.7)	274 ( 1.4)

**Other Jurisdictions**

DDESS	100 ( ... )	269 ( 2.6)	0 ( ... )	... ( ... )
DoDDS	97 ( 0.2)	275 ( 1.0)	3 ( 0.2)	... ( ... )
GUAM	76 ( 0.8)	237 ( 2.1)	24 ( 0.8)	245 ( 3.4)

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).

... Characteristics of the sample do not permit a reliable estimate.

! Interpret with caution — the nature of the sample does not allow accurate determination of the variability of this statistic.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 5.8**

**1990 Mathematics Assessment**



POPULATION:

1990 Grade 8 Public School Students

REPORTED STATISTICS:

Percentage of Students and Average Mathematics Scale Score

TEACHERS' REPORTS ON:

Availability of Resources

*How well are you provided with instructional materials and the resources you need to teach?*

**I Get Some or None of the Resources I Need**

**I Get Most of the Resources I Need**

**I Get All of the Resources I Need**

**JURISDICTIONS**

PCT ( SE )

SS ( SE )

PCT ( SE )

SS ( SE )

PCT ( SE )

SS ( SE )

**Nation**

NATION	31 ( 4.2)	260 ( 3.1)	56 ( 4.0)	265 ( 2.0)	13 ( 2.4)	264 ( 3.7)
NORTHEAST	36 (11.8)	274 (10.0)!	38 (11.7)	272 ( 3.3)!	26 ( 6.6)	272 ( 7.1)!
SOUTHEAST	21 ( 9.7)	256 (10.4)!	71 ( 9.5)	257 ( 3.0)!	8 ( 4.0)	... ( ... )
CENTRAL	47 ( 7.3)	257 ( 3.5)	45 ( 7.8)	272 ( 2.4)!	8 ( 2.4)	... ( ... )
WEST	23 ( 6.1)	254 ( 4.6)!	62 ( 3.8)	267 ( 4.2)	15 ( 5.2)	261 ( 5.1)!

**States**

ALABAMA	31 ( 4.0)	249 ( 2.6)	49 ( 4.8)	252 ( 2.1)	20 ( 4.1)	262 ( 2.3)!
ALASKA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
ARIZONA	31 ( 2.6)	257 ( 2.5)	53 ( 2.8)	261 ( 1.8)	17 ( 2.6)	261 ( 2.1)
ARKANSAS	41 ( 4.1)	254 ( 1.3)	40 ( 3.9)	261 ( 2.0)	19 ( 3.1)	255 ( 2.7)
CALIFORNIA	34 ( 3.6)	254 ( 2.6)	53 ( 3.7)	260 ( 2.0)	14 ( 2.1)	253 ( 3.9)
COLORADO	23 ( 3.2)	262 ( 2.4)	61 ( 3.6)	269 ( 1.3)	15 ( 2.4)	266 ( 2.9)
CONNECTICUT	23 ( 2.7)	267 ( 1.8)	52 ( 3.0)	270 ( 1.5)	25 ( 3.1)	272 ( 2.8)
DELAWARE	32 ( 1.1)	259 ( 1.5)	60 ( 1.3)	264 ( 1.3)	7 ( 0.4)	258 ( 2.1)
DISTRICT OF COLUMBIA	58 ( 1.1)	229 ( 1.0)	38 ( 1.2)	235 ( 1.5)	4 ( 0.3)	243 ( 3.1)
FLORIDA	32 ( 3.1)	252 ( 2.2)	53 ( 3.1)	257 ( 1.6)	15 ( 2.2)	263 ( 3.8)
GEORGIA	36 ( 3.1)	257 ( 2.3)	52 ( 3.7)	259 ( 1.5)	12 ( 2.4)	255 ( 4.5)!
HAWAII	44 ( 0.9)	249 ( 1.4)	51 ( 1.0)	254 ( 1.1)	5 ( 0.5)	249 ( 3.6)
INDIANA	29 ( 3.9)	268 ( 2.5)	54 ( 3.7)	268 ( 1.6)	17 ( 3.0)	267 ( 2.7)
IOWA	14 ( 3.0)	277 ( 4.2)!	60 ( 4.6)	278 ( 1.4)	25 ( 4.2)	277 ( 2.2)
KENTUCKY	31 ( 4.0)	256 ( 1.7)	53 ( 4.0)	257 ( 1.4)	16 ( 2.2)	259 ( 3.0)
LOUISIANA	58 ( 4.3)	245 ( 1.7)	34 ( 4.1)	247 ( 2.2)	8 ( 1.7)	250 ( 5.3)!
MAINE	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
MARYLAND	21 ( 2.8)	247 ( 3.2)	61 ( 3.4)	264 ( 2.0)	18 ( 2.5)	268 ( 2.9)
MASSACHUSETTS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
MICHIGAN	33 ( 3.9)	258 ( 2.6)	55 ( 4.0)	266 ( 1.9)	12 ( 2.3)	274 ( 2.5)
MINNESOTA	23 ( 3.8)	273 ( 1.9)	65 ( 3.7)	276 ( 1.2)	12 ( 2.1)	281 ( 3.0)
MISSISSIPPI	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
MISSOURI	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
MONTANA	21 ( 2.7)	279 ( 1.7)	62 ( 3.0)	280 ( 1.2)	17 ( 2.2)	285 ( 1.6)
NEBRASKA	22 ( 1.9)	269 ( 1.9)	58 ( 2.6)	277 ( 1.4)	20 ( 2.6)	279 ( 2.4)
NEW MEXICO	39 ( 1.1)	256 ( 1.5)	50 ( 1.2)	257 ( 0.8)	11 ( 0.7)	255 ( 2.9)
NEW YORK	35 ( 3.9)	248 ( 3.0)	45 ( 3.5)	265 ( 2.0)	20 ( 2.7)	267 ( 3.3)
NORTH CAROLINA	36 ( 3.3)	244 ( 2.1)	45 ( 3.5)	253 ( 1.7)	19 ( 2.8)	259 ( 2.3)
NORTH DAKOTA	35 ( 3.5)	282 ( 1.9)	48 ( 2.9)	282 ( 1.6)	18 ( 2.7)	278 ( 4.2)
OREGON	24 ( 3.3)	270 ( 1.7)	53 ( 3.7)	270 ( 1.4)	24 ( 3.3)	274 ( 2.6)
RHODE ISLAND	32 ( 0.9)	254 ( 1.2)	54 ( 1.2)	264 ( 1.0)	14 ( 0.6)	264 ( 1.9)
SOUTH CAROLINA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
TENNESSEE	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
TEXAS	29 ( 3.1)	250 ( 2.8)	51 ( 3.3)	259 ( 1.8)	20 ( 2.9)	258 ( 3.0)
UTAH	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
VERMONT	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
VIRGINIA	31 ( 3.1)	254 ( 3.3)	47 ( 3.4)	267 ( 2.0)	22 ( 2.5)	270 ( 3.3)
WASHINGTON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
WEST VIRGINIA	45 ( 4.3)	254 ( 1.5)	47 ( 4.5)	257 ( 1.7)	8 ( 1.9)	266 ( 3.8)!
WISCONSIN	23 ( 3.4)	268 ( 2.6)	58 ( 4.0)	277 ( 1.5)	18 ( 3.4)	280 ( 2.8)
WYOMING	16 ( 0.8)	273 ( 1.5)	53 ( 1.3)	273 ( 1.0)	32 ( 0.9)	272 ( 1.2)

**Other Jurisdictions**

DDESS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
DoDDS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
GUAM	72 ( 1.0)	230 ( 0.9)	20 ( 0.7)	238 ( 2.3)	7 ( 0.6)	242 ( 2.9)

— State or other jurisdiction did not participate in the NAEP assessment year presented in this table.

... Characteristics of the sample do not permit a reliable estimate.

! Interpret with caution — the nature of the sample does not allow accurate determination of the variability of this statistic.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 5.8** (continued) **1992 Mathematics Assessment**



POPULATION: **1992 Grade 8 Public School Students**  
 REPORTED STATISTICS: **Percentage of Students and Average Mathematics Scale Score**  
 TEACHERS' REPORTS ON: **Availability of Resources**

How well are you provided with instructional materials and the resources you need to teach?

**I Get Some or None of the Resources I Need**

**I Get Most of the Resources I Need**

**I Get All of the Resources I Need**

**JURISDICTIONS**

PCT ( SE )

SS ( SE )

PCT ( SE )

SS ( SE )

PCT ( SE )

SS ( SE )

**Nation**

NATION	33 ( 1.9)	262 ( 1.5)	53 ( 2.5)	270 ( 1.1)	13 ( 2.3)	273 ( 3.3)
NORTHEAST	37 ( 4.6)	251 ( 3.3)	51 ( 5.1)	277 ( 3.3)	12 ( 4.6)	275 ( 5.8)!
SOUTHEAST	35 ( 3.6)	261 ( 1.9)	50 ( 5.5)	260 ( 1.6)	15 ( 7.0)	266 ( 6.0)!
CENTRAL	26 ( 3.9)	272 ( 4.6)	60 ( 5.7)	275 ( 2.2)	13 ( 3.3)	283 ( 6.0)!
WEST	35 ( 3.4)	264 ( 2.7)	52 ( 4.1)	269 ( 2.4)	12 ( 2.7)	271 ( 5.0)!

**States**

ALABAMA	37 ( 4.1)	247 ( 2.6)	54 ( 4.5)	256 ( 2.1)	10 ( 2.0)	255 ( 5.8)!
ALASKA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
ARIZONA	41 ( 3.6)	265 ( 1.8)»	43 ( 3.7)	265 ( 1.6)	15 ( 3.1)	265 ( 4.1)!
ARKANSAS	28 ( 3.3)	255 ( 2.5)	56 ( 3.9)»	257 ( 1.8)	16 ( 3.3)	256 ( 3.9)!
CALIFORNIA	32 ( 2.8)	257 ( 2.5)	56 ( 3.0)	264 ( 2.2)	12 ( 2.0)	263 ( 4.3)
COLORADO	36 ( 3.3)	270 ( 1.8)	51 ( 3.0)	275 ( 1.5)»	13 ( 2.1)	271 ( 4.4)
CONNECTICUT	30 ( 3.7)	265 ( 3.2)	50 ( 3.9)	275 ( 2.2)	20 ( 3.3)	284 ( 2.3)»
DELAWARE	46 ( 0.8)»	265 ( 1.2)»	47 ( 0.8)«	261 ( 1.5)	7 ( 0.5)	262 ( 3.0)
DISTRICT OF COLUMBIA	59 ( 1.0)	234 ( 1.3)»	35 ( 1.0)	238 ( 1.4)	6 ( 0.4)»	232 ( 4.5)
FLORIDA	37 ( 3.2)	255 ( 3.0)	50 ( 3.3)	263 ( 1.7)»	13 ( 2.3)	263 ( 3.9)
GEORGIA	32 ( 3.4)	255 ( 2.4)	53 ( 3.5)	262 ( 1.6)	15 ( 2.4)	260 ( 3.5)
HAWAII	47 ( 0.9)	257 ( 1.3)»	47 ( 0.9)«	259 ( 1.2)»	7 ( 0.4)	256 ( 2.9)
INDIANA	31 ( 4.2)	266 ( 1.9)	55 ( 4.2)	273 ( 1.7)	13 ( 2.6)	268 ( 3.4)
IOWA	22 ( 2.9)	280 ( 1.8)	60 ( 4.5)	283 ( 1.2)»	18 ( 3.5)	287 ( 2.7)»
KENTUCKY	35 ( 4.4)	260 ( 1.7)	51 ( 3.7)	266 ( 1.8)»	14 ( 3.0)	260 ( 3.4)!
LOUISIANA	49 ( 4.6)	247 ( 2.4)	43 ( 4.4)	253 ( 2.6)	8 ( 2.4)	254 ( 5.4)!
MAINE	28 ( 4.1)	274 ( 1.7)	57 ( 4.5)	281 ( 1.4)	15 ( 3.0)	280 ( 3.0)
MARYLAND	34 ( 3.6)»	257 ( 3.0)	54 ( 4.0)	270 ( 2.1)	11 ( 2.6)	271 ( 5.7)!
MASSACHUSETTS	42 ( 2.6)	265 ( 2.1)	50 ( 3.2)	279 ( 1.5)	9 ( 2.0)	272 ( 3.1)!
MICHIGAN	31 ( 3.9)	264 ( 3.0)	56 ( 3.8)	269 ( 2.2)	13 ( 2.4)	272 ( 5.0)
MINNESOTA	29 ( 3.3)	280 ( 2.0)	58 ( 4.1)	285 ( 1.2)»	13 ( 2.9)	280 ( 3.0)!
MISSISSIPPI	57 ( 4.0)	245 ( 1.5)	34 ( 3.5)	249 ( 2.3)	9 ( 2.3)	244 ( 4.6)!
MISSOURI	26 ( 3.8)	269 ( 2.0)	60 ( 3.7)	272 ( 1.3)	14 ( 2.6)	275 ( 3.0)
MONTANA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
NEBRASKA	23 ( 3.1)	274 ( 1.9)	61 ( 3.7)	280 ( 1.5)	16 ( 2.6)	275 ( 2.9)
NEW MEXICO	41 ( 3.6)	255 ( 1.5)	51 ( 3.9)	264 ( 1.3)»	9 ( 1.6)	259 ( 2.2)
NEW YORK	31 ( 3.7)	257 ( 3.3)	48 ( 3.9)	267 ( 3.0)	20 ( 3.3)	281 ( 3.2)»
NORTH CAROLINA	46 ( 3.4)	256 ( 1.7)»	43 ( 3.0)	261 ( 1.7)»	11 ( 2.5)	258 ( 2.3)!
NORTH DAKOTA	25 ( 3.2)	285 ( 2.0)	50 ( 4.6)	283 ( 1.3)	25 ( 3.4)	281 ( 2.1)
OREGON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
RHODE ISLAND	42 ( 0.9)»	254 ( 1.5)	51 ( 0.7)	274 ( 1.1)»	6 ( 0.6)«	270 ( 2.6)
SOUTH CAROLINA	32 ( 3.3)	260 ( 2.3)	52 ( 3.5)	262 ( 1.7)	16 ( 2.3)	260 ( 3.3)
TENNESSEE	42 ( 3.8)	260 ( 2.1)	46 ( 3.4)	259 ( 1.9)	12 ( 2.2)	256 ( 4.3)
TEXAS	29 ( 2.8)	259 ( 2.7)	49 ( 3.2)	266 ( 2.4)»	22 ( 2.7)	269 ( 2.5)»
UTAH	38 ( 2.8)	274 ( 1.3)	53 ( 2.5)	275 ( 1.2)	10 ( 1.5)	271 ( 2.5)
VERMONT	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
VIRGINIA	33 ( 3.5)	264 ( 2.4)»	51 ( 3.4)	270 ( 1.4)	16 ( 2.6)	267 ( 3.4)
WASHINGTON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
WEST VIRGINIA	38 ( 4.3)	260 ( 1.6)»	53 ( 4.4)	259 ( 1.2)	9 ( 2.2)	258 ( 2.6)!
WISCONSIN	19 ( 2.9)	275 ( 3.0)	69 ( 3.7)	281 ( 1.9)	12 ( 2.5)	272 ( 3.8)
WYOMING	20 ( 1.7)	273 ( 1.6)	66 ( 3.0)»	276 ( 1.0)»	14 ( 2.4)«	272 ( 3.3)

**Other Jurisdictions**

DDESS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
DoDDS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
GUAM	69 ( 1.1)	234 ( 1.3)»	27 ( 1.1)»	234 ( 2.6)	3 ( 0.4)«	... ( ... )

— State or other jurisdiction did not participate in the NAEP assessment year presented in this table.  
 ... Characteristics of the sample do not permit a reliable estimate.  
 » ( « ) The value for the students was significantly higher (lower) than in the 1990 assessment at about the 95% confidence level using appropriate multiple comparison procedures.  
 ! Interpret with caution — the nature of the sample does not allow accurate determination of the variability of this statistic.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 5.8** (continued) **1996 Mathematics Assessment**



POPULATION: **1996 Grade 8 Public School Students**  
 REPORTED STATISTICS: **Percentage of Students and Average Mathematics Scale Score**  
 TEACHERS' REPORTS ON: **Availability of Resources**

How well are you provided with instructional materials and the resources you need to teach?

**I Get Some or None of the Resources I Need**

**I Get Most of the Resources I Need**

**I Get All of the Resources I Need**

**JURISDICTIONS**

PCT ( SE )

SS ( SE )

PCT ( SE )

SS ( SE )

PCT ( SE )

SS ( SE )

**Nation**

NATION	22 ( 2.7)<	265 ( 2.7)	58 ( 3.3)	272 ( 1.7)»	20 ( 3.1)	279 ( 2.9)»
NORTHEAST	18 ( 4.7)	259 ( 5.0)!	62 ( 8.5)	279 ( 3.3)	20 ( 6.1)	289 ( 8.3)!
SOUTHEAST	29 ( 6.8)	259 ( 6.5)!	56 ( 6.1)	267 ( 3.4)	14 ( 3.7)	265 ( 3.8)!
CENTRAL	19 ( 5.5)	276 ( 4.3)!	59 ( 8.2)	276 ( 5.3)	22 ( 7.7)	281 ( 4.8)!
WEST	21 ( 4.0)	267 ( 3.3)	57 ( 4.6)	269 ( 3.5)	22 ( 6.0)	279 ( 6.3)!

**States**

ALABAMA	40 ( 4.0)	253 ( 3.7)	49 ( 4.2)	255 ( 2.2)	11 ( 2.4)	271 ( 6.5)!
ALASKA†	30 ( 2.8)	275 ( 4.1)	65 ( 3.0)	279 ( 2.5)	5 ( 1.3)	... ( ... )
ARIZONA	27 ( 3.3)<	266 ( 3.6)	60 ( 3.5)>	269 ( 2.0)»	13 ( 2.1)	270 ( 3.8)
ARKANSAS†	16 ( 3.0)«	258 ( 3.6)	59 ( 4.3)»	264 ( 2.1)	25 ( 4.0)	261 ( 2.7)
CALIFORNIA	35 ( 3.2)	259 ( 2.7)	51 ( 3.2)	265 ( 2.4)	13 ( 2.2)	271 ( 4.8)»
COLORADO	28 ( 3.2)	275 ( 2.6)»	58 ( 3.5)	276 ( 1.7)»	14 ( 2.3)	279 ( 2.8)»
CONNECTICUT	29 ( 3.0)	268 ( 2.4)	52 ( 2.8)	285 ( 1.8)»>	18 ( 2.6)	285 ( 2.8)»
DELAWARE	39 ( 0.9)»<	264 ( 1.5)	51 ( 0.9)«>	268 ( 1.4)»	9 ( 0.6)»	270 ( 2.3)»
DISTRICT OF COLUMBIA	66 ( 1.2)»>	230 ( 2.0)	30 ( 1.2)«<	236 ( 2.6)	4 ( 0.3)<	... ( ... )
FLORIDA	37 ( 3.7)	256 ( 4.0)	48 ( 3.8)	267 ( 2.2)»	16 ( 2.6)	270 ( 4.1)
GEORGIA	24 ( 2.9)«	258 ( 3.7)	62 ( 3.1)	263 ( 2.0)	14 ( 2.3)	270 ( 3.9)
HAWAII	42 ( 1.1)<	262 ( 1.4)»	48 ( 1.2)«	266 ( 1.9)»>	11 ( 0.6)»>	247 ( 3.3)
INDIANA	27 ( 4.1)	271 ( 3.0)	54 ( 4.6)	276 ( 2.2)»	19 ( 3.4)	280 ( 2.9)»
IOWA†	29 ( 4.2)»	286 ( 2.3)	56 ( 4.2)	285 ( 1.7)»	15 ( 3.0)	278 ( 3.1)!
KENTUCKY	14 ( 2.9)«<	266 ( 2.6)!	59 ( 4.1)	268 ( 1.5)»	27 ( 3.9)	267 ( 3.1)
LOUISIANA	48 ( 4.2)	249 ( 2.3)	41 ( 4.4)	256 ( 2.9)»	11 ( 2.4)	262 ( 4.2)!
MAINE	34 ( 3.5)	283 ( 2.7)	56 ( 3.8)	284 ( 1.7)	10 ( 2.4)	290 ( 3.1)!
MARYLAND†	36 ( 4.1)»	259 ( 3.4)»	51 ( 4.6)	275 ( 3.5)»	14 ( 3.0)	282 ( 4.8)!
MASSACHUSETTS	44 ( 4.1)	276 ( 2.4)»	45 ( 3.9)	280 ( 3.3)	11 ( 2.6)	278 ( 5.3)!
MICHIGAN†	32 ( 3.8)	271 ( 3.4)»	53 ( 4.1)	281 ( 2.1)»>	16 ( 2.9)	285 ( 5.2)
MINNESOTA	24 ( 3.1)	280 ( 2.7)	63 ( 4.0)	286 ( 1.7)»	13 ( 3.1)	286 ( 5.1)!
MISSISSIPPI	22 ( 3.2)<	245 ( 2.5)	63 ( 4.1)»	251 ( 1.8)	15 ( 3.1)	255 ( 3.4)!
MISSOURI	22 ( 4.0)	267 ( 3.0)	59 ( 4.5)	277 ( 1.4)	19 ( 3.8)	277 ( 3.3)!
MONTANA†	28 ( 2.0)	281 ( 2.3)	56 ( 2.9)	283 ( 1.9)	16 ( 2.6)	288 ( 3.7)
NEBRASKA	20 ( 2.1)	283 ( 1.9)»>	61 ( 3.6)	282 ( 1.2)»	19 ( 3.6)	287 ( 2.7)!
NEW MEXICO	45 ( 2.0)»	262 ( 2.0)»	45 ( 2.0)	266 ( 1.6)»	9 ( 1.7)	266 ( 3.5)
NEW YORK†	33 ( 4.0)	265 ( 2.5)»	51 ( 3.7)	277 ( 2.3)»	16 ( 2.8)	275 ( 3.2)
NORTH CAROLINA	35 ( 3.3)	265 ( 2.8)»	56 ( 3.1)»	269 ( 1.4)»>	9 ( 1.9)«	271 ( 3.5)!
NORTH DAKOTA	33 ( 3.0)	284 ( 1.8)	56 ( 3.0)	285 ( 1.2)	11 ( 1.5)<	287 ( 3.1)
OREGON	40 ( 4.9)»	277 ( 2.3)»	50 ( 4.4)	280 ( 2.1)»	10 ( 2.3)«	272 ( 5.0)!
RHODE ISLAND	44 ( 0.9)»	268 ( 1.8)»>	47 ( 0.9)«<	275 ( 1.0)»	9 ( 0.5)«	258 ( 2.8)<
SOUTH CAROLINA†	37 ( 4.2)	259 ( 2.4)	48 ( 4.2)	263 ( 2.7)	16 ( 3.2)	261 ( 3.3)!
TENNESSEE	37 ( 3.8)	262 ( 2.6)	47 ( 4.5)	265 ( 2.3)	17 ( 2.9)	268 ( 4.3)
TEXAS	21 ( 3.0)	266 ( 2.7)»	59 ( 3.4)	269 ( 1.8)»	20 ( 2.8)	279 ( 3.3)»
UTAH	36 ( 2.2)	277 ( 2.1)	50 ( 2.6)	278 ( 1.1)	15 ( 1.8)	274 ( 2.3)
VERMONT†	33 ( 3.3)	275 ( 2.4)	55 ( 3.5)	281 ( 1.3)	12 ( 1.8)	286 ( 3.0)
VIRGINIA	28 ( 2.8)	264 ( 2.9)»	54 ( 3.2)	272 ( 1.8)	18 ( 2.6)	273 ( 4.7)
WASHINGTON	33 ( 3.1)	275 ( 2.8)	52 ( 3.7)	277 ( 1.6)	14 ( 2.6)	280 ( 3.5)
WEST VIRGINIA	36 ( 3.3)	261 ( 1.7)»	53 ( 3.5)	267 ( 1.5)»>	11 ( 2.3)	268 ( 3.8)!
WISCONSIN†	30 ( 3.3)	280 ( 2.0)»	60 ( 3.8)	286 ( 1.9)»	10 ( 2.4)	282 ( 7.5)!
WYOMING	27 ( 1.1)»>	273 ( 1.8)	61 ( 1.0)»	276 ( 1.3)	12 ( 0.6)«	274 ( 2.1)

**Other Jurisdictions**

DDESS	12 ( 1.2)	255 ( 6.1)	62 ( 1.8)	269 ( 3.1)	25 ( 1.9)	274 ( 3.2)
DoDDS	24 ( 0.7)	278 ( 1.5)	52 ( 0.9)	274 ( 1.3)	25 ( 0.7)	275 ( 1.7)
GUAM	68 ( 1.5)«	235 ( 2.2)»	30 ( 1.5)»	230 ( 4.6)	2 ( 0.5)«	... ( ... )

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).  
 ... Characteristics of the sample do not permit a reliable estimate.  
 » ( « ) The value for the students was significantly higher (lower) than in the 1990 assessment at about the 95% confidence level using appropriate multiple comparison procedures.  
 > (<) The value for the students was significantly higher (lower) than in the 1992 assessment at about the 95% confidence level using appropriate multiple comparison procedures.  
 ! Interpret with caution — the nature of the sample does not allow accurate determination of the variability of this statistic.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 5.9****1996 Mathematics Assessment**

POPULATION:

1996 Grade 8 Public School Students

REPORTED STATISTICS:

Percentage of Students and Average Mathematics Scale Score

TEACHERS' REPORTS ON:

Availability of Curriculum Specialists to Help or Advise



Is there a curriculum specialist available to help or advise you in mathematics?

Yes

No

JURISDICTIONS	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )
<b>Nation</b>				
NATION	52 ( 3.8)	270 ( 2.1)	48 ( 3.8)	275 ( 1.7)
NORTHEAST	33 ( 8.1)	275 ( 6.6)!	67 ( 8.1)	278 ( 3.9)
SOUTHEAST	58 ( 8.9)	265 ( 3.4)	42 ( 8.9)	264 ( 5.4)!
CENTRAL	59 ( 8.1)	275 ( 5.1)	41 ( 8.1)	280 ( 3.0)!
WEST	53 ( 5.5)	266 ( 4.3)	47 ( 5.5)	276 ( 2.7)
<b>States</b>				
ALABAMA	56 ( 4.9)	256 ( 2.5)	44 ( 4.9)	257 ( 3.4)
ALASKA†	50 ( 2.7)	282 ( 2.4)	50 ( 2.7)	274 ( 3.6)
ARIZONA	61 ( 3.2)	270 ( 1.7)	39 ( 3.2)	267 ( 2.6)
ARKANSAS†	35 ( 5.0)	261 ( 2.7)	65 ( 5.0)	265 ( 1.7)
CALIFORNIA	48 ( 3.6)	262 ( 3.0)	52 ( 3.6)	266 ( 2.6)
COLORADO	48 ( 3.8)	277 ( 1.7)	52 ( 3.8)	275 ( 1.8)
CONNECTICUT	57 ( 4.0)	278 ( 1.7)	43 ( 4.0)	283 ( 2.2)
DELAWARE	55 ( 1.1)	268 ( 1.5)	45 ( 1.1)	265 ( 1.3)
DISTRICT OF COLUMBIA	77 ( 1.4)	229 ( 1.7)	23 ( 1.4)	239 ( 4.8)
FLORIDA	69 ( 3.0)	266 ( 2.0)	31 ( 3.0)	262 ( 2.6)
GEORGIA	68 ( 4.0)	263 ( 2.0)	32 ( 4.0)	264 ( 2.7)
HAWAII	62 ( 0.9)	264 ( 1.6)	38 ( 0.9)	260 ( 1.5)
INDIANA	31 ( 3.4)	277 ( 2.5)	69 ( 3.4)	274 ( 1.9)
IOWA†	68 ( 4.3)	282 ( 1.5)	32 ( 4.3)	287 ( 1.9)
KENTUCKY	51 ( 4.2)	268 ( 1.9)	49 ( 4.2)	266 ( 1.8)
LOUISIANA	68 ( 3.9)	255 ( 1.8)	32 ( 3.9)	250 ( 3.6)
MAINE	31 ( 3.5)	288 ( 1.8)	69 ( 3.5)	282 ( 1.7)
MARYLAND†	82 ( 3.5)	268 ( 2.2)	18 ( 3.5)	278 ( 5.5)!
MASSACHUSETTS	54 ( 4.1)	277 ( 2.3)	46 ( 4.1)	279 ( 2.6)
MICHIGAN†	48 ( 4.4)	276 ( 2.6)	52 ( 4.4)	281 ( 2.5)
MINNESOTA	32 ( 3.9)	280 ( 3.1)	68 ( 3.9)	287 ( 1.6)
MISSISSIPPI	51 ( 4.5)	250 ( 2.1)	49 ( 4.5)	251 ( 1.9)
MISSOURI	40 ( 4.3)	274 ( 2.4)	60 ( 4.3)	276 ( 1.7)
MONTANA†	28 ( 2.6)	284 ( 2.3)	72 ( 2.6)	283 ( 1.5)
NEBRASKA	40 ( 2.6)	280 ( 1.5)	60 ( 2.6)	285 ( 1.3)
NEW MEXICO	34 ( 2.2)	262 ( 2.4)	66 ( 2.2)	265 ( 1.4)
NEW YORK†	53 ( 4.2)	271 ( 2.5)	47 ( 4.2)	276 ( 2.5)
NORTH CAROLINA	73 ( 3.1)	267 ( 1.7)	27 ( 3.1)	270 ( 2.4)
NORTH DAKOTA	17 ( 1.3)	283 ( 2.3)	83 ( 1.3)	285 ( 1.1)
OREGON	36 ( 3.5)	278 ( 2.3)	64 ( 3.5)	279 ( 1.9)
RHODE ISLAND	53 ( 0.9)	272 ( 1.4)	47 ( 0.9)	269 ( 1.3)
SOUTH CAROLINA†	66 ( 4.3)	261 ( 2.3)	34 ( 4.3)	262 ( 2.7)
TENNESSEE	51 ( 4.4)	261 ( 2.4)	49 ( 4.4)	268 ( 2.1)
TEXAS	69 ( 4.2)	271 ( 2.0)	31 ( 4.2)	270 ( 2.9)
UTAH	66 ( 1.9)	277 ( 1.3)	34 ( 1.9)	279 ( 1.6)
VERMONT†	27 ( 1.6)	285 ( 2.1)	73 ( 1.6)	278 ( 1.3)
VIRGINIA	68 ( 3.1)	273 ( 1.8)	32 ( 3.1)	263 ( 3.0)
WASHINGTON	45 ( 4.1)	275 ( 2.2)	55 ( 4.1)	278 ( 2.1)
WEST VIRGINIA	58 ( 4.2)	265 ( 1.5)	42 ( 4.2)	266 ( 1.7)
WISCONSIN†	43 ( 3.9)	280 ( 2.9)	57 ( 3.9)	287 ( 1.7)
WYOMING	29 ( 1.1)	271 ( 2.2)	71 ( 1.1)	277 ( 0.8)
<b>Other Jurisdictions</b>				
DDESS	64 ( 1.5)	265 ( 2.4)	36 ( 1.5)	276 ( 4.1)
DoDDS	82 ( 0.5)	274 ( 1.0)	18 ( 0.5)	279 ( 2.3)
GUAM	39 ( 1.3)	231 ( 3.0)	61 ( 1.3)	235 ( 2.6)

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).

! Interpret with caution — the nature of the sample does not allow accurate determination of the variability of this statistic.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 5.10**

**1996 Mathematics Assessment**



POPULATION:

1996 Grade 8 Public School Students

REPORTED STATISTICS:

Percentage of Students and Average Mathematics Scale Score

TEACHERS' REPORTS ON:

School Hours Designated As Preparation Time Per Week

JURISDICTIONS	Less than One Hour		One to Two Hours		Three to Four Hours		Five Hours or More	
	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )
<b>Nation</b>								
NATION	3 ( 1.2)	268 (10.6)!	6 ( 1.7)	261 ( 6.3)!	30 ( 3.4)	275 ( 2.4)	60 ( 3.7)	272 ( 1.7)
NORTHEAST	0 ( ... )	... ( ... )	6 ( 4.1)	... ( ... )	45 (12.3)	274 ( 4.8)!	49 (12.6)	281 ( 5.4)!
SOUTHEAST	3 ( 2.3)	... ( ... )	5 ( 1.4)	263 (13.9)!	33 ( 5.0)	273 ( 3.3)	58 ( 4.7)	260 ( 3.7)
CENTRAL	1 ( ... )	... ( ... )	9 ( 5.6)	249 (15.3)!	19 ( 7.0)	282 ( 5.2)!	72 ( 7.9)	280 ( 2.5)
WEST	6 ( 3.6)	277 (11.1)!	5 ( 2.1)	268 ( 6.7)!	28 ( 4.6)	272 ( 5.7)	61 ( 4.8)	270 ( 2.1)
<b>States</b>								
ALABAMA	6 ( 1.5)	250 ( 4.3)!	8 ( 2.2)	244 ( 6.0)!	23 ( 3.7)	257 ( 3.0)	63 ( 4.0)	258 ( 2.9)
ALASKA†	4 ( 1.3)	... ( ... )	4 ( 0.7)	... ( ... )	31 ( 3.1)	283 ( 3.5)	62 ( 3.2)	277 ( 2.6)
ARIZONA	3 ( 1.1)	... ( ... )	5 ( 1.4)	260 ( 5.4)!	27 ( 3.5)	267 ( 2.9)	64 ( 3.5)	270 ( 2.1)
ARKANSAS†	4 ( 1.5)	273 ( 4.9)!	3 ( 1.4)	... ( ... )	21 ( 4.1)	263 ( 3.2)	72 ( 4.3)	262 ( 1.8)
CALIFORNIA	4 ( 1.2)	244 ( 8.3)!	2 ( 0.7)	... ( ... )	38 ( 3.5)	268 ( 2.8)	56 ( 3.4)	263 ( 2.7)
COLORADO	3 ( 1.2)	289 ( 6.4)!	9 ( 2.0)	277 ( 3.1)!	39 ( 3.3)	275 ( 1.9)	49 ( 3.4)	276 ( 1.7)
CONNECTICUT	2 ( 0.8)	... ( ... )	5 ( 1.5)	277 ( 6.5)!	59 ( 3.9)	282 ( 1.8)	34 ( 3.3)	278 ( 3.1)
DELAWARE	3 ( 0.5)	... ( ... )	3 ( 0.4)	269 ( 5.6)	48 ( 1.1)	265 ( 1.5)	46 ( 1.0)	269 ( 1.6)
DISTRICT OF COLUMBIA	4 ( 0.3)	... ( ... )	1 ( 0.1)	... ( ... )	38 ( 0.9)	243 ( 2.8)	57 ( 0.9)	226 ( 2.2)
FLORIDA	5 ( 1.8)	247 (10.4)!	9 ( 1.9)	267 ( 5.0)!	26 ( 3.7)	267 ( 3.1)	60 ( 4.0)	263 ( 2.4)
GEORGIA	2 ( 0.8)	... ( ... )	12 ( 2.0)	264 ( 4.3)	9 ( 1.8)	265 ( 4.1)	77 ( 2.6)	264 ( 1.9)
HAWAII	5 ( 0.4)	259 ( 4.1)	9 ( 0.7)	275 ( 3.7)	55 ( 1.1)	264 ( 1.3)	31 ( 1.1)	258 ( 2.0)
INDIANA	4 ( 1.5)	273 ( 6.8)!	5 ( 2.0)	266 ( 7.6)!	45 ( 4.3)	278 ( 2.2)	46 ( 4.2)	274 ( 2.2)
IOWA†	5 ( 2.0)	278 ( 6.0)!	5 ( 1.9)	281 ( 4.4)!	42 ( 4.4)	282 ( 2.1)	48 ( 4.7)	286 ( 1.7)
KENTUCKY	4 ( 1.6)	269 ( 2.9)!	8 ( 2.5)	269 ( 4.7)!	31 ( 4.0)	265 ( 2.3)	57 ( 4.3)	268 ( 2.1)
LOUISIANA	4 ( 1.4)	263 ( 5.8)!	6 ( 1.6)	251 ( 5.5)!	20 ( 3.3)	255 ( 3.6)	70 ( 3.3)	252 ( 2.1)
MAINE	9 ( 2.5)	286 ( 4.0)!	11 ( 2.6)	277 ( 4.1)!	57 ( 2.9)	285 ( 1.6)	23 ( 2.9)	284 ( 1.9)
MARYLAND†	2 ( 0.9)	... ( ... )	6 ( 2.3)	256 (13.8)!	37 ( 4.1)	272 ( 3.8)	55 ( 3.7)	270 ( 2.4)
MASSACHUSETTS	0 ( ... )	... ( ... )	7 ( 2.5)	275 ( 8.0)!	50 ( 4.2)	277 ( 3.0)	42 ( 4.3)	280 ( 2.6)
MICHIGAN†	4 ( 1.5)	274 (11.4)!	5 ( 1.4)	272 ( 8.9)!	19 ( 3.7)	281 ( 4.4)	72 ( 3.8)	279 ( 2.2)
MINNESOTA	4 ( 1.4)	271 ( 6.5)!	3 ( 0.9)	... ( ... )	18 ( 2.7)	289 ( 3.6)	76 ( 3.5)	284 ( 1.7)
MISSISSIPPI	2 ( 0.9)	... ( ... )	5 ( 1.6)	242 ( 4.3)!	22 ( 2.9)	252 ( 3.1)	70 ( 3.3)	251 ( 1.8)
MISSOURI	5 ( 1.8)	273 ( 7.4)!	3 ( 1.1)	280 ( 8.1)!	23 ( 3.7)	278 ( 2.4)	69 ( 3.8)	273 ( 1.7)
MONTANA†	1 ( 0.4)	... ( ... )	6 ( 1.7)	286 ( 5.0)!	46 ( 3.2)	284 ( 1.8)	47 ( 2.5)	281 ( 2.1)
NEBRASKA	1 ( 0.5)	... ( ... )	7 ( 1.9)	271 ( 5.0)!	35 ( 2.5)	283 ( 1.6)	58 ( 2.9)	284 ( 1.5)
NEW MEXICO	7 ( 1.4)	261 ( 4.2)	10 ( 1.5)	263 ( 4.0)	43 ( 2.3)	265 ( 2.3)	40 ( 2.2)	264 ( 1.6)
NEW YORK†	5 ( 1.7)	277 ( 9.7)!	3 ( 0.9)	... ( ... )	45 ( 4.7)	273 ( 2.1)	47 ( 4.4)	273 ( 2.8)
NORTH CAROLINA	2 ( 0.8)	... ( ... )	8 ( 1.8)	268 ( 4.6)!	26 ( 3.2)	273 ( 2.1)	63 ( 3.5)	266 ( 2.1)
NORTH DAKOTA	1 ( 0.7)	... ( ... )	10 ( 1.1)	282 ( 3.2)	26 ( 2.2)	285 ( 1.9)	63 ( 2.2)	285 ( 1.4)
OREGON	4 ( 1.1)	269 ( 8.8)!	5 ( 1.4)	272 ( 7.0)!	47 ( 3.6)	278 ( 2.1)	44 ( 3.7)	279 ( 2.4)
RHODE ISLAND	4 ( 0.4)	247 ( 5.5)	5 ( 0.4)	264 ( 5.6)	37 ( 1.0)	269 ( 1.5)	54 ( 1.1)	273 ( 1.2)
SOUTH CAROLINA†	3 ( 1.5)	257 ( 5.0)!	7 ( 1.6)	258 ( 5.9)!	30 ( 4.3)	256 ( 3.5)	60 ( 4.4)	264 ( 2.0)
TENNESSEE	5 ( 1.7)	259 ( 3.7)!	8 ( 2.6)	259 ( 7.2)!	36 ( 4.8)	269 ( 2.4)	51 ( 4.4)	263 ( 2.4)
TEXAS	8 ( 1.9)	265 ( 5.8)!	4 ( 1.1)	275 ( 6.4)!	37 ( 3.2)	271 ( 2.2)	51 ( 3.3)	271 ( 2.0)
UTAH	15 ( 1.6)	284 ( 2.0)	5 ( 1.0)	278 ( 2.8)	31 ( 2.3)	274 ( 1.5)	48 ( 2.2)	277 ( 1.4)
VERMONT†	7 ( 1.2)	277 ( 4.5)	18 ( 2.2)	275 ( 3.7)	56 ( 2.2)	282 ( 1.3)	19 ( 2.2)	277 ( 2.3)
VIRGINIA	5 ( 1.6)	273 ( 8.1)!	6 ( 1.7)	255 (12.4)!	35 ( 3.2)	275 ( 2.1)	54 ( 3.4)	268 ( 1.9)
WASHINGTON	4 ( 1.1)	274 ( 5.8)!	5 ( 1.4)	277 ( 6.7)!	33 ( 3.4)	274 ( 2.7)	58 ( 3.4)	278 ( 1.6)
WEST VIRGINIA	5 ( 1.8)	260 ( 3.8)!	5 ( 1.2)	256 ( 3.0)!	50 ( 3.5)	266 ( 1.7)	40 ( 3.4)	266 ( 1.9)
WISCONSIN†	0 ( 0.1)	... ( ... )	9 ( 2.4)	285 ( 3.9)!	13 ( 2.5)	283 ( 3.7)	78 ( 3.2)	284 ( 1.9)
WYOMING	3 ( 0.3)	... ( ... )	3 ( 0.2)	274 ( 4.3)	43 ( 1.3)	273 ( 1.8)	50 ( 1.2)	277 ( 1.3)
<b>Other Jurisdictions</b>								
DDESS	0 ( ... )	... ( ... )	6 ( 0.7)	... ( ... )	25 ( 1.3)	266 ( 4.2)	70 ( 1.2)	270 ( 3.4)
DoDDS	2 ( 0.1)	... ( ... )	3 ( 0.4)	275 ( 5.5)	26 ( 0.7)	276 ( 1.9)	69 ( 0.8)	275 ( 1.2)
GUAM	0 ( ... )	... ( ... )	19 ( 1.2)	230 ( 4.4)	3 ( 0.4)	... ( ... )	78 ( 1.2)	235 ( 1.9)

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).

... Characteristics of the sample do not permit a reliable estimate.

! Interpret with caution — the nature of the sample does not allow accurate determination of the variability of this statistic.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 5.11**

**1992 Mathematics Assessment**



POPULATION:

1992 Grade 8 Public School Students

REPORTED STATISTICS:

Percentage of Students and Average Mathematics Scale Score

SCHOOLS' REPORTS ON:

Involving Parents as Aides in Classrooms

Does your school use parents as aides in classrooms?	No		Yes, Occasionally		Yes, Routinely	
	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )
<b>JURISDICTIONS</b>						
<b>Nation</b>						
NATION	48 ( 3.9)	268 ( 2.0)	40 ( 3.7)	267 ( 2.0)	12 ( 2.7)	266 ( 2.9)!
NORTHEAST	58 (10.3)	274 ( 4.3)!	35 (10.2)	259 ( 6.9)!	8 ( 4.7)	... ( ... )
SOUTHEAST	48 ( 6.8)	257 ( 2.7)	40 ( 8.1)	262 ( 3.8)!	12 ( 5.8)	261 ( 6.7)!
CENTRAL	50 ( 9.1)	275 ( 3.6)!	36 ( 5.7)	272 ( 2.7)	13 ( 6.0)	274 ( 3.9)!
WEST	38 ( 5.9)	267 ( 4.9)	48 ( 5.6)	271 ( 3.2)	14 ( 5.0)	268 ( 4.1)!
<b>States</b>						
ALABAMA	56 ( 5.1)	254 ( 2.1)	36 ( 5.1)	254 ( 2.7)	9 ( 3.1)	241 (11.4)!
ALASKA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
ARIZONA	24 ( 3.8)	263 ( 3.1)	51 ( 5.2)	266 ( 2.0)	25 ( 4.9)	266 ( 2.6)!
ARKANSAS	54 ( 5.4)	254 ( 1.7)	43 ( 5.3)	261 ( 1.7)	3 ( 1.8)	... ( ... )
CALIFORNIA	33 ( 4.9)	260 ( 2.4)	52 ( 5.1)	261 ( 2.7)	14 ( 3.6)	265 ( 4.3)!
COLORADO	23 ( 4.4)	269 ( 2.9)	58 ( 5.2)	273 ( 1.7)	19 ( 4.0)	274 ( 2.0)!
CONNECTICUT	55 ( 4.7)	273 ( 2.2)	40 ( 4.9)	273 ( 3.2)	5 ( 1.9)	287 ( 5.1)!
DELAWARE	48 ( 0.2)	264 ( 1.5)	48 ( 0.2)	262 ( 1.3)	4 ( 0.0)	... ( ... )
DISTRICT OF COLUMBIA	21 ( 0.5)	235 ( 2.2)	57 ( 0.6)	231 ( 1.1)	23 ( 0.4)	231 ( 2.1)
FLORIDA	23 ( 4.2)	265 ( 3.8)	51 ( 5.3)	257 ( 2.1)	27 ( 4.8)	262 ( 3.2)
GEORGIA	58 ( 4.8)	260 ( 1.8)	36 ( 4.6)	256 ( 1.9)	6 ( 2.5)	263 ( 8.2)!
HAWAII	32 ( 0.4)	261 ( 1.5)	62 ( 0.3)	256 ( 1.1)	6 ( 0.2)	257 ( 1.7)
INDIANA	45 ( 5.7)	272 ( 2.0)	50 ( 5.7)	268 ( 2.0)	5 ( 2.0)	... ( ... )
IOWA	50 ( 5.4)	282 ( 1.5)	41 ( 5.5)	283 ( 1.4)	9 ( 2.6)	289 ( 2.6)!
KENTUCKY	47 ( 5.5)	263 ( 1.8)	44 ( 5.6)	262 ( 1.9)	9 ( 2.7)	267 ( 4.8)!
LOUISIANA	43 ( 5.4)	250 ( 2.5)	52 ( 5.2)	249 ( 2.5)	5 ( 2.3)	... ( ... )
MAINE	42 ( 5.4)	278 ( 1.5)	44 ( 5.2)	278 ( 1.5)	14 ( 3.6)	283 ( 3.0)!
MARYLAND	22 ( 3.7)	263 ( 3.5)	67 ( 4.9)	264 ( 2.0)	12 ( 3.4)	272 ( 6.4)!
MASSACHUSETTS	66 ( 4.8)	271 ( 1.7)	27 ( 4.7)	276 ( 3.4)	7 ( 2.8)	278 ( 3.0)!
MICHIGAN	45 ( 5.0)	265 ( 2.4)	47 ( 5.0)	270 ( 3.3)	8 ( 3.1)	264 (10.3)!
MINNESOTA	43 ( 5.0)	281 ( 1.3)	48 ( 4.6)	284 ( 1.5)	9 ( 3.2)	279 ( 2.9)!
MISSISSIPPI	56 ( 5.3)	246 ( 1.9)	37 ( 5.5)	247 ( 2.7)	7 ( 2.7)	250 ( 4.7)!
MISSOURI	61 ( 5.3)	269 ( 1.6)	33 ( 4.9)	273 ( 2.1)	6 ( 2.6)	276 ( 2.4)!
MONTANA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
NEBRASKA	48 ( 5.6)	280 ( 1.5)	47 ( 5.8)	276 ( 1.6)	4 ( 2.3)	... ( ... )
NEW MEXICO	39 ( 4.6)	257 ( 1.6)	47 ( 4.2)	261 ( 1.5)	14 ( 2.5)	262 ( 2.7)
NEW YORK	73 ( 4.6)	270 ( 2.7)	24 ( 5.1)	257 ( 6.8)!	4 ( 2.3)	... ( ... )
NORTH CAROLINA	34 ( 4.7)	260 ( 2.2)	55 ( 4.9)	257 ( 1.6)	12 ( 3.6)	257 ( 3.7)!
NORTH DAKOTA	73 ( 4.5)	282 ( 1.2)	24 ( 4.2)	287 ( 2.3)	3 ( 1.4)	... ( ... )
OREGON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
RHODE ISLAND	84 ( 0.1)	266 ( 0.8)	16 ( 0.1)	271 ( 1.0)	0 ( 0.0)	... ( ... )
SOUTH CAROLINA	43 ( 5.3)	260 ( 1.8)	47 ( 5.2)	260 ( 1.7)	9 ( 2.7)	269 ( 4.7)!
TENNESSEE	53 ( 4.8)	258 ( 2.3)	36 ( 5.0)	260 ( 2.1)	11 ( 3.4)	262 ( 2.4)!
TEXAS	39 ( 4.8)	261 ( 2.2)	43 ( 5.2)	265 ( 2.3)	18 ( 4.0)	272 ( 4.0)!
UTAH	29 ( 3.5)	272 ( 1.4)	63 ( 3.2)	275 ( 1.0)	9 ( 1.5)	277 ( 2.0)
VERMONT	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
VIRGINIA	35 ( 5.3)	265 ( 3.0)	55 ( 5.5)	270 ( 1.8)	10 ( 2.9)	267 ( 3.6)!
WASHINGTON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
WEST VIRGINIA	34 ( 4.9)	257 ( 2.1)	51 ( 5.2)	259 ( 1.1)	14 ( 3.5)	262 ( 2.7)!
WISCONSIN	49 ( 5.1)	278 ( 2.7)	42 ( 5.3)	280 ( 2.1)	9 ( 2.4)	274 ( 3.6)!
WYOMING	72 ( 3.0)	275 ( 1.1)	26 ( 3.1)	276 ( 1.7)	3 ( 0.9)	... ( ... )
<b>Other Jurisdictions</b>						
DDESS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
DoDDS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
GUAM	100 ( ... )	235 ( 1.2)	0 ( ... )	... ( ... )	0 ( ... )	... ( ... )

— State or other jurisdiction did not participate in the NAEP assessment year presented in this table.

... Characteristics of the sample do not permit a reliable estimate.

! Interpret with caution — the nature of the sample does not allow accurate determination of the variability of this statistic.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 5.11** (continued) **1996 Mathematics Assessment**



POPULATION: **1996 Grade 8 Public School Students**  
 REPORTED STATISTICS: **Percentage of Students and Average Mathematics Scale Score**  
 SCHOOLS' REPORTS ON: **Involving Parents as Aides in Classrooms**

Does your school use parents as aides in classrooms?	No		Yes, Occasionally		Yes, Routinely	
	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )
<b>JURISDICTIONS</b>						
<b>Nation</b>						
NATION	41 ( 5.0)	267 ( 2.2)	46 ( 4.9)	274 ( 2.4)	13 ( 3.6)	273 ( 5.1)!
NORTHEAST	61 (11.8)	272 ( 3.7)	34 (10.2)	287 ( 9.4)!	5 ( 3.1)	... ( ... )
SOUTHEAST	48 ( 9.8)	260 ( 5.2)!	38 ( 9.4)	270 ( 3.8)!	14 ( 6.9)	... ( ... )
CENTRAL	36 (12.0)	273 ( 5.7)!	47 (12.4)	278 ( 4.1)!	17 ( 8.5)	289 ( 5.4)!
WEST	27 ( 7.2)	265 ( 3.5)!	58 ( 8.1)	270 ( 3.1)	15 ( 7.5)	... ( ... )
<b>States</b>						
ALABAMA	46 ( 5.7)	258 ( 4.2)	50 ( 5.8)	257 ( 3.0)	5 ( 2.5)	... ( ... )
ALASKA†	9 ( 2.8)	259 ( 8.8)!	58 ( 3.2)	275 ( 2.6)	33 ( 2.6)	289 ( 3.2)
ARIZONA	25 ( 7.1)	267 ( 4.9)!	61 ( 6.7)	270 ( 1.7)	14 ( 3.4)	268 ( 4.0)!
ARKANSAS†	59 ( 7.2)	261 ( 2.4)	38 ( 7.4)	264 ( 2.8)	3 ( 2.0)	... ( ... )
CALIFORNIA	29 ( 5.2)	257 ( 4.5)	57 ( 6.0)	262 ( 2.9)	14 ( 3.7)	273 ( 5.0)!
COLORADO	14 ( 3.5)	265 ( 3.7)!	58 ( 4.7)	274 ( 1.7)	29 ( 4.3)	283 ( 2.1)
CONNECTICUT	46 ( 5.5)	284 ( 2.0)>	52 ( 5.6)	278 ( 3.3)	2 ( ... )	... ( ... )
DELAWARE	47 ( 0.5)	262 ( 1.5)	43 ( 0.5)<	269 ( 1.6)>	11 ( 0.5)>	... ( ... )
DISTRICT OF COLUMBIA	45 ( 0.8)>	243 ( 2.9)	38 ( 0.9)<	224 ( 2.5)	16 ( 1.0)<	215 ( 3.4)<
FLORIDA	22 ( 3.9)	260 ( 3.6)	62 ( 4.9)	263 ( 3.0)	16 ( 3.7)	274 ( 3.6)!
GEORGIA	47 ( 5.2)	257 ( 2.3)	45 ( 5.3)	264 ( 3.4)	8 ( 3.1)	278 ( 4.0)!
HAWAII	43 ( 0.5)>	259 ( 1.9)	54 ( 0.6)<	266 ( 1.0)>	3 ( 0.2)<	... ( ... )
INDIANA	49 ( 6.3)	273 ( 2.8)	41 ( 5.9)	278 ( 2.1)>	9 ( 3.2)	286 ( 3.0)!
IOWA†	38 ( 5.0)	282 ( 2.2)	55 ( 4.9)	284 ( 1.8)	7 ( 2.3)	288 ( 2.3)!
KENTUCKY	33 ( 5.0)	266 ( 2.9)	55 ( 5.5)	269 ( 1.4)>	12 ( 3.6)	263 ( 3.6)!
LOUISIANA	37 ( 5.2)	257 ( 2.5)	54 ( 5.8)	251 ( 2.7)	9 ( 3.2)	258 ( 4.2)!
MAINE	16 ( 2.8)<	279 ( 2.9)	72 ( 4.0)>	285 ( 1.6)>	12 ( 2.7)	283 ( 2.9)!
MARYLAND†	19 ( 4.6)	262 ( 5.6)!	69 ( 5.6)	272 ( 2.9)	12 ( 3.9)	272 ( 7.6)!
MASSACHUSETTS	57 ( 5.4)	273 ( 3.3)	38 ( 5.3)	285 ( 3.4)	5 ( 1.4)	... ( ... )
MICHIGAN†	34 ( 5.6)	273 ( 4.2)	59 ( 5.8)	279 ( 3.1)	7 ( 3.3)	270 (10.3)!
MINNESOTA	28 ( 5.2)	285 ( 2.9)!	58 ( 5.5)	286 ( 2.0)	15 ( 3.4)	282 ( 2.5)!
MISSISSIPPI	56 ( 4.7)	249 ( 2.0)	38 ( 4.5)	251 ( 2.6)	6 ( 2.0)	... ( ... )
MISSOURI	45 ( 5.5)	266 ( 2.6)	48 ( 5.5)	277 ( 2.1)	7 ( 2.8)	280 ( 6.3)!
MONTANA†	49 ( 4.0)	286 ( 2.1)	46 ( 4.3)	281 ( 2.0)	5 ( 2.3)	279 ( 2.7)!
NEBRASKA	50 ( 2.9)	283 ( 1.4)	47 ( 2.8)	283 ( 1.3)>	3 ( 1.1)	... ( ... )
NEW MEXICO	38 ( 3.5)	262 ( 2.3)	56 ( 3.4)	265 ( 1.8)	6 ( 1.2)	... ( ... )
NEW YORK†	70 ( 6.5)	270 ( 3.1)	22 ( 6.5)	270 ( 6.2)!	8 ( 3.5)	267 ( 6.0)!
NORTH CAROLINA	38 ( 4.7)	268 ( 2.6)	50 ( 5.0)	266 ( 2.2)>	12 ( 3.0)	271 ( 5.2)!
NORTH DAKOTA	62 ( 2.7)	285 ( 1.3)	32 ( 2.4)	282 ( 1.4)	6 ( 1.5)	281 ( 4.5)!
OREGON	11 ( 3.1)	266 ( 5.3)!	60 ( 5.2)	276 ( 2.0)	30 ( 5.2)	280 ( 2.7)
RHODE ISLAND	73 ( 0.5)<	269 ( 1.1)	23 ( 0.5)>	270 ( 1.7)	4 ( 0.2)>	... ( ... )
SOUTH CAROLINA†	36 ( 5.5)	257 ( 3.4)	53 ( 5.4)	263 ( 2.2)	11 ( 3.9)	261 ( 5.2)!
TENNESSEE	34 ( 5.8)	261 ( 3.0)	62 ( 5.9)>	265 ( 2.2)	4 ( 2.1)	... ( ... )
TEXAS	36 ( 5.9)	269 ( 4.1)	57 ( 6.3)	275 ( 2.1)>	7 ( 3.2)	274 ( 5.6)!
UTAH	31 ( 3.6)	276 ( 2.0)	57 ( 3.3)	275 ( 1.5)	12 ( 2.6)	284 ( 2.4)!
VERMONT†	33 ( 2.1)	280 ( 1.3)	57 ( 2.6)	277 ( 1.3)	10 ( 2.0)	281 ( 2.6)!
VIRGINIA	31 ( 4.5)	263 ( 4.2)	60 ( 4.6)	274 ( 1.7)	9 ( 3.1)	269 ( 5.5)!
WASHINGTON	9 ( 3.2)	265 ( 5.3)!	77 ( 4.4)	276 ( 1.7)	15 ( 4.1)	275 ( 3.6)!
WEST VIRGINIA	36 ( 4.7)	263 ( 1.8)	40 ( 5.0)	264 ( 2.1)	25 ( 5.0)	269 ( 2.0)!
WISCONSIN†	35 ( 5.3)	279 ( 2.5)	56 ( 5.9)	283 ( 2.4)	9 ( 3.5)	287 ( 2.7)!
WYOMING	29 ( 1.0)<	276 ( 1.9)	63 ( 0.8)>	275 ( 1.0)	8 ( 1.0)>	266 ( 2.8)
<b>Other Jurisdictions</b>						
DDESS	6 ( 0.4)	... ( ... )	73 ( 1.8)	266 ( 2.8)	21 ( 1.9)	269 ( 6.4)
DoDDS	17 ( 0.3)	276 ( 2.6)	61 ( 0.6)	274 ( 1.7)	22 ( 0.6)	276 ( 1.7)
GUAM	100 ( ... )	239 ( 1.7)	0 ( ... )	... ( ... )	0 ( ... )	... ( ... )

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).  
 ... Characteristics of the sample do not permit a reliable estimate.  
 > (<) The value for the students was significantly higher (lower) than in the 1992 assessment at about the 95% confidence level using appropriate multiple comparison procedures.  
 ! Interpret with caution — the nature of the sample does not allow accurate determination of the variability of this statistic.  
 SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.



**TABLE 5.12**

**1990 Mathematics Assessment**



POPULATION:

1990 Grade 8 Public School Students

REPORTED STATISTICS:

Percentage of Students and Average Mathematics Scale Score

SCHOOLS' REPORTS ON:

Student Absenteeism

To what degree is student absenteeism a problem in your school?	Not a Problem		Minor		Moderate to Serious	
	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )
<b>JURISDICTIONS</b>						
<b>Nation</b>						
NATION	10 ( 4.1)	277 ( 4.8)!	52 ( 6.2)	262 ( 2.1)	38 ( 5.5)	258 ( 2.6)
NORTHEAST	24 (11.9)	... ( ... )	62 (12.1)	... ( ... )	14 ( 6.8)	... ( ... )
SOUTHEAST	0 ( ... )	... ( ... )	61 (13.2)	254 ( 4.4)!	39 (13.2)	261 ( 5.3)!
CENTRAL	3 ( ... )	... ( ... )	45 (15.6)	... ( ... )	53 (13.4)	261 ( 5.4)!
WEST	12 ( ... )	... ( ... )	43 ( 9.9)	261 ( 2.5)!	45 ( 8.9)	256 ( 4.7)
<b>States</b>						
ALABAMA	9 ( 3.2)	261 ( 5.4)!	44 ( 5.3)	253 ( 2.3)	47 ( 5.3)	251 ( 1.4)
ALASKA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
ARIZONA	11 ( 2.5)	272 ( 1.8)!	40 ( 4.2)	264 ( 2.1)	48 ( 3.9)	254 ( 2.0)
ARKANSAS	9 ( 3.1)	264 ( 3.0)!	52 ( 4.1)	258 ( 1.5)	39 ( 4.4)	254 ( 1.5)
CALIFORNIA	11 ( 3.5)	269 ( 5.3)!	45 ( 5.2)	261 ( 2.1)	44 ( 5.7)	252 ( 2.3)
COLORADO	21 ( 3.7)	276 ( 2.1)	54 ( 4.7)	269 ( 1.6)	25 ( 4.3)	256 ( 2.2)
CONNECTICUT	34 ( 4.3)	277 ( 2.0)	47 ( 4.3)	274 ( 1.4)	19 ( 2.7)	245 ( 3.2)
DELAWARE	13 ( 0.1)	271 ( 1.5)	46 ( 0.2)	264 ( 1.5)	41 ( 0.2)	255 ( 1.3)
DISTRICT OF COLUMBIA	13 ( 0.2)	239 ( 1.4)	40 ( 0.3)	241 ( 1.8)	47 ( 0.2)	223 ( 1.1)
FLORIDA	8 ( 3.0)	270 ( 5.7)!	42 ( 5.3)	258 ( 2.3)	50 ( 5.1)	250 ( 2.1)
GEORGIA	9 ( 3.5)	277 ( 5.5)!	58 ( 5.4)	258 ( 1.9)	33 ( 4.8)	255 ( 2.7)
HAWAII	19 ( 0.3)	259 ( 1.7)	45 ( 0.3)	251 ( 1.2)	37 ( 0.3)	249 ( 1.3)
INDIANA	13 ( 3.8)	275 ( 3.4)!	46 ( 5.0)	272 ( 1.7)	42 ( 4.9)	261 ( 2.0)
IOWA	23 ( 4.2)	279 ( 1.7)	54 ( 5.2)	279 ( 1.7)	23 ( 4.7)	274 ( 2.9)!
KENTUCKY	10 ( 2.7)	269 ( 3.0)!	43 ( 5.3)	258 ( 1.4)	46 ( 5.1)	253 ( 1.7)
LOUISIANA	9 ( 2.6)	261 ( 4.5)!	42 ( 5.1)	247 ( 2.6)	49 ( 5.2)	244 ( 1.7)
MAINE	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
MARYLAND	22 ( 4.3)	272 ( 4.2)	41 ( 5.0)	266 ( 2.4)	37 ( 4.5)	250 ( 2.5)
MASSACHUSETTS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
MICHIGAN	23 ( 4.2)	276 ( 2.4)	46 ( 4.6)	270 ( 1.5)	32 ( 4.1)	248 ( 2.5)
MINNESOTA	25 ( 4.5)	278 ( 1.8)!	59 ( 5.2)	277 ( 1.2)	16 ( 3.9)	266 ( 2.9)!
MISSISSIPPI	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
MISSOURI	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
MONTANA	20 ( 2.9)	282 ( 1.2)	55 ( 2.9)	282 ( 1.2)	25 ( 1.9)	277 ( 2.3)
NEBRASKA	24 ( 2.4)	283 ( 1.6)	54 ( 3.3)	277 ( 1.3)	22 ( 2.7)	263 ( 2.5)
NEW MEXICO	11 ( 0.8)	263 ( 2.5)	42 ( 1.0)	258 ( 1.2)	47 ( 1.1)	254 ( 1.1)
NEW YORK	31 ( 5.1)	274 ( 2.0)	38 ( 5.1)	266 ( 2.6)	31 ( 3.9)	243 ( 3.1)
NORTH CAROLINA	4 ( 2.1)	... ( ... )	38 ( 4.2)	252 ( 2.1)	58 ( 4.6)	248 ( 1.3)
NORTH DAKOTA	42 ( 3.2)	281 ( 2.1)	48 ( 3.2)	283 ( 1.0)	11 ( 2.8)	272 ( 5.9)!
OREGON	14 ( 3.8)	273 ( 2.8)!	57 ( 4.8)	274 ( 1.1)	29 ( 4.3)	267 ( 2.5)
RHODE ISLAND	24 ( 1.4)	270 ( 1.5)	65 ( 1.2)	258 ( 0.7)	11 ( 0.3)	250 ( 1.9)
SOUTH CAROLINA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
TENNESSEE	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
TEXAS	6 ( 2.2)	254 ( 7.4)!	57 ( 4.7)	261 ( 1.9)	37 ( 4.6)	254 ( 2.5)
UTAH	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
VERMONT	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
VIRGINIA	22 ( 4.2)	275 ( 3.7)	47 ( 5.5)	267 ( 3.0)	30 ( 4.4)	253 ( 2.4)
WASHINGTON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
WEST VIRGINIA	10 ( 3.1)	254 ( 2.3)!	52 ( 4.9)	259 ( 1.6)	38 ( 4.7)	253 ( 1.4)
WISCONSIN	25 ( 4.5)	277 ( 2.6)	54 ( 5.2)	276 ( 1.4)	21 ( 3.9)	268 ( 4.1)
WYOMING	26 ( 0.5)	272 ( 1.0)	54 ( 0.8)	272 ( 0.9)	20 ( 1.1)	274 ( 2.0)
<b>Other Jurisdictions</b>						
DDESS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
DoDDS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
GUAM	0 ( ... )	... ( ... )	32 ( 0.2)	236 ( 1.4)	68 ( 0.2)	230 ( 0.9)

— State or other jurisdiction did not participate in the NAEP assessment year presented in this table.

... Characteristics of the sample do not permit a reliable estimate.

! Interpret with caution — the nature of the sample does not allow accurate determination of the variability of this statistic.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 5.12** (continued) **1992 Mathematics Assessment**



POPULATION: **1992 Grade 8 Public School Students**  
 REPORTED STATISTICS: **Percentage of Students and Average Mathematics Scale Score**  
 SCHOOLS' REPORTS ON: **Student Absenteeism**

To what degree is student absenteeism a problem in your school?

	Not a Problem		Minor		Moderate to Serious	
JURISDICTIONS	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )
<b>Nation</b>						
NATION	19 ( 3.1)	274 ( 3.2)	52 ( 3.9)	270 ( 1.5)»	29 ( 3.9)	258 ( 2.1)
NORTHEAST	32 ( 8.9)	273 ( 6.8)!	44 ( 8.3)	270 ( 4.2)	24 ( 6.4)	254 ( 7.0)!
SOUTHEAST	13 ( 4.9)	265 ( 5.7)!	57 ( 7.0)	260 ( 2.8)	30 ( 7.5)	256 ( 3.1)!
CENTRAL	18 ( 6.8)	279 ( 3.5)!	53 ( 7.6)	278 ( 2.4)	28 ( 6.2)	264 ( 4.4)!
WEST	17 ( 4.8)	278 ( 5.8)!	51 ( 7.7)	273 ( 2.3)	32 ( 9.4)	257 ( 3.9)!
<b>States</b>						
ALABAMA	9 ( 3.0)	245 (12.4)!	55 ( 6.0)	255 ( 2.1)	36 ( 5.6)	250 ( 2.5)
ALASKA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
ARIZONA	17 ( 4.8)	272 ( 3.9)!	44 ( 4.4)	268 ( 1.9)	38 ( 5.0)	259 ( 2.2)
ARKANSAS	5 ( 2.3)	263 ( 6.2)!	55 ( 5.7)	257 ( 1.6)	40 ( 5.2)	255 ( 1.8)
CALIFORNIA	21 ( 4.1)	277 ( 3.6)!	45 ( 5.0)	263 ( 2.5)	34 ( 4.5)	250 ( 3.1)
COLORADO	12 ( 3.3)	281 ( 3.6)!	64 ( 4.9)	274 ( 1.4)	24 ( 4.1)	262 ( 2.1)
CONNECTICUT	31 ( 4.6)	285 ( 1.9)	52 ( 5.2)	275 ( 2.4)	17 ( 3.2)	252 ( 4.9)
DELAWARE	20 ( 0.1)»	268 ( 1.9)	58 ( 0.2)»	261 ( 1.3)	22 ( 0.2)«	263 ( 2.4)
DISTRICT OF COLUMBIA	9 ( 0.3)«	246 ( 1.9)	44 ( 0.5)»	236 ( 1.5)	47 ( 0.4)	225 ( 1.2)
FLORIDA	11 ( 3.4)	269 ( 3.6)!	54 ( 4.9)	263 ( 1.9)	36 ( 4.7)	253 ( 3.2)
GEORGIA	9 ( 3.2)	261 ( 5.8)!	55 ( 5.3)	262 ( 2.0)	36 ( 5.3)	255 ( 1.9)
HAWAII	24 ( 0.2)»	267 ( 1.5)»	42 ( 0.3)«	259 ( 1.5)»	34 ( 0.3)«	249 ( 1.5)
INDIANA	19 ( 4.0)	281 ( 2.4)!	60 ( 5.5)	270 ( 1.6)	21 ( 5.1)«	262 ( 3.1)!
IOWA	16 ( 3.2)	289 ( 2.4)!	67 ( 3.5)	284 ( 1.1)	17 ( 3.1)	277 ( 3.0)
KENTUCKY	13 ( 3.3)	274 ( 3.4)!	47 ( 5.5)	263 ( 1.6)	39 ( 5.8)	258 ( 1.5)
LOUISIANA	13 ( 3.1)	262 ( 7.8)!	51 ( 4.6)	252 ( 2.2)	36 ( 5.0)	243 ( 2.4)
MAINE	28 ( 3.7)	284 ( 2.3)	66 ( 4.3)	278 ( 1.0)	6 ( 2.8)	267 ( 4.8)!
MARYLAND	13 ( 2.9)	278 ( 3.3)!	55 ( 5.1)	269 ( 2.2)	31 ( 4.7)	252 ( 3.2)
MASSACHUSETTS	38 ( 4.6)	282 ( 1.8)	45 ( 5.1)	271 ( 2.4)	18 ( 4.5)	260 ( 5.4)!
MICHIGAN	19 ( 3.9)	281 ( 5.2)!	44 ( 4.9)	269 ( 2.3)	37 ( 4.4)	259 ( 2.7)»
MINNESOTA	24 ( 4.2)	281 ( 2.0)	69 ( 4.1)	283 ( 1.2)»	7 ( 2.1)	273 ( 3.6)!
MISSISSIPPI	7 ( 2.8)	262 ( 4.5)!	54 ( 5.5)	247 ( 2.1)	39 ( 5.2)	244 ( 1.8)
MISSOURI	13 ( 3.4)	272 ( 1.6)!	54 ( 4.5)	274 ( 1.4)	33 ( 4.2)	267 ( 2.7)
MONTANA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
NEBRASKA	27 ( 4.9)	280 ( 1.7)	53 ( 5.7)	281 ( 1.5)	20 ( 3.4)	269 ( 2.2)
NEW MEXICO	9 ( 3.2)	260 ( 4.1)!	46 ( 4.2)	262 ( 1.3)	45 ( 4.6)	257 ( 1.5)
NEW YORK	30 ( 4.6)	275 ( 5.4)	49 ( 5.0)	272 ( 2.6)	21 ( 4.4)	242 ( 5.8)!
NORTH CAROLINA	16 ( 3.9)»	261 ( 4.2)!	48 ( 5.5)	258 ( 1.9)	36 ( 4.7)«	258 ( 2.1)»
NORTH DAKOTA	29 ( 4.0)	286 ( 2.1)	60 ( 4.4)	282 ( 1.2)	11 ( 2.7)	282 ( 1.9)!
OREGON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
RHODE ISLAND	22 ( 0.2)	272 ( 1.5)	50 ( 0.2)«	271 ( 1.2)»	28 ( 0.2)»	253 ( 1.2)
SOUTH CAROLINA	12 ( 3.2)	266 ( 4.5)!	46 ( 5.0)	264 ( 1.7)	42 ( 5.1)	257 ( 1.7)
TENNESSEE	12 ( 3.9)	264 ( 7.9)!	58 ( 5.6)	260 ( 1.6)	31 ( 4.8)	254 ( 2.1)
TEXAS	14 ( 3.6)	277 ( 3.7)!	59 ( 5.3)	265 ( 2.1)	27 ( 4.5)	257 ( 2.6)
UTAH	12 ( 2.7)	277 ( 2.0)!	60 ( 4.4)	277 ( 0.9)	28 ( 3.9)	269 ( 1.3)
VERMONT	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
VIRGINIA	12 ( 2.9)	280 ( 4.6)!	64 ( 4.5)	270 ( 1.6)	24 ( 3.7)	257 ( 2.2)
WASHINGTON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
WEST VIRGINIA	8 ( 2.7)	263 ( 3.8)!	70 ( 4.6)»	260 ( 1.2)	22 ( 4.3)	255 ( 1.5)
WISCONSIN	26 ( 5.2)	284 ( 3.4)!	56 ( 5.3)	281 ( 1.3)	19 ( 3.1)	259 ( 3.5)
WYOMING	25 ( 2.9)	279 ( 1.7)»	69 ( 3.2)»	274 ( 1.0)	7 ( 2.1)«	268 ( 4.7)!
<b>Other Jurisdictions</b>						
DDESS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
DoDDS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
GUAM	0 ( ... )	... ( ... )	66 ( 0.2)»	235 ( 1.2)	34 ( 0.2)«	235 ( 2.7)

— State or other jurisdiction did not participate in the NAEP assessment year presented in this table.

... Characteristics of the sample do not permit a reliable estimate.

» («) The value for the students was significantly higher (lower) than in the 1990 assessment at about the 95% confidence level using appropriate multiple comparison procedures.

! Interpret with caution — the nature of the sample does not allow accurate determination of the variability of this statistic.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 5.12** (continued) **1996 Mathematics Assessment**



POPULATION: **1996 Grade 8 Public School Students**  
 REPORTED STATISTICS: **Percentage of Students and Average Mathematics Scale Score**  
 SCHOOLS' REPORTS ON: **Student Absenteeism**

To what degree is student absenteeism a problem in your school?

Not a Problem	Minor	Moderate to Serious
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JURISDICTIONS	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )
<b>Nation</b>						
NATION	22 ( 3.7)	282 ( 3.6)	54 ( 4.4)	272 ( 1.6)»	25 ( 3.1)	262 ( 2.4)
NORTHEAST	42 (12.6)	283 ( 7.6)!	50 (14.1)	274 ( 4.3)!	8 ( 4.4)	... ( ... )
SOUTHEAST	13 ( 4.7)	275 ( 8.2)!	43 ( 7.4)	268 ( 4.8)	44 ( 7.2)	260 ( 4.0)!
CENTRAL	26 ( 5.8)	282 ( 5.1)!	60 ( 8.4)	278 ( 4.0)	14 ( 6.8)	265 ( 3.0)!
WEST	12 ( 6.4)	287 ( 8.3)!	59 ( 7.2)	268 ( 2.5)	28 ( 7.4)	264 ( 4.6)!
<b>States</b>						
ALABAMA	21 ( 4.3)	261 ( 4.5)!	52 ( 5.3)	257 ( 3.9)	27 ( 4.0)«	255 ( 3.6)
ALASKA†	24 ( 2.0)	281 ( 3.4)	56 ( 2.8)	283 ( 2.9)	20 ( 3.3)	264 ( 4.6)
ARIZONA	11 ( 3.8)	282 ( 2.2)!	50 ( 6.0)	273 ( 1.9)»	39 ( 5.1)	260 ( 2.2)
ARKANSAS†	14 ( 3.8)	272 ( 4.5)!	53 ( 7.5)	262 ( 1.9)	34 ( 6.8)	260 ( 3.6)!
CALIFORNIA	24 ( 4.3)	276 ( 4.1)	49 ( 5.5)	262 ( 2.8)	27 ( 4.6)	251 ( 3.4)
COLORADO	26 ( 4.1)	280 ( 2.9)	54 ( 4.3)	277 ( 1.5)»	20 ( 3.4)	264 ( 3.9)
CONNECTICUT	27 ( 4.9)	291 ( 2.7)»	57 ( 5.3)	277 ( 2.1)	16 ( 3.2)	272 ( 3.9)»»
DELAWARE	34 ( 0.5)»»	268 ( 1.7)	39 ( 0.5)««	267 ( 1.5)»	27 ( 0.5)«>	265 ( 1.7)»
DISTRICT OF COLUMBIA	24 ( 0.6)»»	260 ( 3.2)»»	55 ( 0.8)»»	227 ( 1.9)«<	21 ( 0.8)«<	213 ( 3.9)«<
FLORIDA	28 ( 5.3)»»	268 ( 6.2)!	33 ( 5.1)«<	269 ( 2.1)»	39 ( 5.4)	255 ( 2.4)
GEORGIA	14 ( 4.1)	268 ( 7.7)!	48 ( 5.9)	267 ( 3.0)»	39 ( 5.5)	255 ( 2.7)
HAWAII	7 ( 0.2)«<	... ( ... )	55 ( 0.5)»»	266 ( 1.1)»»	39 ( 0.5)»»	256 ( 1.9)»»
INDIANA	41 ( 6.2)»»	280 ( 2.3)	44 ( 5.8)	274 ( 2.3)	15 ( 3.9)«	268 ( 4.0)!
IOWA†	24 ( 5.0)	289 ( 2.5)!	59 ( 6.0)	283 ( 1.5)	17 ( 4.2)	279 ( 3.4)!
KENTUCKY	23 ( 4.2)	277 ( 2.4)	44 ( 4.8)	267 ( 1.7)»	33 ( 4.9)	262 ( 1.9)»
LOUISIANA	19 ( 4.0)	254 ( 4.8)!	48 ( 4.7)	260 ( 1.9)»»	32 ( 4.7)	242 ( 3.0)
MAINE	29 ( 3.6)	286 ( 2.6)	54 ( 4.3)	283 ( 1.7)	17 ( 3.3)	284 ( 2.7)
MARYLAND†	16 ( 5.2)	291 ( 6.6)!	47 ( 5.6)	274 ( 2.4)»	37 ( 5.0)	256 ( 3.6)
MASSACHUSETTS	28 ( 5.0)	284 ( 3.3)	63 ( 5.3)	279 ( 2.8)	9 ( 2.6)	255 ( 4.2)!
MICHIGAN†	32 ( 5.3)	288 ( 2.9)»	38 ( 5.6)	282 ( 3.0)»»	30 ( 5.0)	257 ( 3.6)
MINNESOTA	31 ( 5.4)	285 ( 2.5)	52 ( 5.7)	286 ( 2.0)»	17 ( 4.4)	281 ( 3.3)!
MISSISSIPPI	7 ( 2.7)	260 ( 6.5)!	53 ( 4.8)	251 ( 1.9)	40 ( 4.7)	247 ( 2.1)
MISSOURI	21 ( 4.5)	277 ( 3.2)!	50 ( 5.1)	278 ( 2.0)	29 ( 4.8)	261 ( 3.0)
MONTANA†	20 ( 2.3)	289 ( 3.0)	53 ( 3.4)	285 ( 1.5)	27 ( 3.2)	276 ( 3.0)
NEBRASKA	31 ( 3.0)	289 ( 1.7)»»	53 ( 3.4)	280 ( 1.1)	16 ( 2.4)	278 ( 2.2)»»
NEW MEXICO	11 ( 3.2)	275 ( 2.9)!	38 ( 3.2)	266 ( 2.1)»	51 ( 2.7)	260 ( 1.8)»
NEW YORK†	34 ( 5.7)	279 ( 3.5)	52 ( 5.5)	269 ( 3.2)	14 ( 4.2)«	250 (10.0)!
NORTH CAROLINA	13 ( 3.3)	276 ( 3.8)!	50 ( 4.5)	269 ( 2.1)»»	37 ( 5.0)«	264 ( 2.9)»
NORTH DAKOTA	39 ( 2.2)	285 ( 1.4)	57 ( 2.2)	284 ( 1.4)	4 ( 1.1)	278 ( 5.1)!
OREGON	16 ( 4.1)	286 ( 4.2)!	42 ( 5.1)	281 ( 2.1)»	41 ( 5.5)	268 ( 2.2)
RHODE ISLAND	47 ( 0.4)»»	271 ( 1.5)	46 ( 0.5)«<	266 ( 1.3)«<	7 ( 0.3)«<	... ( ... )
SOUTH CAROLINA†	22 ( 5.2)	266 ( 3.7)!	39 ( 5.8)	266 ( 2.1)	39 ( 6.0)	254 ( 3.0)
TENNESSEE	16 ( 4.2)	275 ( 4.6)!	43 ( 5.7)	263 ( 3.0)	41 ( 5.0)	259 ( 2.6)
TEXAS	24 ( 4.4)»	285 ( 3.5)!	47 ( 6.1)	272 ( 2.5)»	29 ( 5.4)	260 ( 3.2)
UTAH	10 ( 2.0)	278 ( 3.1)!	68 ( 3.4)	278 ( 1.1)	22 ( 2.9)	272 ( 2.8)
VERMONT†	38 ( 2.5)	281 ( 1.2)	51 ( 2.2)	278 ( 1.4)	11 ( 1.8)	275 ( 3.5)
VIRGINIA	29 ( 4.6)»	277 ( 3.6)	46 ( 4.9)«	272 ( 2.6)	25 ( 4.3)	258 ( 2.7)
WASHINGTON	15 ( 4.2)	283 ( 2.8)!	52 ( 5.9)	277 ( 2.2)	33 ( 5.1)	268 ( 2.6)
WEST VIRGINIA	20 ( 3.9)	264 ( 2.3)	52 ( 5.0)	266 ( 1.4)»»	28 ( 4.2)	262 ( 2.5)»
WISCONSIN†	33 ( 4.4)	289 ( 2.4)»	50 ( 5.4)	284 ( 1.7)»	18 ( 4.0)	268 ( 6.3)!
WYOMING	12 ( 0.7)«<	283 ( 2.2)»	67 ( 0.9)»	273 ( 0.9)	21 ( 0.5)»	275 ( 2.3)
<b>Other Jurisdictions</b>						
DDESS	21 ( 1.8)	278 ( 7.7)	79 ( 1.8)	267 ( 2.4)	0 ( ... )	... ( ... )
DoDDS	55 ( 0.7)	272 ( 1.2)	36 ( 0.7)	280 ( 1.6)	9 ( 0.2)	271 ( 2.9)
GUAM	0 ( ... )	... ( ... )	34 ( 0.8)«	230 ( 2.9)	66 ( 0.8)»	239 ( 2.6)»

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).  
 ... Characteristics of the sample do not permit a reliable estimate.  
 » («) The value for the students was significantly higher (lower) than in the 1990 assessment at about the 95% confidence level using appropriate multiple comparison procedures.  
 > (<) The value for the students was significantly higher (lower) than in the 1992 assessment at about the 95% confidence level using appropriate multiple comparison procedures.  
 ! Interpret with caution — the nature of the sample does not allow accurate determination of the variability of this statistic.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.



## Chapter 6

# *Classroom Practices Related to Mathematics Instruction*

### *Overview*

NAEP collected information about instructional approaches and strategies used in the classroom by surveying students and their teachers about specific activities employed. For several tables, student- and teacher-reported results are presented for similar questions, including calculator and computer use. Some discrepancies may exist between student- and teacher-reported percentages. No attempt is made to offer conclusive reasons for these discrepancies.

Chapter 6 also contains data pertaining to teachers' knowledge of and participation in activities associated with the National Council of Teachers of Mathematics (NCTM) Curriculum and Evaluation Standards for School Mathematics. The NCTM Standards outline curriculum and evaluation recommendations for kindergarten through grade 12 mathematics instruction.

As with all NAEP results, the unit of analysis is the student. Therefore, student and teacher background question results are reported in terms of the students whose teachers report particular instructional practices.

**TABLE 6.1**

**1996 Mathematics Assessment**



POPULATION:

1996 Grade 4 Public School Students

REPORTED STATISTICS:

Percentage of Students and Average Mathematics Scale Score

TEACHERS' REPORTS ON:

Knowledge of the NCTM Standards

*How knowledgeable are you about the National Council of Teachers of Mathematics (NCTM) Curriculum and Evaluation Standards for School Mathematics?*

I Have Little or No Knowledge	Somewhat Knowledgeable	Knowledgeable	Very Knowledgeable
-------------------------------	------------------------	---------------	--------------------

JURISDICTIONS	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )
<b>Nation</b>								
NATION	45 ( 2.4)	222 ( 1.7)	32 ( 2.4)	222 ( 1.6)	18 ( 2.0)	222 ( 2.0)	6 ( 1.2)	235 ( 4.8)!
NORTHEAST	48 ( 4.6)	226 ( 3.2)	28 ( 4.8)	219 ( 4.0)!	15 ( 3.6)	229 ( 3.1)!	9 ( 3.2)	249 (10.1)!
SOUTHEAST	34 ( 4.9)	214 ( 2.8)	45 ( 4.5)	220 ( 4.0)	18 ( 3.3)	215 ( 4.3)!	3 ( 1.5)	... ( ... )
CENTRAL	40 ( 6.7)	231 ( 2.2)	31 ( 6.5)	233 ( 2.9)	23 ( 5.3)	225 ( 4.7)!	5 ( 1.7)	... ( ... )
WEST	53 ( 3.0)	219 ( 3.1)	26 ( 3.1)	218 ( 1.6)	14 ( 3.4)	220 ( 3.0)!	6 ( 2.5)	226 ( 5.2)!
<b>States</b>								
ALABAMA	49 ( 3.5)	211 ( 1.9)	34 ( 3.1)	212 ( 1.9)	14 ( 2.7)	210 ( 3.6)!	3 ( 1.6)	224 ( 6.5)!
ALASKA†	34 ( 2.8)	224 ( 2.1)	42 ( 3.4)	219 ( 2.6)	18 ( 2.3)	231 ( 2.7)	6 ( 1.3)	238 ( 2.4)!
ARIZONA	44 ( 3.2)	219 ( 2.3)	33 ( 3.2)	217 ( 2.2)	19 ( 3.1)	216 ( 5.8)	5 ( 1.2)	234 ( 6.3)!
ARKANSAS†	41 ( 4.1)	218 ( 2.0)	43 ( 4.7)	213 ( 2.1)	14 ( 3.0)	218 ( 4.1)!	3 ( 1.3)	232 ( 4.8)!
CALIFORNIA	46 ( 3.6)	205 ( 2.6)	38 ( 3.8)	212 ( 2.8)	9 ( 1.9)	208 ( 5.0)!	7 ( 1.9)	227 ( 6.6)!
COLORADO	27 ( 3.1)	224 ( 2.5)	40 ( 3.2)	227 ( 1.8)	23 ( 2.8)	226 ( 3.1)	10 ( 1.7)	226 ( 3.8)
CONNECTICUT	38 ( 3.1)	229 ( 2.0)	34 ( 2.6)	231 ( 1.9)	19 ( 2.6)	236 ( 2.6)	9 ( 1.7)	242 ( 4.7)!
DELAWARE	22 ( 1.0)	213 ( 1.8)	41 ( 1.2)	218 ( 1.4)	28 ( 1.0)	214 ( 1.2)	9 ( 0.7)	212 ( 4.2)
DISTRICT OF COLUMBIA	39 ( 0.8)	184 ( 1.2)	31 ( 0.9)	188 ( 2.2)	21 ( 0.8)	192 ( 2.3)	9 ( 0.5)	186 ( 2.7)
FLORIDA	49 ( 3.1)	215 ( 1.6)	32 ( 2.2)	217 ( 1.8)	14 ( 2.0)	216 ( 2.6)	5 ( 1.4)	224 ( 5.3)!
GEORGIA	40 ( 3.3)	214 ( 1.8)	34 ( 3.2)	215 ( 2.4)	17 ( 2.0)	221 ( 3.9)	8 ( 1.8)	217 ( 4.8)!
HAWAII	34 ( 2.4)	209 ( 1.8)	47 ( 3.0)	216 ( 2.6)	16 ( 2.1)	227 ( 3.0)	3 ( 1.1)	226 ( 7.4)!
INDIANA	61 ( 4.0)	228 ( 1.2)	25 ( 3.9)	227 ( 1.9)	12 ( 2.5)	239 ( 4.2)!	2 ( 0.8)	... ( ... )
IOWA†	30 ( 3.2)	225 ( 1.8)	44 ( 3.5)	229 ( 1.6)	22 ( 3.5)	235 ( 2.3)	4 ( 1.3)	235 ( 3.1)!
KENTUCKY	26 ( 3.7)	224 ( 2.1)	46 ( 3.5)	218 ( 1.9)	22 ( 3.2)	219 ( 2.4)	6 ( 1.7)	220 ( 4.3)!
LOUISIANA	43 ( 3.2)	210 ( 1.6)	34 ( 2.6)	209 ( 1.9)	14 ( 2.4)	208 ( 3.9)	9 ( 2.2)	207 ( 3.5)!
MAINE	22 ( 3.6)	232 ( 2.6)	35 ( 3.5)	230 ( 1.7)	31 ( 3.7)	236 ( 1.5)	12 ( 2.3)	232 ( 3.1)!
MARYLAND	31 ( 3.1)	215 ( 2.2)	32 ( 3.3)	220 ( 3.0)	29 ( 2.8)	224 ( 3.0)	8 ( 1.7)	247 ( 5.3)!
MASSACHUSETTS	28 ( 3.5)	221 ( 2.1)	36 ( 2.8)	230 ( 1.8)	24 ( 3.0)	235 ( 2.2)	12 ( 2.4)	237 ( 2.7)!
MICHIGAN†	45 ( 4.0)	228 ( 2.1)	32 ( 3.6)	221 ( 2.6)	17 ( 2.5)	232 ( 3.9)	6 ( 1.8)	222 ( 7.5)!
MINNESOTA	41 ( 3.1)	232 ( 1.5)	37 ( 2.4)	232 ( 1.9)	15 ( 2.6)	234 ( 2.8)	7 ( 1.8)	236 ( 4.5)!
MISSISSIPPI	29 ( 3.8)	206 ( 2.3)	39 ( 3.5)	207 ( 1.9)	25 ( 3.3)	213 ( 3.0)	7 ( 1.6)	210 ( 4.5)!
MISSOURI	48 ( 4.2)	225 ( 1.5)	34 ( 3.5)	224 ( 1.8)	13 ( 2.2)	224 ( 3.4)	5 ( 1.5)	234 ( 4.2)!
MONTANA†	29 ( 3.7)	226 ( 2.2)	43 ( 3.3)	229 ( 1.6)	25 ( 3.5)	229 ( 3.1)	4 ( 1.3)	233 ( 2.9)!
NEBRASKA	38 ( 4.1)	225 ( 2.3)	34 ( 3.5)	230 ( 1.6)	21 ( 3.7)	228 ( 3.1)!	7 ( 1.9)	225 ( 5.6)!
NEVADA†	35 ( 2.9)	214 ( 2.3)	42 ( 3.2)	219 ( 1.6)	16 ( 1.9)	220 ( 2.4)	6 ( 1.3)	226 ( 3.8)!
NEW JERSEY†	42 ( 3.7)	225 ( 1.9)	38 ( 3.8)	227 ( 2.8)	14 ( 2.4)	237 ( 2.8)	5 ( 1.9)	232 ( 4.9)!
NEW MEXICO	44 ( 3.3)	212 ( 2.0)	31 ( 2.8)	215 ( 2.9)	20 ( 3.0)	217 ( 3.6)	5 ( 1.3)	226 ( 5.1)!
NEW YORK†	53 ( 3.1)	222 ( 1.7)	31 ( 2.7)	222 ( 2.9)	12 ( 1.9)	233 ( 2.1)	4 ( 0.8)	221 ( 4.4)!
NORTH CAROLINA	39 ( 3.3)	223 ( 1.9)	34 ( 3.3)	223 ( 2.0)	21 ( 2.7)	228 ( 2.1)	6 ( 1.8)	224 ( 4.9)!
NORTH DAKOTA	30 ( 3.1)	228 ( 2.7)	41 ( 3.4)	234 ( 1.4)	22 ( 2.9)	230 ( 1.7)	6 ( 2.4)	234 ( 3.7)!
OREGON	35 ( 3.3)	220 ( 2.1)	42 ( 3.3)	226 ( 1.7)	17 ( 2.6)	223 ( 3.1)	6 ( 1.3)	234 ( 3.2)!
PENNSYLVANIA†	49 ( 3.9)	227 ( 1.8)	30 ( 2.5)	224 ( 1.6)	16 ( 2.7)	230 ( 3.5)	4 ( 1.5)	222 ( 8.9)!
RHODE ISLAND	24 ( 2.8)	217 ( 2.7)	41 ( 2.7)	221 ( 1.8)	25 ( 2.5)	222 ( 2.9)	10 ( 1.9)	223 ( 3.5)
SOUTH CAROLINA†	34 ( 3.8)	208 ( 2.0)	40 ( 3.5)	212 ( 1.8)	21 ( 2.7)	221 ( 1.7)	6 ( 1.6)	226 ( 6.6)!
TENNESSEE	48 ( 3.4)	219 ( 1.7)	35 ( 3.0)	219 ( 2.2)	14 ( 2.2)	224 ( 3.9)	3 ( 1.1)	216 ( 6.1)!
TEXAS	58 ( 3.4)	226 ( 1.9)	26 ( 3.1)	228 ( 2.7)	12 ( 2.5)	237 ( 4.7)!	4 ( 1.6)	237 ( 5.1)!
UTAH	34 ( 3.1)	225 ( 1.9)	33 ( 3.1)	228 ( 1.7)	24 ( 3.0)	226 ( 2.4)	9 ( 2.1)	232 ( 2.9)!
VERMONT†	14 ( 2.4)	223 ( 3.2)	34 ( 2.9)	227 ( 2.0)	42 ( 3.2)	224 ( 1.8)	10 ( 1.9)	221 ( 3.9)!
VIRGINIA	32 ( 3.0)	217 ( 2.1)	39 ( 2.9)	224 ( 1.6)	22 ( 3.0)	225 ( 3.1)	6 ( 1.5)	236 ( 4.7)!
WASHINGTON	43 ( 3.8)	223 ( 1.4)	34 ( 2.7)	225 ( 1.8)	19 ( 2.5)	227 ( 2.6)	4 ( 1.1)	235 ( 4.0)!
WEST VIRGINIA	48 ( 3.7)	222 ( 1.4)	34 ( 3.4)	225 ( 1.8)	16 ( 2.7)	224 ( 3.0)	2 ( 0.8)	... ( ... )
WISCONSIN	39 ( 4.2)	228 ( 1.4)	40 ( 4.0)	233 ( 2.0)	16 ( 3.0)	233 ( 3.5)	5 ( 1.0)	240 ( 4.6)!
WYOMING	42 ( 3.7)	221 ( 1.9)	34 ( 3.5)	222 ( 1.8)	15 ( 2.2)	229 ( 2.7)	9 ( 1.5)	225 ( 4.0)
<b>Other Jurisdictions</b>								
DDESS	31 ( 0.8)	225 ( 1.4)	36 ( 1.1)	220 ( 1.5)	27 ( 0.8)	229 ( 1.8)	6 ( 0.4)	225 ( 2.8)
DoDDS	24 ( 1.8)	221 ( 1.4)	34 ( 1.7)	224 ( 1.2)	29 ( 2.2)	223 ( 1.9)	13 ( 1.8)	225 ( 2.4)
GUAM	63 ( 1.2)	185 ( 1.8)	25 ( 1.3)	192 ( 2.4)	11 ( 0.8)	198 ( 2.9)	1 ( 0.2)	... ( ... )

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).

... Characteristics of the sample do not permit a reliable estimate.

! Interpret with caution — the nature of the sample does not allow accurate determination of the variability of this statistic.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 6.2**

**1996 Mathematics Assessment**



POPULATION:  
REPORTED STATISTICS:  
TEACHERS' REPORTS ON:

1996 Grade 4 Public School Students  
Percentage of Students and Average Mathematics Scale Score  
Professional Development for Implementing the NCTM Standards

Have you participated in any activities to provide you with strategies for implementing the 1989 NCTM Curriculum and Evaluation Standards for School Mathematics?	Local Workshop		Regional or National NCTM Meeting		Other		No	
	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )
<b>JURISDICTIONS</b>								
<b>Nation</b>								
NATION	29 ( 2.5)	223 ( 1.9)	9 ( 1.4)	229 ( 3.1)	12 ( 1.7)	230 ( 3.3)	60 ( 2.8)	222 ( 1.3)
NORTHEAST	23 ( 5.4)	228 ( 6.4)!	8 ( 2.1)	... ( ... )	20 ( 4.4)	236 ( 7.3)!	61 ( 5.1)	225 ( 2.0)
SOUTHEAST	31 ( 5.4)	219 ( 5.6)	5 ( 2.1)	222 ( 5.4)!	7 ( 3.2)	208 ( 7.0)!	60 ( 6.2)	215 ( 2.4)
CENTRAL	38 ( 6.6)	228 ( 3.6)	10 ( 2.4)	225 ( 5.4)!	13 ( 3.6)	238 ( 3.3)!	52 ( 5.8)	232 ( 2.1)
WEST	24 ( 3.2)	219 ( 2.0)	10 ( 3.3)	225 ( 3.0)!	8 ( 2.9)	225 ( 3.7)!	65 ( 5.2)	217 ( 2.5)
<b>States</b>								
ALABAMA	25 ( 3.2)	215 ( 2.7)	5 ( 1.4)	217 ( 5.9)!	7 ( 1.7)	215 ( 4.8)!	69 ( 3.2)	210 ( 1.7)
ALASKA†	34 ( 3.1)	227 ( 3.2)	4 ( 1.5)	234 ( 7.4)!	15 ( 2.5)	220 ( 6.1)	58 ( 3.2)	222 ( 1.7)
ARIZONA	28 ( 3.3)	214 ( 3.4)	9 ( 1.9)	233 ( 6.0)!	13 ( 2.3)	216 ( 6.3)	61 ( 3.5)	220 ( 1.9)
ARKANSAS†	33 ( 4.0)	215 ( 2.9)	14 ( 3.0)	219 ( 3.6)!	11 ( 3.2)	221 ( 4.7)!	55 ( 4.0)	215 ( 1.8)
CALIFORNIA	31 ( 3.5)	212 ( 3.4)	2 ( 1.0)	... ( ... )	9 ( 2.1)	220 ( 4.2)!	64 ( 3.4)	207 ( 2.3)
COLORADO	39 ( 3.6)	227 ( 2.2)	16 ( 2.2)	225 ( 2.9)	11 ( 1.9)	225 ( 2.2)	46 ( 3.7)	225 ( 1.6)
CONNECTICUT	37 ( 3.1)	234 ( 2.1)	8 ( 1.7)	240 ( 3.0)!	9 ( 1.8)	237 ( 2.9)!	56 ( 3.5)	230 ( 1.6)
DELAWARE	54 ( 0.8)	215 ( 1.0)	12 ( 0.6)	216 ( 3.2)	10 ( 0.7)	215 ( 3.1)	38 ( 0.8)	216 ( 1.4)
DISTRICT OF COLUMBIA	33 ( 0.9)	190 ( 1.7)	6 ( 0.3)	197 ( 3.9)	13 ( 0.6)	187 ( 3.4)	57 ( 0.9)	186 ( 1.3)
FLORIDA	30 ( 2.8)	219 ( 2.2)	3 ( 0.9)	224 ( 4.9)!	6 ( 1.3)	223 ( 3.4)!	66 ( 2.8)	214 ( 1.4)
GEORGIA	32 ( 3.1)	220 ( 2.5)	8 ( 1.9)	218 ( 5.6)!	10 ( 1.4)	217 ( 3.3)	57 ( 3.5)	213 ( 1.7)
HAWAII	46 ( 2.6)	219 ( 2.9)	3 ( 0.9)	212 ( 5.7)!	8 ( 1.4)	212 ( 6.6)	47 ( 2.4)	213 ( 1.6)
INDIANA	19 ( 3.2)	234 ( 3.4)	9 ( 2.2)	242 ( 4.0)!	10 ( 2.6)	231 ( 4.8)!	72 ( 3.3)	228 ( 0.9)
IOWA†	40 ( 4.0)	231 ( 1.5)	15 ( 3.3)	234 ( 1.8)!	10 ( 2.4)	234 ( 3.5)!	47 ( 3.7)	226 ( 1.5)
KENTUCKY	39 ( 3.6)	219 ( 1.5)	15 ( 2.9)	215 ( 3.4)!	5 ( 1.7)	222 ( 4.0)!	51 ( 3.7)	221 ( 1.7)
LOUISIANA	36 ( 3.1)	208 ( 2.1)	12 ( 2.3)	207 ( 4.0)	9 ( 1.8)	208 ( 6.0)!	56 ( 3.6)	210 ( 1.5)
MAINE	45 ( 3.7)	234 ( 1.5)	15 ( 2.5)	235 ( 3.0)	20 ( 2.7)	233 ( 2.3)	42 ( 4.0)	231 ( 1.7)
MARYLAND	41 ( 3.5)	228 ( 2.7)	13 ( 2.6)	236 ( 4.3)	10 ( 1.5)	227 ( 4.9)	49 ( 3.6)	216 ( 2.2)
MASSACHUSETTS	47 ( 4.1)	235 ( 2.0)	10 ( 2.3)	236 ( 2.9)!	16 ( 2.5)	232 ( 2.3)	43 ( 3.9)	222 ( 1.7)
MICHIGAN†	32 ( 3.6)	229 ( 3.0)	11 ( 2.3)	218 ( 5.2)!	8 ( 1.9)	235 ( 2.8)!	59 ( 3.9)	225 ( 1.8)
MINNESOTA	36 ( 3.5)	234 ( 1.7)	7 ( 1.8)	238 ( 4.4)!	13 ( 1.8)	235 ( 2.0)	54 ( 3.3)	231 ( 1.4)
MISSISSIPPI	56 ( 3.8)	209 ( 1.7)	15 ( 2.2)	215 ( 2.9)	7 ( 2.0)	203 ( 4.3)!	35 ( 3.6)	207 ( 1.9)
MISSOURI	19 ( 3.2)	229 ( 2.5)	9 ( 2.3)	233 ( 2.4)!	8 ( 1.5)	221 ( 3.1)	69 ( 4.3)	224 ( 1.4)
MONTANA†	46 ( 4.0)	229 ( 1.7)	12 ( 2.2)	229 ( 3.8)	15 ( 2.3)	232 ( 2.9)	42 ( 4.0)	226 ( 1.7)
NEBRASKA	39 ( 4.3)	229 ( 2.2)	11 ( 2.6)	233 ( 4.0)!	14 ( 2.7)	227 ( 3.2)	52 ( 4.3)	225 ( 1.8)
NEVADA†	40 ( 3.2)	220 ( 2.1)	8 ( 2.0)	228 ( 2.5)!	9 ( 1.8)	220 ( 4.1)!	52 ( 3.3)	216 ( 1.7)
NEW JERSEY†	34 ( 4.3)	231 ( 3.0)	9 ( 2.7)	232 ( 3.2)!	11 ( 2.5)	231 ( 4.1)!	54 ( 4.4)	224 ( 1.8)
NEW MEXICO	33 ( 3.4)	219 ( 2.7)	13 ( 2.8)	218 ( 3.3)!	8 ( 1.8)	217 ( 5.2)!	57 ( 3.7)	212 ( 2.1)
NEW YORK†	28 ( 3.1)	227 ( 1.9)	3 ( 1.1)	... ( ... )	7 ( 1.6)	221 ( 4.0)!	66 ( 3.2)	222 ( 1.9)
NORTH CAROLINA	32 ( 3.2)	225 ( 2.0)	21 ( 3.0)	224 ( 2.8)	7 ( 1.2)	217 ( 5.1)	54 ( 3.4)	225 ( 1.6)
NORTH DAKOTA	37 ( 3.3)	232 ( 1.3)	19 ( 3.2)	232 ( 2.1)	11 ( 2.2)	231 ( 2.1)	47 ( 3.6)	231 ( 2.0)
OREGON	40 ( 3.2)	228 ( 2.1)	9 ( 1.9)	223 ( 3.8)!	12 ( 1.8)	226 ( 3.1)	50 ( 3.6)	221 ( 1.8)
PENNSYLVANIA†	28 ( 3.2)	229 ( 2.5)	4 ( 1.4)	227 ( 6.4)!	8 ( 1.7)	218 ( 4.0)!	64 ( 3.7)	226 ( 1.4)
RHODE ISLAND	58 ( 2.8)	224 ( 1.8)	9 ( 1.5)	229 ( 3.1)	16 ( 2.3)	215 ( 3.8)	33 ( 3.0)	215 ( 2.2)
SOUTH CAROLINA†	39 ( 3.8)	216 ( 1.8)	12 ( 2.1)	224 ( 2.8)	13 ( 2.4)	211 ( 4.0)	49 ( 3.9)	210 ( 1.8)
TENNESSEE	28 ( 3.5)	220 ( 2.5)	8 ( 1.8)	228 ( 4.4)!	6 ( 1.4)	214 ( 4.0)!	66 ( 3.6)	220 ( 1.7)
TEXAS	23 ( 3.4)	232 ( 3.5)	6 ( 1.4)	233 ( 5.0)!	4 ( 1.7)	234 ( 8.2)!	71 ( 3.3)	227 ( 1.7)
UTAH	49 ( 3.2)	227 ( 1.8)	14 ( 2.3)	233 ( 4.1)	10 ( 1.6)	221 ( 2.7)	42 ( 2.8)	226 ( 1.7)
VERMONT†	51 ( 3.5)	225 ( 1.8)	15 ( 2.7)	223 ( 3.1)	27 ( 2.8)	224 ( 2.2)	28 ( 3.1)	225 ( 2.5)
VIRGINIA	31 ( 3.3)	226 ( 2.4)	11 ( 2.1)	219 ( 3.9)	10 ( 1.9)	228 ( 4.3)	58 ( 3.7)	221 ( 1.7)
WASHINGTON	29 ( 3.2)	226 ( 1.8)	10 ( 2.0)	230 ( 4.1)	11 ( 1.9)	226 ( 2.8)	60 ( 3.5)	224 ( 1.4)
WEST VIRGINIA	33 ( 3.6)	223 ( 2.0)	16 ( 2.2)	226 ( 2.7)	7 ( 2.0)	222 ( 2.9)!	55 ( 3.6)	222 ( 1.4)
WISCONSIN	30 ( 3.9)	236 ( 1.8)	6 ( 1.5)	238 ( 5.1)!	15 ( 2.5)	233 ( 3.3)	59 ( 4.1)	229 ( 1.1)
WYOMING	32 ( 3.5)	224 ( 2.6)	14 ( 2.0)	223 ( 3.3)	11 ( 1.5)	229 ( 3.5)	54 ( 3.1)	222 ( 1.4)
<b>Other Jurisdictions</b>								
DDESS	38 ( 1.0)	223 ( 1.5)	18 ( 0.8)	228 ( 2.4)	11 ( 0.9)	219 ( 2.4)	50 ( 1.1)	225 ( 1.3)
D <sub>o</sub> DDS	51 ( 1.9)	224 ( 1.0)	14 ( 1.3)	225 ( 2.8)	19 ( 1.5)	226 ( 2.3)	36 ( 1.7)	222 ( 1.4)
GUAM	18 ( 0.9)	196 ( 2.5)	0 ( ... )	... ( ... )	4 ( 0.5)	... ( ... )	78 ( 1.0)	187 ( 1.5)

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).

... Characteristics of the sample do not permit a reliable estimate.

! Interpret with caution — the nature of the sample does not allow accurate determination of the variability of this statistic.

**TABLE 6.3**

**1992 Mathematics Assessment**



POPULATION:

1992 Grade 4 Public School Students

REPORTED STATISTICS:

Percentage of Students and Average Mathematics Scale Score

TEACHERS' REPORTS ON:

Time Spent on Mathematics Instruction

JURISDICTIONS	Two and a Half Hours or Less		More than Two and a Half Hours but Less than Four Hours		Four Hours or More	
	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )
<b>Nation</b>						
NATION	5 ( 1.0)	224 ( 3.7)!	21 ( 2.1)	222 ( 2.6)	74 ( 2.5)	217 ( 1.1)
NORTHEAST	6 ( 2.8)	... ( ... )	21 ( 5.6)	219 ( 3.7)!	73 ( 6.8)	222 ( 3.6)
SOUTHEAST	4 ( 1.2)	212 ( 5.9)!	8 ( 2.2)	205 ( 3.4)!	88 ( 2.7)	209 ( 2.2)
CENTRAL	4 ( 1.6)	... ( ... )	34 ( 5.0)	223 ( 3.9)	63 ( 5.4)	226 ( 1.8)
WEST	5 ( 2.2)	... ( ... )	24 ( 3.6)	228 ( 5.7)	71 ( 4.9)	215 ( 1.7)
<b>States</b>						
ALABAMA	8 ( 1.9)	201 ( 3.8)!	7 ( 1.3)	210 ( 5.0)	85 ( 2.3)	209 ( 1.7)
ALASKA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
ARIZONA	5 ( 1.2)	218 ( 6.1)!	27 ( 2.6)	214 ( 2.4)	68 ( 2.8)	216 ( 1.1)
ARKANSAS	6 ( 1.7)	208 ( 5.0)!	30 ( 3.7)	210 ( 1.9)	64 ( 3.5)	212 ( 1.3)
CALIFORNIA	3 ( 1.2)	192 ( 7.5)!	26 ( 3.9)	212 ( 3.2)	70 ( 3.9)	208 ( 2.1)
COLORADO	7 ( 1.7)	218 ( 4.0)!	30 ( 3.2)	224 ( 1.8)	63 ( 3.8)	220 ( 1.5)
CONNECTICUT	1 ( 0.5)	... ( ... )	19 ( 3.0)	232 ( 2.5)	80 ( 3.0)	228 ( 1.4)
DELAWARE	7 ( 0.4)	228 ( 4.1)	33 ( 0.7)	216 ( 1.2)	61 ( 0.8)	219 ( 1.1)
DISTRICT OF COLUMBIA	9 ( 0.4)	199 ( 2.8)	16 ( 1.0)	191 ( 2.5)	75 ( 1.1)	192 ( 0.9)
FLORIDA	3 ( 1.0)	212 ( 4.7)!	21 ( 2.7)	216 ( 2.0)	75 ( 2.8)	213 ( 1.5)
GEORGIA	4 ( 1.1)	216 ( 5.8)!	10 ( 1.6)	218 ( 2.9)	86 ( 1.8)	215 ( 1.5)
HAWAII	6 ( 1.3)	214 ( 4.6)!	38 ( 2.8)	214 ( 2.0)	55 ( 3.1)	214 ( 1.7)
INDIANA	3 ( 1.0)	232 ( 5.4)!	39 ( 3.7)	219 ( 1.9)	58 ( 3.7)	221 ( 1.3)
IOWA	6 ( 2.1)	224 ( 4.0)!	38 ( 3.7)	230 ( 1.5)	56 ( 4.0)	230 ( 1.4)
KENTUCKY	7 ( 1.8)	212 ( 4.9)!	12 ( 2.6)	213 ( 2.2)!	81 ( 2.8)	215 ( 1.3)
LOUISIANA	7 ( 1.4)	196 ( 4.6)!	10 ( 2.6)	204 ( 7.8)!	84 ( 2.9)	205 ( 1.5)
MAINE	4 ( 1.3)	236 ( 3.2)!	39 ( 4.3)	231 ( 1.8)	57 ( 4.1)	231 ( 1.3)
MARYLAND	4 ( 1.4)	233 ( 7.9)!	11 ( 2.4)	221 ( 9.4)!	85 ( 2.8)	218 ( 1.4)
MASSACHUSETTS	2 ( 0.9)	222 ( 6.2)!	35 ( 3.9)	225 ( 2.0)	63 ( 4.0)	229 ( 1.4)
MICHIGAN	5 ( 1.4)	223 ( 6.6)!	29 ( 3.4)	225 ( 2.9)	66 ( 3.4)	218 ( 1.9)
MINNESOTA	7 ( 1.7)	230 ( 3.3)!	31 ( 3.8)	229 ( 1.5)	63 ( 3.8)	227 ( 1.7)
MISSISSIPPI	10 ( 2.2)	195 ( 3.2)!	14 ( 2.6)	204 ( 4.0)	76 ( 3.2)	202 ( 1.4)
MISSOURI	5 ( 1.4)	224 ( 3.7)!	18 ( 3.2)	223 ( 2.9)	77 ( 3.1)	223 ( 1.6)
MONTANA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
NEBRASKA	8 ( 2.3)	220 ( 3.1)!	37 ( 4.0)	226 ( 2.1)	55 ( 3.3)	227 ( 1.6)
NEVADA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
NEW JERSEY	3 ( 1.4)	... ( ... )	29 ( 4.4)	231 ( 2.3)	69 ( 4.6)	227 ( 1.9)
NEW MEXICO	4 ( 1.1)	209 ( 4.4)!	20 ( 3.0)	213 ( 2.3)	76 ( 3.3)	214 ( 1.5)
NEW YORK	6 ( 1.4)	215 ( 6.6)!	27 ( 3.4)	227 ( 2.1)	67 ( 3.8)	215 ( 1.7)
NORTH CAROLINA	8 ( 1.5)	221 ( 4.1)	32 ( 3.1)	215 ( 1.7)	60 ( 3.2)	212 ( 1.6)
NORTH DAKOTA	6 ( 1.8)	226 ( 3.2)!	37 ( 4.7)	228 ( 1.2)	56 ( 4.8)	230 ( 1.0)
OREGON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
PENNSYLVANIA	4 ( 1.2)	225 ( 5.4)!	30 ( 3.3)	220 ( 3.0)	67 ( 3.4)	226 ( 1.6)
RHODE ISLAND	3 ( 1.1)	... ( ... )	24 ( 3.3)	219 ( 3.0)	74 ( 3.6)	214 ( 1.8)
SOUTH CAROLINA	4 ( 1.7)	207 ( 3.6)!	15 ( 2.6)	216 ( 3.3)	81 ( 3.2)	212 ( 1.3)
TENNESSEE	4 ( 1.3)	212 ( 5.6)!	17 ( 2.0)	209 ( 2.2)	79 ( 2.3)	212 ( 1.5)
TEXAS	4 ( 1.0)	215 ( 4.5)!	12 ( 2.4)	218 ( 4.1)	83 ( 2.6)	219 ( 1.5)
UTAH	6 ( 1.4)	219 ( 4.1)!	23 ( 2.9)	222 ( 1.8)	70 ( 3.1)	226 ( 1.1)
VERMONT	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
VIRGINIA	3 ( 1.0)	219 ( 5.0)!	17 ( 2.9)	216 ( 3.4)	79 ( 3.2)	222 ( 1.4)
WASHINGTON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
WEST VIRGINIA	4 ( 1.5)	215 ( 6.0)!	9 ( 1.9)	218 ( 2.0)!	87 ( 2.5)	214 ( 1.2)
WISCONSIN	2 ( 0.9)	... ( ... )	27 ( 3.2)	229 ( 1.8)	71 ( 3.0)	229 ( 1.2)
WYOMING	3 ( 1.2)	229 ( 5.0)!	22 ( 3.4)	224 ( 2.0)	75 ( 3.4)	226 ( 1.2)
<b>Other Jurisdictions</b>						
DDESS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
DoDDS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
GUAM	9 ( 0.5)	196 ( 2.0)	20 ( 1.1)	191 ( 1.8)	71 ( 1.1)	193 ( 1.1)

— State or other jurisdiction did not participate in the NAEP assessment year presented in this table.

... Characteristics of the sample do not permit a reliable estimate.

! Interpret with caution — the nature of the sample does not allow accurate determination of the variability of this statistic.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.



**TABLE 6.3** (continued) **1996 Mathematics Assessment**



POPULATION: **1996 Grade 4 Public School Students**  
 REPORTED STATISTICS: **Percentage of Students and Average Mathematics Scale Score**  
 TEACHERS' REPORTS ON: **Time Spent on Mathematics Instruction**

How much time do you spend each week on mathematics instruction with this class?

Two and a Half Hours or Less	More than Two and a Half Hours but Less than Four Hours	Four Hours or More
------------------------------	---	--------------------

JURISDICTIONS	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )
<b>Nation</b>						
NATION	5 ( 1.1)	225 ( 2.8)!	25 ( 2.5)	225 ( 1.9)	69 ( 2.8)	222 ( 1.1)>
NORTHEAST	3 ( ... )	... ( ... )	27 ( 5.9)	229 ( 2.8)!	70 ( 7.4)	224 ( 3.4)
SOUTHEAST	6 ( 2.7)	216 ( 5.2)!	12 ( 2.9)	218 ( 2.3)!	82 ( 3.8)	214 ( 2.3)
CENTRAL	3 ( 1.7)	... ( ... )	41 ( 5.2)	229 ( 2.4)	57 ( 5.6)	232 ( 3.1)
WEST	8 ( 1.9)	227 ( 4.0)!	22 ( 4.5)	220 ( 5.4)!	71 ( 4.8)	220 ( 1.7)
<b>States</b>						
ALABAMA	9 ( 2.2)	215 ( 4.3)!	10 ( 2.2)	212 ( 4.4)!	80 ( 2.9)	211 ( 1.4)
ALASKA†	5 ( 1.5)	218 ( 7.1)!	28 ( 2.9)	220 ( 3.6)	67 ( 3.0)	226 ( 1.8)
ARIZONA	8 ( 1.3)	213 ( 5.0)	22 ( 3.0)	217 ( 2.4)	71 ( 3.1)	219 ( 2.3)
ARKANSAS†	15 ( 3.2)	218 ( 3.4)!	34 ( 4.2)	218 ( 2.0)>	51 ( 4.6)	214 ( 2.4)
CALIFORNIA	5 ( 1.5)	200 ( 7.2)!	22 ( 3.1)	207 ( 3.8)	73 ( 3.4)	211 ( 2.1)
COLORADO	7 ( 1.8)	221 ( 6.6)!	27 ( 2.7)	223 ( 2.2)	66 ( 3.2)	228 ( 1.3)>
CONNECTICUT	3 ( 1.0)	231 ( 9.2)!	21 ( 2.9)	232 ( 2.8)	76 ( 2.9)	232 ( 1.3)
DELAWARE	10 ( 0.6)>	224 ( 3.3)	28 ( 1.0)<	215 ( 1.4)	62 ( 1.2)	214 ( 1.1)<
DISTRICT OF COLUMBIA	10 ( 0.6)	194 ( 2.8)	19 ( 0.5)	190 ( 1.3)	72 ( 0.7)	185 ( 1.2)<
FLORIDA	5 ( 1.2)	210 ( 3.3)!	22 ( 2.5)	212 ( 2.0)	73 ( 2.7)	218 ( 1.5)
GEORGIA	11 ( 1.7)>	216 ( 4.1)	11 ( 1.9)	214 ( 3.7)	78 ( 2.2)	216 ( 1.8)
HAWAII	5 ( 1.1)	209 ( 9.3)!	27 ( 2.5)<	216 ( 2.5)	68 ( 2.9)>	216 ( 1.8)
INDIANA	5 ( 1.5)	226 ( 5.3)!	43 ( 3.7)	229 ( 1.6)>	52 ( 3.5)	230 ( 1.4)>
IOWA†	7 ( 2.1)	224 ( 4.2)!	37 ( 4.2)	231 ( 1.8)	55 ( 4.5)	229 ( 1.3)
KENTUCKY	8 ( 2.6)	221 ( 4.8)!	23 ( 3.6)	221 ( 2.7)	69 ( 4.0)	219 ( 1.5)
LOUISIANA	8 ( 2.0)	201 ( 5.1)!	7 ( 1.8)	211 ( 4.7)!	85 ( 2.7)	210 ( 1.3)
MAINE	6 ( 1.4)	232 ( 2.9)!	35 ( 3.7)	230 ( 1.7)	60 ( 3.7)	234 ( 1.6)
MARYLAND	9 ( 2.4)	211 ( 4.9)!	7 ( 1.8)	228 ( 7.1)!	84 ( 3.1)	223 ( 1.8)
MASSACHUSETTS	3 ( 1.1)	224 ( 7.4)!	33 ( 3.5)	228 ( 2.0)	64 ( 3.6)	230 ( 1.7)
MICHIGAN†	5 ( 1.4)	226 ( 4.8)!	32 ( 3.7)	228 ( 2.6)	63 ( 3.5)	225 ( 1.6)>
MINNESOTA	6 ( 1.2)	231 ( 4.2)	25 ( 3.2)	233 ( 2.4)	69 ( 3.2)	232 ( 1.3)
MISSISSIPPI	10 ( 2.2)	198 ( 3.4)!	16 ( 2.6)	207 ( 4.8)	74 ( 3.0)	210 ( 1.2)>
MISSOURI	7 ( 2.4)	222 ( 3.0)!	34 ( 3.6)>	228 ( 1.7)	58 ( 3.7)<	224 ( 1.4)
MONTANA†	8 ( 2.0)	226 ( 3.9)!	33 ( 3.5)	224 ( 2.0)	59 ( 3.9)	230 ( 1.4)
NEBRASKA	6 ( 1.7)	228 ( 2.5)!	27 ( 3.9)	220 ( 2.1)	67 ( 4.2)	230 ( 1.3)
NEVADA†	3 ( 0.9)	222 ( 6.0)!	14 ( 2.6)	221 ( 3.2)	83 ( 2.9)	217 ( 1.3)
NEW JERSEY†	3 ( 1.3)	214 ( 8.8)!	26 ( 4.2)	230 ( 1.8)	71 ( 3.9)	227 ( 2.0)
NEW MEXICO	8 ( 2.1)	204 ( 6.2)!	31 ( 3.1)	211 ( 2.6)	61 ( 3.4)<	218 ( 1.7)
NEW YORK†	4 ( 1.1)	220 ( 5.0)!	38 ( 3.1)	227 ( 2.1)	58 ( 3.3)	221 ( 1.8)
NORTH CAROLINA	6 ( 1.6)	224 ( 4.6)!	19 ( 2.7)<	222 ( 2.1)	75 ( 3.1)>	225 ( 1.5)>
NORTH DAKOTA	5 ( 1.5)	223 ( 6.3)!	33 ( 3.1)	230 ( 1.6)	62 ( 3.1)	233 ( 1.2)
OREGON	7 ( 2.0)	220 ( 4.3)!	42 ( 3.1)	222 ( 1.9)	51 ( 3.7)	226 ( 1.6)
PENNSYLVANIA†	4 ( 1.3)	219 ( 5.8)!	27 ( 3.6)	226 ( 2.2)	69 ( 3.7)	227 ( 1.7)
RHODE ISLAND	3 ( 1.0)	219 ( 8.2)!	22 ( 2.8)	220 ( 2.4)	75 ( 3.0)	220 ( 1.7)
SOUTH CAROLINA†	5 ( 1.2)	212 ( 4.8)!	19 ( 2.5)	212 ( 2.6)	76 ( 2.6)	213 ( 1.5)
TENNESSEE	3 ( 0.9)	215 ( 6.0)!	21 ( 2.7)	216 ( 2.0)	76 ( 2.8)	221 ( 1.8)>
TEXAS	7 ( 1.4)	228 ( 6.3)	13 ( 2.4)	221 ( 3.4)	80 ( 2.6)	229 ( 1.5)>
UTAH	11 ( 2.2)	225 ( 3.0)!	20 ( 2.3)	226 ( 2.7)	69 ( 3.4)	227 ( 1.4)
VERMONT†	4 ( 0.9)	224 ( 6.5)!	43 ( 3.5)	226 ( 1.7)	53 ( 3.6)	224 ( 1.6)
VIRGINIA	6 ( 1.4)	220 ( 3.2)!	20 ( 3.1)	222 ( 2.8)	74 ( 3.3)	223 ( 1.5)
WASHINGTON	7 ( 1.4)	220 ( 3.7)!	35 ( 3.5)	222 ( 2.0)	58 ( 3.7)	227 ( 1.4)
WEST VIRGINIA	4 ( 1.6)	229 ( 4.3)!	10 ( 2.4)	221 ( 2.0)!	86 ( 2.8)	223 ( 1.2)>
WISCONSIN	5 ( 1.8)	226 ( 3.8)!	28 ( 3.3)	232 ( 2.6)	67 ( 3.9)	232 ( 1.2)
WYOMING	5 ( 1.5)	219 ( 5.8)!	26 ( 2.5)	222 ( 2.4)	69 ( 2.9)	223 ( 1.5)
<b>Other Jurisdictions</b>						
DDESS	6 ( 0.6)	220 ( 4.8)	17 ( 0.7)	221 ( 2.7)	77 ( 0.8)	226 ( 1.2)
DoDDS	6 ( 1.1)	225 ( 2.2)	21 ( 1.4)	222 ( 1.9)	73 ( 1.8)	223 ( 0.9)
GUAM	12 ( 1.1)	191 ( 3.8)	32 ( 1.3)>	191 ( 2.3)	56 ( 1.5)<	188 ( 2.6)

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).  
 ... Characteristics of the sample do not permit a reliable estimate.  
 > (<) The value for the students was significantly higher (lower) than in the 1992 assessment at about the 95% confidence level using appropriate multiple comparison procedures.  
 ! Interpret with caution — the nature of the sample does not allow accurate determination of the variability of this statistic.  
 SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 6.4**

**1996 Mathematics Assessment**



POPULATION:

1996 Grade 4 Public School Students

REPORTED STATISTICS:

Percentage of Students and Average Mathematics Scale Score

TEACHERS' REPORTS ON:

Mathematics Facts and Concepts Addressed

*In this mathematics class, how often do you address learning mathematics facts and concepts?*

<b>A Little or None</b>	<b>Some</b>	<b>A Lot</b>
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JURISDICTIONS	A Little or None		Some		A Lot	
	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )
<b>Nation</b>						
NATION	0 ( ... )	... ( ... )	7 ( 1.1)	221 ( 3.5)	93 ( 1.1)	223 ( 1.1)
NORTHEAST	1 ( ... )	... ( ... )	8 ( 2.1)	... ( ... )	91 ( 2.0)	226 ( 2.6)
SOUTHEAST	0 ( ... )	... ( ... )	4 ( 2.1)	206 ( 5.1)!	96 ( 2.1)	217 ( 2.6)
CENTRAL	0 ( ... )	... ( ... )	9 ( 2.9)	224 ( 7.7)!	91 ( 2.9)	231 ( 2.0)
WEST	0 ( ... )	... ( ... )	7 ( 1.7)	222 ( 6.3)!	92 ( 1.7)	220 ( 2.0)
<b>States</b>						
ALABAMA	0 ( ... )	... ( ... )	3 ( 1.4)	216 ( 4.6)!	97 ( 1.5)	211 ( 1.3)
ALASKA†	0 ( ... )	... ( ... )	12 ( 2.5)	224 ( 4.2)!	88 ( 2.5)	224 ( 1.4)
ARIZONA	1 ( ... )	... ( ... )	9 ( 2.3)	211 ( 8.9)!	91 ( 2.4)	219 ( 1.8)
ARKANSAS†	0 ( ... )	... ( ... )	6 ( 1.9)	215 ( 5.0)!	94 ( 1.9)	216 ( 1.5)
CALIFORNIA	1 ( 0.5)	... ( ... )	10 ( 2.1)	199 ( 7.1)!	89 ( 2.2)	211 ( 1.9)
COLORADO	1 ( 0.7)	... ( ... )	10 ( 2.0)	220 ( 4.0)	89 ( 2.1)	227 ( 1.1)
CONNECTICUT	1 ( 0.6)	... ( ... )	6 ( 1.4)	239 ( 2.7)!	93 ( 1.6)	232 ( 1.2)
DELAWARE	0 ( ... )	... ( ... )	11 ( 0.5)	226 ( 4.1)	89 ( 0.5)	214 ( 0.8)
DISTRICT OF COLUMBIA	3 ( 0.3)	... ( ... )	13 ( 0.5)	185 ( 2.4)	84 ( 0.6)	187 ( 1.2)
FLORIDA	0 ( 0.2)	... ( ... )	7 ( 1.4)	216 ( 4.2)!	93 ( 1.5)	216 ( 1.2)
GEORGIA	0 ( ... )	... ( ... )	3 ( 1.0)	215 ( 4.5)!	97 ( 1.0)	216 ( 1.6)
HAWAII	1 ( 0.6)	... ( ... )	5 ( 1.2)	207 ( 6.8)!	94 ( 1.3)	216 ( 1.5)
INDIANA	0 ( ... )	... ( ... )	2 ( 1.2)	... ( ... )	98 ( 0.9)	229 ( 1.1)
IOWA†	0 ( ... )	... ( ... )	7 ( 2.6)	231 ( 4.1)!	93 ( 2.6)	229 ( 1.2)
KENTUCKY	0 ( ... )	... ( ... )	9 ( 2.3)	213 ( 3.6)!	91 ( 2.3)	220 ( 1.3)
LOUISIANA	0 ( ... )	... ( ... )	3 ( 0.9)	205 ( 7.1)!	97 ( 0.9)	209 ( 1.2)
MAINE	1 ( 0.3)	... ( ... )	9 ( 2.0)	233 ( 4.3)!	91 ( 2.1)	232 ( 1.2)
MARYLAND	1 ( ... )	... ( ... )	12 ( 2.1)	223 ( 3.6)	88 ( 2.3)	222 ( 1.8)
MASSACHUSETTS	1 ( 0.4)	... ( ... )	8 ( 1.7)	231 ( 4.6)!	92 ( 1.8)	229 ( 1.4)
MICHIGAN†	1 ( ... )	... ( ... )	13 ( 2.4)	221 ( 5.8)	85 ( 2.8)	227 ( 1.4)
MINNESOTA	1 ( 0.4)	... ( ... )	16 ( 2.4)	232 ( 3.3)	84 ( 2.4)	233 ( 1.2)
MISSISSIPPI	0 ( ... )	... ( ... )	5 ( 1.3)	211 ( 4.4)!	95 ( 1.3)	208 ( 1.3)
MISSOURI	0 ( ... )	... ( ... )	3 ( 1.1)	228 ( 5.7)!	97 ( 1.1)	225 ( 1.2)
MONTANA†	0 ( ... )	... ( ... )	5 ( 1.8)	228 ( 3.9)!	95 ( 1.8)	228 ( 1.2)
NEBRASKA	0 ( ... )	... ( ... )	5 ( 1.6)	219 ( 5.7)!	95 ( 1.6)	228 ( 1.2)
NEVADA†	1 ( 0.8)	... ( ... )	9 ( 1.9)	225 ( 3.0)!	89 ( 2.1)	218 ( 1.4)
NEW JERSEY†	0 ( 0.3)	... ( ... )	5 ( 1.4)	221 ( 6.6)!	94 ( 1.4)	228 ( 1.5)
NEW MEXICO	1 ( 0.8)	... ( ... )	12 ( 2.2)	214 ( 4.5)	86 ( 2.3)	215 ( 1.9)
NEW YORK†	0 ( ... )	... ( ... )	8 ( 1.7)	222 ( 5.1)!	92 ( 1.7)	224 ( 1.2)
NORTH CAROLINA	0 ( ... )	... ( ... )	12 ( 2.2)	228 ( 3.4)	88 ( 2.2)	223 ( 1.2)
NORTH DAKOTA	0 ( ... )	... ( ... )	5 ( 1.6)	233 ( 2.1)!	94 ( 1.5)	231 ( 1.2)
OREGON	1 ( 0.4)	... ( ... )	10 ( 2.0)	223 ( 4.3)	89 ( 2.1)	224 ( 1.3)
PENNSYLVANIA†	0 ( ... )	... ( ... )	3 ( 1.1)	... ( ... )	97 ( 1.2)	227 ( 1.3)
RHODE ISLAND	1 ( 0.4)	... ( ... )	14 ( 2.0)	218 ( 4.1)	85 ( 2.1)	221 ( 1.3)
SOUTH CAROLINA†	0 ( ... )	... ( ... )	6 ( 1.4)	208 ( 4.2)!	94 ( 1.4)	214 ( 1.2)
TENNESSEE	1 ( ... )	... ( ... )	4 ( 1.0)	219 ( 3.9)!	95 ( 1.1)	220 ( 1.5)
TEXAS	1 ( ... )	... ( ... )	7 ( 2.0)	220 ( 6.6)!	92 ( 2.2)	229 ( 1.5)
UTAH	0 ( ... )	... ( ... )	4 ( 1.1)	232 ( 4.4)!	96 ( 1.1)	227 ( 1.2)
VERMONT†	2 ( 0.6)	... ( ... )	13 ( 2.2)	224 ( 2.3)	86 ( 2.2)	225 ( 1.4)
VIRGINIA	0 ( ... )	... ( ... )	6 ( 1.2)	220 ( 4.7)!	94 ( 1.2)	223 ( 1.3)
WASHINGTON	1 ( 0.6)	... ( ... )	7 ( 1.3)	230 ( 3.1)	92 ( 1.4)	224 ( 1.4)
WEST VIRGINIA	1 ( ... )	... ( ... )	3 ( 1.3)	223 ( 3.8)!	96 ( 1.7)	223 ( 1.1)
WISCONSIN	0 ( ... )	... ( ... )	6 ( 1.4)	232 ( 5.6)!	93 ( 1.4)	232 ( 1.0)
WYOMING	0 ( ... )	... ( ... )	4 ( 1.2)	230 ( 4.0)!	96 ( 1.2)	222 ( 1.5)
<b>Other Jurisdictions</b>						
DDESS	0 ( ... )	... ( ... )	5 ( 0.6)	... ( ... )	95 ( 0.6)	224 ( 1.0)
DoDDS	5 ( 0.6)	225 ( 2.9)	34 ( 1.9)	223 ( 1.3)	61 ( 1.9)	223 ( 0.9)
GUAM	2 ( 0.5)	... ( ... )	8 ( 0.6)	193 ( 6.2)	90 ( 0.7)	189 ( 1.5)

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).

... Characteristics of the sample do not permit a reliable estimate.

! Interpret with caution — the nature of the sample does not allow accurate determination of the variability of this statistic.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 6.5**

**1996 Mathematics Assessment**



POPULATION:

1996 Grade 4 Public School Students

REPORTED STATISTICS:

Percentage of Students and Average Mathematics Scale Score

TEACHERS' REPORTS ON:

Mathematics Learning Skills/Problem Solving Procedures Addressed

*In this mathematics class, how often do you address learning skills and procedures needed to solve routine problems?*

A Little or None	Some	A Lot
------------------	------	-------

JURISDICTIONS	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )
<b>Nation</b>						
NATION	0 ( ... )	... ( ... )	9 ( 1.3)	220 ( 3.9)	91 ( 1.3)	223 ( 1.1)
NORTHEAST	0 ( ... )	... ( ... )	6 ( 3.0)	... ( ... )	94 ( 3.0)	227 ( 2.4)
SOUTHEAST	0 ( ... )	... ( ... )	7 ( 2.2)	209 ( 3.9)!	93 ( 2.2)	217 ( 2.9)
CENTRAL	1 ( ... )	... ( ... )	10 ( 2.4)	227 ( 8.1)!	89 ( 2.4)	231 ( 1.9)
WEST	0 ( ... )	... ( ... )	10 ( 2.5)	222 ( 6.5)!	90 ( 2.5)	220 ( 2.1)
<b>States</b>						
ALABAMA	0 ( ... )	... ( ... )	5 ( 1.6)	205 ( 5.5)!	95 ( 1.7)	212 ( 1.3)
ALASKA†	1 ( 0.4)	... ( ... )	15 ( 2.7)	222 ( 5.7)	84 ( 2.7)	224 ( 1.4)
ARIZONA	3 ( 2.1)	... ( ... )	17 ( 2.6)	217 ( 3.9)	79 ( 3.3)	220 ( 1.9)
ARKANSAS†	0 ( ... )	... ( ... )	12 ( 2.8)	215 ( 3.1)!	88 ( 2.8)	216 ( 1.5)
CALIFORNIA	2 ( 0.9)	... ( ... )	20 ( 3.1)	209 ( 5.5)	78 ( 3.0)	210 ( 1.9)
COLORADO	2 ( 0.6)	... ( ... )	14 ( 2.3)	220 ( 3.3)	85 ( 2.5)	228 ( 1.1)
CONNECTICUT	0 ( 0.2)	... ( ... )	9 ( 1.6)	233 ( 3.5)	91 ( 1.7)	232 ( 1.2)
DELAWARE	1 ( 0.3)	... ( ... )	12 ( 0.6)	217 ( 2.7)	87 ( 0.6)	215 ( 0.8)
DISTRICT OF COLUMBIA	2 ( 0.3)	... ( ... )	15 ( 0.5)	188 ( 3.0)	84 ( 0.6)	187 ( 1.0)
FLORIDA	0 ( ... )	... ( ... )	8 ( 1.4)	216 ( 3.2)	91 ( 1.4)	216 ( 1.2)
GEORGIA	1 ( 0.5)	... ( ... )	7 ( 1.6)	217 ( 6.2)!	92 ( 1.6)	216 ( 1.6)
HAWAII	1 ( 0.4)	... ( ... )	14 ( 1.7)	216 ( 3.5)	85 ( 1.7)	216 ( 1.7)
INDIANA	0 ( ... )	... ( ... )	3 ( 1.0)	224 ( 5.0)!	96 ( 1.1)	229 ( 1.1)
IOWA†	0 ( ... )	... ( ... )	13 ( 2.6)	229 ( 2.5)!	87 ( 2.6)	229 ( 1.3)
KENTUCKY	1 ( ... )	... ( ... )	10 ( 2.7)	215 ( 2.4)!	89 ( 2.8)	220 ( 1.3)
LOUISIANA	0 ( ... )	... ( ... )	7 ( 1.4)	208 ( 4.1)!	93 ( 1.5)	209 ( 1.2)
MAINE	1 ( ... )	... ( ... )	10 ( 2.1)	228 ( 3.3)!	89 ( 2.3)	233 ( 1.1)
MARYLAND	1 ( ... )	... ( ... )	11 ( 2.3)	219 ( 4.5)!	89 ( 2.4)	222 ( 1.7)
MASSACHUSETTS	0 ( 0.2)	... ( ... )	11 ( 1.9)	230 ( 3.3)	88 ( 1.9)	229 ( 1.5)
MICHIGAN†	1 ( ... )	... ( ... )	12 ( 2.0)	220 ( 4.3)	87 ( 1.9)	227 ( 1.4)
MINNESOTA	1 ( ... )	... ( ... )	15 ( 2.5)	229 ( 2.9)	84 ( 2.3)	233 ( 1.3)
MISSISSIPPI	0 ( 0.3)	... ( ... )	7 ( 1.2)	202 ( 3.9)	93 ( 1.3)	209 ( 1.2)
MISSOURI	0 ( ... )	... ( ... )	8 ( 1.9)	224 ( 2.8)!	92 ( 1.9)	225 ( 1.3)
MONTANA†	0 ( 0.1)	... ( ... )	12 ( 2.3)	226 ( 3.8)!	88 ( 2.3)	229 ( 1.2)
NEBRASKA	0 ( ... )	... ( ... )	11 ( 2.5)	221 ( 3.3)!	89 ( 2.5)	228 ( 1.3)
NEVADA†	1 ( 0.5)	... ( ... )	13 ( 2.5)	214 ( 3.4)!	87 ( 2.6)	219 ( 1.5)
NEW JERSEY†	1 ( 0.5)	... ( ... )	5 ( 1.3)	219 ( 4.2)!	93 ( 1.4)	228 ( 1.6)
NEW MEXICO	2 ( 0.8)	... ( ... )	15 ( 2.7)	215 ( 2.7)	83 ( 2.8)	214 ( 2.2)
NEW YORK†	0 ( ... )	... ( ... )	8 ( 1.6)	214 ( 7.4)	92 ( 1.6)	224 ( 1.2)
NORTH CAROLINA	0 ( ... )	... ( ... )	10 ( 1.9)	230 ( 3.0)	89 ( 1.9)	223 ( 1.2)
NORTH DAKOTA	0 ( ... )	... ( ... )	10 ( 2.3)	227 ( 3.0)!	90 ( 2.3)	232 ( 1.1)
OREGON	0 ( ... )	... ( ... )	10 ( 1.9)	222 ( 4.1)	89 ( 1.9)	224 ( 1.4)
PENNSYLVANIA†	0 ( ... )	... ( ... )	4 ( 1.2)	221 ( 4.5)!	96 ( 1.2)	227 ( 1.3)
RHODE ISLAND	1 ( 0.4)	... ( ... )	12 ( 1.9)	221 ( 4.4)	87 ( 1.8)	220 ( 1.3)
SOUTH CAROLINA†	1 ( ... )	... ( ... )	9 ( 1.6)	211 ( 3.4)	91 ( 1.6)	213 ( 1.3)
TENNESSEE	0 ( ... )	... ( ... )	7 ( 1.5)	214 ( 4.2)!	93 ( 1.6)	220 ( 1.5)
TEXAS	0 ( ... )	... ( ... )	8 ( 1.9)	216 ( 6.6)!	92 ( 1.9)	229 ( 1.5)
UTAH	1 ( 0.7)	... ( ... )	10 ( 1.9)	230 ( 2.7)	88 ( 2.1)	226 ( 1.2)
VERMONT†	1 ( 0.6)	... ( ... )	20 ( 2.4)	224 ( 2.5)	79 ( 2.4)	225 ( 1.4)
VIRGINIA	1 ( 0.7)	... ( ... )	9 ( 1.8)	219 ( 3.6)!	90 ( 1.9)	223 ( 1.3)
WASHINGTON	1 ( 0.6)	... ( ... )	14 ( 2.3)	223 ( 3.1)	84 ( 2.3)	225 ( 1.3)
WEST VIRGINIA	0 ( ... )	... ( ... )	10 ( 2.3)	220 ( 2.8)!	90 ( 2.3)	224 ( 1.2)
WISCONSIN	0 ( ... )	... ( ... )	9 ( 2.4)	224 ( 3.9)!	90 ( 2.4)	232 ( 1.1)
WYOMING	0 ( ... )	... ( ... )	11 ( 2.0)	223 ( 2.4)	89 ( 2.1)	223 ( 1.5)
<b>Other Jurisdictions</b>						
DDESS	0 ( ... )	... ( ... )	10 ( 1.0)	225 ( 3.4)	90 ( 1.0)	225 ( 1.1)
DoDDS	7 ( 0.7)	224 ( 4.1)	26 ( 2.0)	222 ( 1.5)	66 ( 2.0)	224 ( 0.8)
GUAM	5 ( 0.6)	... ( ... )	13 ( 1.1)	191 ( 3.8)	82 ( 1.2)	189 ( 1.8)

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).

... Characteristics of the sample do not permit a reliable estimate.

! Interpret with caution — the nature of the sample does not allow accurate determination of the variability of this statistic.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 6.6**

**1996 Mathematics Assessment**



POPULATION:

1996 Grade 4 Public School Students

REPORTED STATISTICS:

Percentage of Students and Average Mathematics Scale Score

TEACHERS' REPORTS ON:

Mathematics Reasoning Development/Analytical Abilities Addressed

*In this mathematics class, how often do you address developing reasoning and analytical ability to solve unique problems?*

A Little or None	Some	A Lot
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JURISDICTIONS	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )
<b>Nation</b>						
NATION	7 ( 1.2)	222 ( 3.4)	39 ( 2.6)	219 ( 1.7)	54 ( 2.5)	226 ( 1.6)
NORTHEAST	13 ( 4.3)	227 ( 3.4)!	35 ( 3.7)	218 ( 4.6)	52 ( 3.7)	232 ( 2.8)
SOUTHEAST	7 ( 1.9)	215 ( 5.7)!	38 ( 5.6)	214 ( 2.6)	55 ( 5.3)	218 ( 4.8)
CENTRAL	6 ( 2.8)	232 ( 8.0)!	49 ( 6.2)	229 ( 3.0)	45 ( 5.5)	232 ( 2.8)
WEST	4 ( 1.1)	210 ( 8.5)!	36 ( 4.3)	214 ( 2.7)	60 ( 4.6)	225 ( 2.6)
<b>States</b>						
ALABAMA	9 ( 1.8)	204 ( 3.3)	45 ( 3.4)	210 ( 1.6)	46 ( 3.2)	214 ( 2.1)
ALASKA†	15 ( 2.4)	217 ( 3.4)	43 ( 3.4)	223 ( 2.1)	42 ( 3.4)	227 ( 2.4)
ARIZONA	12 ( 1.9)	215 ( 3.5)	44 ( 2.7)	219 ( 2.2)	44 ( 2.9)	218 ( 2.9)
ARKANSAS†	12 ( 2.4)	211 ( 3.5)	55 ( 4.4)	216 ( 1.7)	33 ( 4.4)	218 ( 2.4)
CALIFORNIA	8 ( 1.9)	202 ( 5.4)!	45 ( 3.3)	208 ( 2.3)	47 ( 3.7)	212 ( 2.7)
COLORADO	9 ( 1.6)	219 ( 4.3)	47 ( 3.1)	225 ( 1.9)	45 ( 3.2)	228 ( 1.7)
CONNECTICUT	5 ( 1.4)	221 ( 4.5)!	38 ( 3.1)	231 ( 1.7)	57 ( 3.4)	234 ( 1.7)
DELAWARE	11 ( 0.6)	209 ( 2.0)	35 ( 1.2)	213 ( 1.8)	54 ( 1.2)	218 ( 1.1)
DISTRICT OF COLUMBIA	12 ( 0.5)	180 ( 3.7)	38 ( 0.9)	186 ( 1.8)	50 ( 1.0)	189 ( 1.3)
FLORIDA	9 ( 1.7)	210 ( 4.5)	39 ( 2.5)	215 ( 1.9)	51 ( 2.7)	218 ( 1.8)
GEORGIA	6 ( 1.2)	207 ( 4.2)!	40 ( 2.3)	214 ( 2.2)	55 ( 2.5)	218 ( 2.1)
HAWAII	13 ( 1.8)	208 ( 3.0)	43 ( 2.9)	215 ( 2.5)	44 ( 2.8)	218 ( 1.5)
INDIANA	13 ( 2.6)	225 ( 3.3)!	47 ( 3.9)	229 ( 1.3)	40 ( 4.3)	231 ( 2.1)
IOWA†	13 ( 3.0)	223 ( 3.5)!	46 ( 3.7)	230 ( 1.4)	41 ( 4.1)	231 ( 1.7)
KENTUCKY	8 ( 2.0)	220 ( 3.8)!	40 ( 3.3)	217 ( 1.8)	52 ( 3.3)	221 ( 1.7)
LOUISIANA	12 ( 1.9)	202 ( 3.5)	40 ( 3.0)	209 ( 1.3)	47 ( 3.2)	211 ( 2.1)
MAINE	6 ( 1.7)	225 ( 4.1)!	37 ( 3.2)	232 ( 1.6)	56 ( 3.2)	234 ( 1.3)
MARYLAND	8 ( 2.1)	209 ( 5.8)!	38 ( 3.4)	215 ( 2.2)	54 ( 3.2)	229 ( 2.1)
MASSACHUSETTS	9 ( 1.8)	231 ( 3.0)!	38 ( 3.5)	227 ( 1.6)	53 ( 3.8)	231 ( 2.1)
MICHIGAN†	7 ( 1.7)	210 ( 3.7)!	48 ( 3.7)	224 ( 2.2)	46 ( 3.9)	231 ( 1.8)
MINNESOTA	10 ( 2.2)	226 ( 3.9)!	50 ( 3.4)	231 ( 1.4)	40 ( 3.3)	236 ( 1.6)
MISSISSIPPI	10 ( 2.2)	211 ( 3.7)!	39 ( 3.7)	207 ( 1.9)	51 ( 3.8)	209 ( 1.9)
MISSOURI	11 ( 1.6)	218 ( 2.6)	50 ( 3.0)	226 ( 1.2)	39 ( 3.2)	226 ( 1.6)
MONTANA†	6 ( 2.1)	230 ( 5.2)!	48 ( 4.1)	226 ( 1.5)	45 ( 4.0)	230 ( 1.8)
NEBRASKA	7 ( 2.0)	224 ( 2.3)!	52 ( 3.6)	225 ( 1.9)	41 ( 3.3)	231 ( 1.8)
NEVADA†	6 ( 1.2)	208 ( 5.4)!	36 ( 3.4)	217 ( 1.8)	58 ( 3.3)	220 ( 1.9)
NEW JERSEY†	5 ( 1.3)	221 ( 4.9)!	36 ( 4.4)	225 ( 2.3)	59 ( 4.2)	229 ( 2.2)
NEW MEXICO	13 ( 2.5)	206 ( 5.8)!	46 ( 3.1)	214 ( 1.9)	41 ( 2.9)	217 ( 2.4)
NEW YORK†	9 ( 1.6)	215 ( 4.4)	31 ( 3.1)	219 ( 2.6)	59 ( 3.6)	227 ( 1.5)
NORTH CAROLINA	4 ( 1.3)	222 ( 4.2)!	36 ( 3.2)	221 ( 1.8)	59 ( 3.7)	226 ( 1.4)
NORTH DAKOTA	14 ( 2.6)	231 ( 2.6)	47 ( 3.7)	230 ( 1.8)	40 ( 3.8)	233 ( 1.3)
OREGON	10 ( 2.0)	218 ( 3.1)!	45 ( 3.6)	223 ( 1.7)	45 ( 3.7)	225 ( 1.8)
PENNSYLVANIA†	11 ( 2.3)	226 ( 3.5)!	40 ( 3.6)	225 ( 1.7)	50 ( 3.9)	228 ( 1.6)
RHODE ISLAND	9 ( 1.9)	216 ( 5.2)!	41 ( 3.0)	218 ( 2.3)	50 ( 3.3)	223 ( 1.6)
SOUTH CAROLINA†	8 ( 1.8)	204 ( 2.5)!	39 ( 2.8)	214 ( 1.5)	53 ( 3.1)	214 ( 1.9)
TENNESSEE	9 ( 2.0)	206 ( 4.2)!	46 ( 3.3)	221 ( 2.0)	45 ( 3.3)	221 ( 1.7)
TEXAS	3 ( 0.8)	... ( ... )	27 ( 3.4)	223 ( 2.6)	70 ( 3.4)	231 ( 1.7)
UTAH	12 ( 2.4)	226 ( 3.7)	45 ( 2.9)	226 ( 1.6)	43 ( 3.0)	228 ( 1.7)
VERMONT†	4 ( 1.2)	216 ( 6.4)!	40 ( 3.0)	224 ( 1.7)	56 ( 3.2)	226 ( 1.5)
VIRGINIA	8 ( 1.5)	212 ( 2.9)	45 ( 3.2)	221 ( 2.1)	47 ( 3.2)	226 ( 1.6)
WASHINGTON	14 ( 2.5)	214 ( 3.6)	46 ( 3.1)	226 ( 1.4)	40 ( 2.7)	227 ( 1.4)
WEST VIRGINIA	11 ( 2.5)	219 ( 2.7)!	46 ( 4.1)	222 ( 1.6)	43 ( 4.0)	226 ( 1.7)
WISCONSIN	11 ( 2.5)	225 ( 4.1)!	46 ( 4.0)	230 ( 1.3)	44 ( 4.0)	235 ( 1.8)
WYOMING	7 ( 1.9)	221 ( 3.1)!	46 ( 3.5)	222 ( 2.0)	46 ( 3.6)	224 ( 1.7)
<b>Other Jurisdictions</b>						
DDESS	10 ( 0.9)	221 ( 4.2)	35 ( 1.3)	222 ( 1.4)	55 ( 1.4)	227 ( 1.4)
DoDDS	3 ( 0.7)	214 ( 4.7)!	34 ( 1.6)	222 ( 1.2)	63 ( 1.7)	224 ( 1.0)
GUAM	22 ( 1.1)	193 ( 2.7)	46 ( 1.3)	188 ( 2.3)	32 ( 1.3)	188 ( 2.8)

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).

... Characteristics of the sample do not permit a reliable estimate.

! Interpret with caution — the nature of the sample does not allow accurate determination of the variability of this statistic.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 6.7**

**1996 Mathematics Assessment**



POPULATION:

1996 Grade 4 Public School Students

REPORTED STATISTICS:

Percentage of Students and Average Mathematics Scale Score

TEACHERS' REPORTS ON:

Mathematics Communication Skills Addressed

*In this mathematics class, how often do you address learning how to communicate ideas in mathematics effectively?*

A Little or None	Some	A Lot
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JURISDICTIONS	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )
<b>Nation</b>						
NATION	17 ( 1.9)	227 ( 2.1)	44 ( 2.7)	219 ( 2.0)	39 ( 2.6)	225 ( 1.6)
NORTHEAST	17 ( 4.3)	229 ( 2.8)!	35 ( 6.4)	229 ( 5.0)!	47 ( 7.6)	223 ( 2.7)
SOUTHEAST	11 ( 3.7)	213 ( 5.8)!	50 ( 4.3)	214 ( 3.2)	39 ( 5.0)	220 ( 5.0)
CENTRAL	28 ( 4.2)	234 ( 2.4)	38 ( 5.6)	226 ( 2.5)	33 ( 4.5)	233 ( 3.3)
WEST	13 ( 3.5)	222 ( 4.3)!	49 ( 5.2)	216 ( 3.6)	39 ( 4.3)	226 ( 2.5)
<b>States</b>						
ALABAMA	17 ( 2.7)	208 ( 2.2)	42 ( 3.0)	213 ( 1.8)	40 ( 3.0)	211 ( 2.1)
ALASKA†	26 ( 3.1)	219 ( 2.9)	44 ( 3.5)	224 ( 2.3)	30 ( 3.2)	227 ( 2.9)
ARIZONA	20 ( 2.4)	215 ( 3.1)	41 ( 2.6)	220 ( 2.1)	39 ( 2.4)	218 ( 3.1)
ARKANSAS†	23 ( 3.7)	216 ( 2.5)	40 ( 3.5)	215 ( 2.3)	37 ( 4.0)	218 ( 1.9)
CALIFORNIA	15 ( 2.5)	206 ( 3.5)	47 ( 3.6)	207 ( 2.7)	38 ( 3.4)	214 ( 2.8)
COLORADO	16 ( 2.2)	221 ( 2.9)	49 ( 2.9)	226 ( 1.6)	35 ( 3.2)	228 ( 2.0)
CONNECTICUT	13 ( 2.0)	227 ( 3.1)	36 ( 3.1)	234 ( 1.8)	51 ( 3.0)	232 ( 1.8)
DELAWARE	14 ( 0.7)	207 ( 2.1)	39 ( 1.0)	215 ( 1.5)	47 ( 1.1)	218 ( 1.4)
DISTRICT OF COLUMBIA	17 ( 0.6)	185 ( 2.4)	34 ( 0.9)	188 ( 1.4)	49 ( 0.9)	187 ( 1.9)
FLORIDA	16 ( 1.8)	213 ( 2.9)	37 ( 2.8)	217 ( 1.8)	47 ( 3.0)	216 ( 1.6)
GEORGIA	11 ( 1.7)	212 ( 3.3)	39 ( 2.7)	215 ( 2.1)	49 ( 2.7)	217 ( 2.2)
HAWAII	18 ( 2.1)	213 ( 2.8)	48 ( 2.7)	213 ( 2.7)	34 ( 2.8)	220 ( 2.1)
INDIANA	25 ( 3.7)	227 ( 2.1)	46 ( 4.1)	230 ( 1.1)	29 ( 4.0)	231 ( 2.8)
IOWA†	25 ( 3.8)	226 ( 2.2)	43 ( 3.9)	231 ( 1.5)	31 ( 3.9)	230 ( 2.2)
KENTUCKY	11 ( 2.5)	218 ( 3.9)!	34 ( 4.0)	220 ( 2.1)	55 ( 4.4)	220 ( 1.7)
LOUISIANA	16 ( 2.3)	207 ( 3.1)	37 ( 3.1)	211 ( 1.6)	48 ( 3.4)	209 ( 1.9)
MAINE	15 ( 2.5)	231 ( 3.2)	36 ( 3.3)	233 ( 1.6)	49 ( 4.1)	233 ( 1.7)
MARYLAND	5 ( 1.4)	213 ( 7.7)!	41 ( 3.3)	218 ( 2.3)	53 ( 3.4)	226 ( 2.5)
MASSACHUSETTS	16 ( 2.1)	223 ( 2.3)	38 ( 2.9)	228 ( 1.6)	46 ( 3.2)	232 ( 2.4)
MICHIGAN†	23 ( 3.4)	222 ( 3.0)	44 ( 3.7)	227 ( 2.0)	32 ( 3.4)	228 ( 2.2)
MINNESOTA	27 ( 2.8)	230 ( 1.9)	43 ( 2.8)	231 ( 1.5)	29 ( 3.3)	236 ( 2.0)
MISSISSIPPI	13 ( 2.0)	212 ( 2.4)	43 ( 3.5)	208 ( 2.1)	45 ( 3.6)	208 ( 1.8)
MISSOURI	28 ( 2.8)	225 ( 1.8)	38 ( 3.5)	224 ( 1.4)	34 ( 3.3)	227 ( 2.5)
MONTANA†	16 ( 2.7)	223 ( 2.8)	53 ( 3.6)	228 ( 1.8)	31 ( 3.6)	231 ( 2.0)
NEBRASKA	19 ( 3.1)	227 ( 1.9)	50 ( 3.7)	226 ( 1.7)	32 ( 3.2)	230 ( 2.3)
NEVADA†	15 ( 2.8)	211 ( 3.2)	38 ( 3.3)	217 ( 2.2)	47 ( 3.7)	221 ( 1.8)
NEW JERSEY†	15 ( 2.8)	229 ( 3.1)	39 ( 3.8)	226 ( 2.8)	46 ( 3.5)	229 ( 2.1)
NEW MEXICO	23 ( 2.9)	209 ( 5.2)	35 ( 3.2)	219 ( 1.9)	42 ( 3.0)	214 ( 2.3)
NEW YORK†	16 ( 2.0)	218 ( 3.4)	39 ( 3.1)	224 ( 1.8)	45 ( 3.4)	225 ( 1.9)
NORTH CAROLINA	12 ( 1.9)	225 ( 2.6)	36 ( 3.2)	226 ( 2.0)	52 ( 3.5)	222 ( 1.7)
NORTH DAKOTA	28 ( 3.2)	232 ( 2.1)	45 ( 3.6)	231 ( 1.5)	27 ( 3.2)	233 ( 1.7)
OREGON	23 ( 2.8)	219 ( 2.3)	43 ( 3.3)	224 ( 1.8)	34 ( 3.2)	227 ( 2.1)
PENNSYLVANIA†	19 ( 3.0)	228 ( 2.8)	43 ( 3.4)	227 ( 1.5)	38 ( 3.1)	225 ( 2.1)
RHODE ISLAND	23 ( 2.8)	219 ( 2.3)	40 ( 3.1)	219 ( 2.3)	37 ( 3.4)	223 ( 2.4)
SOUTH CAROLINA†	14 ( 2.5)	211 ( 2.3)	42 ( 3.3)	213 ( 1.7)	44 ( 3.2)	214 ( 1.9)
TENNESSEE	19 ( 2.6)	217 ( 2.2)	38 ( 3.5)	222 ( 2.4)	43 ( 3.4)	219 ( 2.3)
TEXAS	12 ( 2.4)	223 ( 4.5)	32 ( 3.1)	225 ( 2.2)	55 ( 3.7)	231 ( 1.8)
UTAH	24 ( 3.0)	225 ( 2.4)	43 ( 2.8)	227 ( 1.7)	33 ( 3.0)	227 ( 1.7)
VERMONT†	7 ( 1.5)	219 ( 6.0)!	35 ( 3.3)	221 ( 1.8)	58 ( 3.4)	228 ( 1.4)
VIRGINIA	18 ( 2.7)	218 ( 3.7)	36 ( 2.7)	221 ( 1.8)	46 ( 3.0)	225 ( 1.8)
WASHINGTON	31 ( 2.7)	221 ( 2.0)	40 ( 2.5)	225 ( 1.6)	30 ( 2.2)	228 ( 1.9)
WEST VIRGINIA	21 ( 2.9)	223 ( 1.9)	45 ( 3.3)	222 ( 1.5)	33 ( 3.3)	226 ( 1.5)
WISCONSIN	26 ( 3.8)	230 ( 1.7)	43 ( 3.6)	231 ( 1.6)	31 ( 3.3)	233 ( 2.5)
WYOMING	21 ( 3.3)	220 ( 2.4)	49 ( 4.0)	223 ( 1.8)	30 ( 3.1)	224 ( 1.9)
<b>Other Jurisdictions</b>						
DDESS	19 ( 1.0)	220 ( 3.0)	38 ( 1.3)	227 ( 1.6)	43 ( 0.9)	225 ( 2.1)
DoDDS	4 ( 0.7)	215 ( 3.8)	30 ( 1.6)	222 ( 1.1)	66 ( 1.7)	224 ( 1.0)
GUAM	24 ( 1.1)	192 ( 3.2)	37 ( 1.2)	190 ( 2.2)	39 ( 1.2)	186 ( 2.2)

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).  
! Interpret with caution — the nature of the sample does not allow accurate determination of the variability of this statistic.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 6.8**

**1996 Mathematics Assessment**



POPULATION:

1996 Grade 4 Public School Students

REPORTED STATISTICS:

Percentage of Students and Average Mathematics Scale Score

TEACHERS' REPORTS ON:

Writing About Solving Mathematics Problems

*In this mathematics class, how often do the students in this class write a few sentences about how to solve mathematics problems?*

Never or Hardly Ever	Once or Twice a Month	Once or Twice a Week	Almost Every Day
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JURISDICTIONS	PCT ( SE )		SS ( SE )		PCT ( SE )		SS ( SE )		PCT ( SE )		SS ( SE )	
<b>Nation</b>	27 ( 2.4)	220 ( 1.7)	35 ( 2.8)	223 ( 2.5)	27 ( 2.2)	223 ( 1.8)	10 ( 1.6)	233 ( 3.2)				
NATION	27 ( 2.4)	220 ( 1.7)	35 ( 2.8)	223 ( 2.5)	27 ( 2.2)	223 ( 1.8)	10 ( 1.6)	233 ( 3.2)				
NORTHEAST	22 ( 4.5)	227 ( 4.5)!	29 ( 6.9)	222 (11.5)!	32 ( 7.2)	224 ( 3.9)!	18 ( 4.4)	234 ( 6.1)!				
SOUTHEAST	27 ( 5.5)	212 ( 3.1)!	48 ( 4.0)	219 ( 4.3)	22 ( 4.7)	216 ( 2.9)!	4 ( 1.3)	... ( ... )				
CENTRAL	34 ( 6.0)	228 ( 2.4)	38 ( 5.6)	230 ( 3.2)	20 ( 4.1)	232 ( 5.5)!	8 ( 2.2)	240 ( 6.1)!				
WEST	24 ( 3.5)	216 ( 3.1)	29 ( 4.6)	220 ( 5.2)	34 ( 2.4)	221 ( 3.0)	13 ( 3.2)	231 ( 4.8)!				
<b>States</b>												
ALABAMA	35 ( 3.2)	210 ( 1.8)	39 ( 3.4)	212 ( 2.3)	23 ( 3.1)	212 ( 2.9)	3 ( 1.0)	215 (10.2)!				
ALASKA†	42 ( 3.1)	220 ( 2.6)	34 ( 2.9)	224 ( 1.8)	17 ( 2.1)	229 ( 2.1)	7 ( 1.1)	233 ( 7.4)				
ARIZONA	26 ( 2.6)	214 ( 2.8)	40 ( 3.5)	221 ( 2.0)	27 ( 2.8)	217 ( 4.5)	8 ( 1.7)	221 ( 3.7)!				
ARKANSAS†	41 ( 4.5)	215 ( 2.5)	43 ( 4.4)	217 ( 2.1)	15 ( 3.0)	218 ( 4.0)!	1 ( ... )	... ( ... )				
CALIFORNIA	15 ( 2.1)	202 ( 3.7)	33 ( 3.2)	212 ( 2.8)	38 ( 3.4)	208 ( 2.7)	13 ( 2.7)	217 ( 5.7)!				
COLORADO	24 ( 3.1)	226 ( 2.3)	38 ( 3.3)	224 ( 1.6)	29 ( 3.3)	229 ( 2.1)	9 ( 1.6)	226 ( 3.1)				
CONNECTICUT	13 ( 2.1)	227 ( 3.7)	34 ( 2.7)	230 ( 1.9)	39 ( 2.8)	236 ( 1.7)	14 ( 2.5)	234 ( 4.4)				
DELAWARE	19 ( 0.7)	211 ( 1.9)	41 ( 1.2)	214 ( 1.2)	30 ( 1.2)	217 ( 1.5)	9 ( 0.6)	219 ( 2.7)				
DISTRICT OF COLUMBIA	21 ( 0.7)	184 ( 1.8)	37 ( 0.7)	185 ( 2.0)	34 ( 0.8)	193 ( 1.2)	7 ( 0.2)	186 ( 2.1)				
FLORIDA	34 ( 2.8)	218 ( 2.0)	41 ( 3.0)	218 ( 1.9)	22 ( 2.3)	211 ( 2.3)	4 ( 1.1)	214 ( 8.4)!				
GEORGIA	26 ( 2.7)	213 ( 2.0)	45 ( 3.3)	216 ( 2.0)	26 ( 2.7)	217 ( 3.2)	4 ( 1.0)	215 ( 5.2)!				
HAWAII	33 ( 2.7)	212 ( 2.0)	38 ( 2.6)	218 ( 2.2)	25 ( 2.7)	216 ( 3.0)	3 ( 1.6)	222 (13.3)!				
INDIANA	46 ( 3.7)	230 ( 1.4)	38 ( 4.0)	227 ( 2.2)	14 ( 2.3)	229 ( 2.6)	2 ( 1.0)	... ( ... )				
IOWA†	40 ( 4.2)	228 ( 1.6)	43 ( 3.6)	230 ( 1.7)	13 ( 2.5)	232 ( 3.0)	4 ( 1.5)	229 ( 4.9)!				
KENTUCKY	8 ( 2.2)	221 ( 5.0)!	38 ( 3.8)	222 ( 2.1)	42 ( 3.9)	218 ( 2.1)	12 ( 2.7)	220 ( 3.3)!				
LOUISIANA	39 ( 3.3)	209 ( 1.6)	34 ( 3.2)	210 ( 2.3)	23 ( 2.8)	209 ( 2.5)	4 ( 1.7)	212 ( 9.6)!				
MAINE	13 ( 2.7)	229 ( 2.4)!	34 ( 3.6)	232 ( 2.0)	36 ( 3.3)	235 ( 1.7)	18 ( 3.1)	232 ( 2.5)				
MARYLAND	6 ( 1.6)	208 ( 4.2)!	31 ( 3.3)	221 ( 2.9)	50 ( 3.5)	223 ( 2.1)	13 ( 2.7)	228 ( 5.1)!				
MASSACHUSETTS	20 ( 3.3)	222 ( 2.6)	40 ( 3.3)	228 ( 1.6)	31 ( 2.9)	234 ( 2.6)	9 ( 2.1)	235 ( 3.7)!				
MICHIGAN†	25 ( 3.6)	222 ( 2.1)	41 ( 3.7)	225 ( 2.2)	30 ( 4.3)	231 ( 2.7)	3 ( 1.3)	234 ( 4.4)!				
MINNESOTA	39 ( 3.5)	231 ( 1.5)	37 ( 3.1)	233 ( 1.8)	20 ( 2.7)	233 ( 1.8)	3 ( 1.0)	241 ( 5.2)!				
MISSISSIPPI	20 ( 2.7)	209 ( 2.3)	39 ( 3.3)	210 ( 2.2)	33 ( 3.4)	207 ( 2.3)	9 ( 1.9)	209 ( 4.2)!				
MISSOURI	43 ( 3.5)	224 ( 1.5)	38 ( 4.0)	226 ( 1.8)	15 ( 2.1)	225 ( 2.9)	4 ( 1.4)	231 ( 2.9)!				
MONTANA†	31 ( 4.3)	225 ( 2.3)	39 ( 3.6)	228 ( 2.0)	26 ( 3.4)	233 ( 1.6)	4 ( 1.7)	229 ( 8.5)!				
NEBRASKA	31 ( 3.5)	227 ( 2.1)	49 ( 4.0)	226 ( 2.0)	18 ( 3.0)	232 ( 2.8)	2 ( 1.1)	228 ( 7.8)!				
NEVADA†	22 ( 3.0)	212 ( 2.3)	33 ( 3.3)	218 ( 2.4)	33 ( 3.0)	223 ( 1.8)	13 ( 2.1)	220 ( 3.0)				
NEW JERSEY†	23 ( 3.2)	226 ( 3.0)	44 ( 3.7)	227 ( 2.4)	27 ( 3.2)	229 ( 2.7)	6 ( 1.7)	231 ( 6.5)!				
NEW MEXICO	33 ( 3.0)	211 ( 3.5)	39 ( 3.0)	215 ( 2.4)	22 ( 2.8)	219 ( 2.5)	6 ( 1.6)	212 ( 6.2)!				
NEW YORK†	32 ( 2.6)	225 ( 2.3)	38 ( 3.0)	224 ( 1.9)	22 ( 2.2)	223 ( 2.7)	8 ( 1.6)	217 ( 5.7)!				
NORTH CAROLINA	14 ( 2.1)	220 ( 3.4)	41 ( 3.7)	227 ( 1.6)	36 ( 3.6)	222 ( 2.0)	10 ( 2.8)	226 ( 3.6)!				
NORTH DAKOTA	47 ( 3.7)	230 ( 1.3)	32 ( 3.4)	229 ( 2.1)	19 ( 2.7)	237 ( 1.7)	2 ( 0.8)	... ( ... )				
OREGON	25 ( 3.2)	223 ( 2.4)	36 ( 3.2)	221 ( 1.9)	33 ( 2.8)	225 ( 2.3)	6 ( 1.7)	237 ( 2.8)!				
PENNSYLVANIA†	38 ( 3.6)	227 ( 1.9)	38 ( 3.1)	227 ( 1.9)	21 ( 2.9)	227 ( 2.9)	4 ( 1.4)	228 ( 7.5)!				
RHODE ISLAND	32 ( 2.9)	215 ( 2.6)	35 ( 2.4)	222 ( 2.1)	28 ( 2.8)	223 ( 2.2)	4 ( 1.3)	228 ( 3.8)!				
SOUTH CAROLINA†	29 ( 3.1)	214 ( 2.3)	37 ( 3.3)	211 ( 1.9)	29 ( 3.0)	215 ( 2.6)	4 ( 1.2)	211 ( 7.1)!				
TENNESSEE	45 ( 3.6)	218 ( 1.8)	36 ( 3.3)	222 ( 1.9)	17 ( 2.6)	220 ( 3.1)	2 ( 0.6)	... ( ... )				
TEXAS	34 ( 3.2)	226 ( 2.5)	37 ( 2.8)	227 ( 1.8)	22 ( 2.5)	233 ( 3.4)	7 ( 2.1)	224 ( 4.6)!				
UTAH	38 ( 3.5)	226 ( 2.0)	39 ( 3.7)	227 ( 1.6)	20 ( 2.6)	231 ( 2.5)	3 ( 1.0)	217 ( 3.7)!				
VERMONT†	3 ( 0.8)	... ( ... )	27 ( 3.0)	226 ( 2.0)	63 ( 3.1)	226 ( 1.6)	8 ( 1.7)	223 ( 3.4)!				
VIRGINIA	35 ( 2.8)	217 ( 2.0)	41 ( 3.0)	224 ( 1.9)	21 ( 2.6)	226 ( 2.7)	4 ( 1.1)	237 ( 8.1)!				
WASHINGTON	36 ( 3.9)	218 ( 2.0)	42 ( 3.4)	228 ( 1.3)	18 ( 2.6)	230 ( 2.2)	3 ( 1.0)	225 ( 4.5)!				
WEST VIRGINIA	26 ( 3.5)	220 ( 1.9)	45 ( 3.7)	224 ( 1.6)	23 ( 3.3)	223 ( 2.2)	6 ( 1.9)	230 ( 3.0)!				
WISCONSIN	36 ( 3.7)	231 ( 1.4)	42 ( 3.2)	232 ( 1.6)	19 ( 2.9)	233 ( 3.0)	3 ( 1.0)	229 ( 8.0)!				
WYOMING	39 ( 3.8)	222 ( 1.7)	37 ( 3.1)	223 ( 2.4)	20 ( 2.7)	224 ( 2.5)	3 ( 1.1)	227 ( 4.9)!				
<b>Other Jurisdictions</b>												
DDESS	26 ( 0.7)	224 ( 1.9)	45 ( 1.0)	223 ( 1.4)	23 ( 1.2)	229 ( 2.0)	6 ( 0.7)	225 ( 3.6)				
DoDDS	2 ( 0.7)	... ( ... )	18 ( 1.7)	221 ( 1.7)	53 ( 2.3)	223 ( 0.9)	27 ( 1.9)	225 ( 2.0)				
GUAM	32 ( 1.3)	193 ( 2.2)	31 ( 1.4)	189 ( 3.2)	27 ( 1.1)	188 ( 2.9)	9 ( 0.7)	182 ( 4.0)				

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).

... Characteristics of the sample do not permit a reliable estimate.

! Interpret with caution — the nature of the sample does not allow accurate determination of the variability of this statistic.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 6.9**

**1996 Mathematics Assessment**



POPULATION:

1996 Grade 4 Public School Students

REPORTED STATISTICS:

Percentage of Students and Average Mathematics Scale Score

STUDENTS' REPORTS ON:

Writing About Solving Mathematics Problems

JURISDICTIONS	Never or Hardly Ever		Once or Twice a Month		Once or Twice a Week		Almost Every Day	
	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )
<b>Nation</b>								
NATION	33 ( 1.4)	226 ( 1.3)	17 ( 0.7)	231 ( 1.3)	27 ( 0.9)	223 ( 1.6)	22 ( 1.2)	211 ( 1.9)
NORTHEAST	34 ( 3.3)	231 ( 2.8)	15 ( 1.5)	235 ( 3.1)	31 ( 2.8)	229 ( 2.9)	21 ( 2.3)	212 ( 4.1)
SOUTHEAST	36 ( 3.0)	218 ( 3.8)	15 ( 1.3)	223 ( 2.9)	27 ( 2.2)	218 ( 3.1)	22 ( 1.4)	205 ( 2.9)
CENTRAL	35 ( 2.9)	233 ( 1.8)	20 ( 1.5)	236 ( 3.0)	26 ( 1.0)	229 ( 3.6)	19 ( 3.3)	221 ( 3.9)
WEST	30 ( 2.0)	222 ( 2.2)	18 ( 1.0)	229 ( 2.4)	27 ( 1.2)	219 ( 3.2)	25 ( 1.9)	210 ( 3.1)
<b>States</b>								
ALABAMA	43 ( 1.5)	217 ( 1.4)	14 ( 0.6)	216 ( 2.3)	23 ( 1.0)	212 ( 1.9)	21 ( 1.1)	199 ( 1.7)
ALASKA†	39 ( 1.5)	227 ( 1.3)	18 ( 0.9)	228 ( 2.4)	26 ( 1.1)	225 ( 2.1)	17 ( 1.0)	213 ( 2.6)
ARIZONA	35 ( 1.7)	222 ( 2.1)	20 ( 1.1)	222 ( 2.0)	26 ( 1.3)	220 ( 2.5)	20 ( 1.4)	206 ( 2.2)
ARKANSAS†	45 ( 1.6)	219 ( 1.5)	17 ( 1.0)	222 ( 1.8)	23 ( 1.2)	216 ( 2.2)	14 ( 0.8)	201 ( 2.7)
CALIFORNIA	29 ( 2.0)	212 ( 1.8)	18 ( 1.2)	214 ( 2.9)	30 ( 1.2)	211 ( 2.1)	23 ( 1.3)	203 ( 3.0)
COLORADO	32 ( 1.5)	228 ( 1.5)	20 ( 1.0)	231 ( 1.8)	29 ( 1.1)	226 ( 1.7)	19 ( 1.3)	217 ( 2.2)
CONNECTICUT	26 ( 1.4)	232 ( 1.4)	19 ( 0.9)	241 ( 1.8)	33 ( 1.1)	235 ( 1.6)	22 ( 1.0)	222 ( 2.1)
DELAWARE	34 ( 1.2)	218 ( 1.5)	18 ( 0.9)	223 ( 2.5)	26 ( 1.3)	220 ( 1.9)	22 ( 1.0)	201 ( 2.1)
DISTRICT OF COLUMBIA	31 ( 1.0)	192 ( 2.3)	14 ( 0.7)	196 ( 2.2)	26 ( 0.8)	190 ( 2.3)	29 ( 0.9)	178 ( 1.6)
FLORIDA	36 ( 1.4)	220 ( 1.3)	19 ( 0.9)	221 ( 1.9)	26 ( 1.1)	216 ( 2.1)	20 ( 1.0)	203 ( 1.8)
GEORGIA	35 ( 1.6)	218 ( 1.7)	15 ( 1.0)	224 ( 2.4)	28 ( 1.3)	217 ( 2.0)	21 ( 1.0)	204 ( 2.0)
HAWAII	27 ( 1.2)	218 ( 1.7)	17 ( 0.9)	221 ( 2.0)	31 ( 1.2)	217 ( 2.4)	26 ( 1.2)	207 ( 2.1)
INDIANA	42 ( 1.6)	230 ( 1.2)	17 ( 0.7)	235 ( 1.7)	26 ( 1.3)	230 ( 1.4)	15 ( 1.0)	221 ( 2.0)
IOWA†	40 ( 1.9)	231 ( 1.0)	22 ( 1.1)	234 ( 1.4)	25 ( 1.2)	228 ( 1.8)	14 ( 0.9)	220 ( 2.1)
KENTUCKY	23 ( 1.4)	218 ( 1.6)	23 ( 1.0)	227 ( 1.5)	32 ( 1.2)	222 ( 1.7)	22 ( 1.5)	213 ( 1.8)
LOUISIANA	39 ( 1.2)	213 ( 1.2)	16 ( 0.9)	216 ( 2.3)	24 ( 0.9)	210 ( 1.8)	21 ( 1.0)	197 ( 1.4)
MAINE	19 ( 1.5)	233 ( 1.7)	24 ( 1.3)	236 ( 1.9)	32 ( 1.3)	232 ( 1.3)	25 ( 1.6)	229 ( 1.5)
MARYLAND	22 ( 1.3)	222 ( 2.0)	20 ( 1.0)	230 ( 2.1)	33 ( 1.2)	224 ( 2.0)	25 ( 1.5)	211 ( 2.0)
MASSACHUSETTS	28 ( 2.0)	227 ( 1.6)	21 ( 1.1)	236 ( 1.6)	33 ( 1.5)	231 ( 1.7)	19 ( 1.5)	223 ( 2.2)
MICHIGAN†	33 ( 1.4)	227 ( 1.6)	19 ( 1.1)	233 ( 1.9)	30 ( 1.1)	227 ( 1.5)	18 ( 1.3)	217 ( 2.2)
MINNESOTA	33 ( 1.7)	234 ( 1.0)	21 ( 0.9)	237 ( 1.8)	30 ( 1.3)	234 ( 1.6)	16 ( 1.1)	222 ( 2.2)
MISSISSIPPI	34 ( 1.2)	212 ( 1.8)	15 ( 0.9)	214 ( 2.2)	26 ( 1.0)	209 ( 1.4)	24 ( 1.2)	201 ( 1.5)
MISSOURI	45 ( 1.6)	228 ( 1.3)	18 ( 0.8)	231 ( 1.7)	22 ( 1.1)	224 ( 1.3)	15 ( 1.0)	209 ( 2.1)
MONTANA†	37 ( 1.7)	227 ( 1.6)	21 ( 1.1)	232 ( 2.0)	27 ( 1.2)	232 ( 1.7)	15 ( 1.2)	217 ( 2.2)
NEBRASKA	39 ( 1.6)	228 ( 1.6)	20 ( 0.8)	234 ( 1.8)	26 ( 1.1)	230 ( 1.7)	14 ( 0.9)	214 ( 2.1)
NEVADA†	31 ( 1.4)	220 ( 1.4)	19 ( 0.9)	224 ( 2.2)	29 ( 1.3)	217 ( 1.8)	22 ( 1.1)	210 ( 1.7)
NEW JERSEY†	33 ( 1.5)	230 ( 1.8)	18 ( 0.8)	233 ( 2.2)	29 ( 1.3)	230 ( 2.0)	20 ( 1.4)	214 ( 2.3)
NEW MEXICO	40 ( 1.7)	217 ( 1.6)	16 ( 0.8)	219 ( 2.5)	24 ( 1.0)	215 ( 2.6)	20 ( 1.1)	204 ( 3.1)
NEW YORK†	33 ( 1.3)	228 ( 1.4)	18 ( 0.9)	229 ( 2.1)	26 ( 1.0)	225 ( 1.7)	23 ( 1.2)	209 ( 2.3)
NORTH CAROLINA	29 ( 1.3)	226 ( 1.6)	18 ( 0.8)	234 ( 1.8)	32 ( 1.1)	228 ( 1.5)	21 ( 1.3)	210 ( 1.9)
NORTH DAKOTA	50 ( 1.3)	233 ( 1.2)	18 ( 0.8)	233 ( 2.1)	20 ( 1.0)	230 ( 2.0)	12 ( 0.8)	221 ( 1.9)
OREGON	34 ( 1.4)	225 ( 1.7)	20 ( 0.9)	230 ( 1.8)	29 ( 1.0)	226 ( 1.8)	17 ( 1.1)	214 ( 2.0)
PENNSYLVANIA†	38 ( 1.4)	228 ( 1.4)	19 ( 0.9)	232 ( 1.9)	27 ( 1.1)	228 ( 1.4)	17 ( 1.0)	215 ( 2.1)
RHODE ISLAND	32 ( 1.4)	221 ( 1.5)	18 ( 1.1)	229 ( 2.6)	31 ( 1.3)	221 ( 2.0)	18 ( 1.2)	212 ( 2.2)
SOUTH CAROLINA†	40 ( 1.4)	216 ( 1.4)	16 ( 0.9)	219 ( 2.1)	24 ( 1.1)	216 ( 2.0)	20 ( 1.1)	201 ( 1.8)
TENNESSEE	39 ( 1.3)	223 ( 1.3)	20 ( 0.9)	226 ( 2.0)	25 ( 1.2)	219 ( 2.2)	15 ( 0.8)	202 ( 2.2)
TEXAS	38 ( 1.6)	231 ( 1.4)	17 ( 0.8)	236 ( 2.1)	24 ( 1.0)	230 ( 1.8)	21 ( 1.6)	219 ( 2.5)
UTAH	36 ( 1.6)	227 ( 1.4)	19 ( 0.9)	232 ( 1.5)	28 ( 1.1)	228 ( 1.6)	17 ( 0.9)	220 ( 2.3)
VERMONT†	12 ( 1.2)	219 ( 2.5)	19 ( 1.0)	230 ( 2.3)	41 ( 1.3)	230 ( 1.6)	27 ( 1.2)	218 ( 2.1)
VIRGINIA	38 ( 1.3)	222 ( 1.6)	21 ( 0.8)	231 ( 1.9)	25 ( 1.0)	224 ( 1.6)	17 ( 1.1)	214 ( 2.1)
WASHINGTON	39 ( 1.4)	227 ( 1.3)	20 ( 0.9)	232 ( 1.5)	26 ( 1.2)	225 ( 1.9)	14 ( 0.8)	214 ( 2.3)
WEST VIRGINIA	37 ( 1.5)	225 ( 1.3)	19 ( 1.0)	230 ( 1.9)	28 ( 1.1)	225 ( 1.7)	17 ( 1.0)	212 ( 1.7)
WISCONSIN	38 ( 1.7)	233 ( 1.1)	23 ( 1.1)	238 ( 1.7)	25 ( 1.2)	232 ( 1.6)	15 ( 1.0)	219 ( 2.4)
WYOMING	41 ( 1.6)	225 ( 1.7)	19 ( 1.0)	230 ( 2.2)	26 ( 1.2)	223 ( 1.9)	14 ( 1.0)	212 ( 2.0)
<b>Other Jurisdictions</b>								
DDESS	41 ( 1.1)	228 ( 1.5)	16 ( 0.8)	229 ( 2.5)	25 ( 1.2)	222 ( 2.5)	17 ( 1.0)	215 ( 1.9)
DoDDS	20 ( 0.9)	222 ( 2.1)	18 ( 0.8)	228 ( 2.0)	35 ( 0.9)	226 ( 1.3)	26 ( 1.0)	218 ( 1.7)
GUAM	36 ( 1.2)	197 ( 2.0)	13 ( 0.9)	185 ( 5.2)	23 ( 1.1)	189 ( 3.1)	29 ( 1.3)	181 ( 2.8)

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 6.10**

**1996 Mathematics Assessment**



POPULATION:

1996 Grade 4 Public School Students

REPORTED STATISTICS:

Percentage of Students and Average Mathematics Scale Score

TEACHERS' REPORTS ON:

Discussing Mathematics Problems

*In this mathematics class, how often do the students discuss solutions to mathematics problems with other students?*

Never or Hardly Ever	Once or Twice a Month	Once or Twice a Week	Almost Every Day
----------------------	-----------------------	----------------------	------------------

JURISDICTIONS	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )
<b>Nation</b>								
NATION	6 ( 1.4)	219 ( 3.0)!	22 ( 1.7)	221 ( 1.9)	37 ( 2.3)	221 ( 1.9)	35 ( 2.1)	227 ( 1.8)
NORTHEAST	4 ( 2.5)	... ( ... )	25 ( 4.5)	220 ( 6.0)	34 ( 3.8)	225 ( 4.1)	37 ( 3.9)	230 ( 4.9)
SOUTHEAST	7 ( 3.5)	211 ( 3.5)!	15 ( 2.7)	213 ( 4.2)!	41 ( 5.2)	217 ( 3.7)	36 ( 4.1)	218 ( 5.8)
CENTRAL	9 ( 3.8)	227 ( 2.8)!	26 ( 4.1)	230 ( 2.4)	32 ( 5.0)	230 ( 4.3)	32 ( 5.6)	233 ( 2.8)!
WEST	2 ( 1.1)	... ( ... )	22 ( 2.6)	218 ( 2.8)	40 ( 3.8)	217 ( 3.3)	36 ( 3.2)	228 ( 1.9)
<b>States</b>								
ALABAMA	7 ( 1.8)	205 ( 4.5)!	21 ( 2.6)	214 ( 2.3)	40 ( 3.4)	211 ( 1.7)	32 ( 2.6)	211 ( 2.0)
ALASKA†	9 ( 2.3)	216 ( 5.2)!	21 ( 2.7)	221 ( 3.3)	28 ( 3.1)	223 ( 3.5)	43 ( 3.3)	227 ( 2.2)
ARIZONA	7 ( 1.3)	204 ( 3.5)	17 ( 2.2)	215 ( 3.9)	40 ( 3.0)	219 ( 2.7)	36 ( 3.3)	222 ( 2.7)
ARKANSAS†	11 ( 3.0)	212 ( 5.7)!	31 ( 4.3)	216 ( 2.3)	36 ( 4.3)	220 ( 2.4)	22 ( 3.6)	213 ( 2.7)
CALIFORNIA	3 ( 1.1)	... ( ... )	21 ( 3.1)	205 ( 4.4)	43 ( 2.7)	210 ( 2.2)	33 ( 3.0)	213 ( 2.8)
COLORADO	4 ( 1.0)	217 ( 7.1)!	18 ( 2.6)	220 ( 2.5)	45 ( 3.0)	227 ( 1.6)	33 ( 3.5)	229 ( 1.9)
CONNECTICUT	6 ( 1.4)	217 ( 6.7)!	17 ( 2.2)	229 ( 2.7)	37 ( 2.7)	232 ( 1.8)	41 ( 3.2)	235 ( 1.9)
DELAWARE	4 ( 0.6)	206 ( 4.3)	23 ( 1.1)	212 ( 1.6)	31 ( 1.2)	210 ( 1.7)	41 ( 1.2)	222 ( 1.1)
DISTRICT OF COLUMBIA	5 ( 0.5)	181 ( 4.1)	14 ( 0.4)	183 ( 1.7)	41 ( 1.0)	190 ( 1.7)	39 ( 0.8)	187 ( 1.4)
FLORIDA	5 ( 1.1)	217 ( 4.8)!	19 ( 2.1)	214 ( 2.8)	40 ( 2.7)	216 ( 2.0)	36 ( 2.8)	217 ( 1.8)
GEORGIA	4 ( 1.1)	207 ( 5.3)!	19 ( 2.0)	214 ( 2.5)	30 ( 2.5)	217 ( 2.2)	47 ( 2.9)	216 ( 2.2)
HAWAII	8 ( 1.6)	198 ( 6.3)	19 ( 1.6)	217 ( 2.3)	40 ( 2.7)	216 ( 1.7)	33 ( 2.4)	218 ( 2.3)
INDIANA	6 ( 2.0)	234 ( 3.1)!	23 ( 3.0)	230 ( 2.0)	43 ( 4.3)	228 ( 1.5)	28 ( 3.5)	230 ( 2.5)
IOWA†	6 ( 2.1)	226 ( 3.6)!	24 ( 3.4)	230 ( 2.3)	44 ( 3.8)	229 ( 1.7)	27 ( 3.7)	230 ( 1.8)
KENTUCKY	7 ( 2.0)	224 ( 4.7)!	15 ( 2.6)	222 ( 2.5)	40 ( 3.7)	220 ( 1.8)	38 ( 3.1)	218 ( 2.1)
LOUISIANA	8 ( 1.9)	205 ( 3.8)!	19 ( 2.3)	211 ( 2.3)	37 ( 2.8)	209 ( 1.6)	36 ( 2.6)	209 ( 2.1)
MAINE	2 ( 0.8)	... ( ... )	15 ( 2.5)	228 ( 2.5)	42 ( 3.2)	233 ( 1.8)	41 ( 3.2)	234 ( 1.6)
MARYLAND	4 ( 1.2)	206 ( 6.4)!	13 ( 2.3)	219 ( 4.1)	33 ( 2.8)	218 ( 2.3)	50 ( 3.3)	226 ( 2.7)
MASSACHUSETTS	4 ( 1.4)	220 ( 3.8)!	19 ( 2.7)	228 ( 2.0)	37 ( 3.4)	227 ( 1.9)	40 ( 3.6)	233 ( 2.5)
MICHIGAN†	5 ( 1.8)	218 ( 4.6)!	16 ( 2.4)	224 ( 2.8)	35 ( 3.6)	228 ( 1.9)	43 ( 3.8)	226 ( 2.4)
MINNESOTA	9 ( 1.9)	218 ( 4.8)!	20 ( 2.4)	234 ( 2.3)	38 ( 3.6)	232 ( 1.6)	33 ( 3.6)	236 ( 1.7)
MISSISSIPPI	5 ( 1.1)	211 ( 3.3)!	21 ( 3.1)	208 ( 3.8)	39 ( 3.3)	210 ( 1.9)	35 ( 3.4)	207 ( 1.9)
MISSOURI	8 ( 1.8)	222 ( 3.1)!	25 ( 2.9)	225 ( 2.1)	35 ( 3.7)	225 ( 1.8)	33 ( 2.9)	226 ( 2.1)
MONTANA†	4 ( 1.5)	226 ( 8.2)!	20 ( 3.1)	226 ( 3.4)	42 ( 3.4)	228 ( 1.5)	34 ( 3.7)	230 ( 2.1)
NEBRASKA	3 ( 1.2)	223 ( 4.1)!	27 ( 2.9)	224 ( 2.3)	33 ( 3.8)	224 ( 2.5)	36 ( 4.2)	233 ( 1.9)
NEVADA†	6 ( 1.9)	212 ( 5.6)!	16 ( 2.0)	214 ( 3.2)	35 ( 3.1)	216 ( 2.1)	44 ( 3.2)	222 ( 1.5)
NEW JERSEY†	4 ( 1.5)	225 ( 3.7)!	14 ( 2.6)	221 ( 5.2)	39 ( 4.0)	228 ( 2.2)	42 ( 3.9)	230 ( 2.0)
NEW MEXICO	9 ( 2.1)	217 ( 3.1)!	22 ( 2.7)	211 ( 3.6)	37 ( 3.3)	214 ( 2.5)	32 ( 3.2)	216 ( 2.5)
NEW YORK†	8 ( 1.8)	215 ( 4.7)!	17 ( 2.3)	223 ( 3.7)	34 ( 2.4)	223 ( 2.2)	40 ( 2.9)	226 ( 2.0)
NORTH CAROLINA	3 ( 1.2)	208 ( 5.1)!	18 ( 2.9)	222 ( 2.3)	40 ( 3.6)	227 ( 1.5)	39 ( 3.7)	223 ( 2.3)
NORTH DAKOTA	10 ( 2.0)	227 ( 3.8)!	30 ( 3.2)	231 ( 1.8)	40 ( 3.4)	231 ( 1.7)	20 ( 2.2)	235 ( 1.7)
OREGON	5 ( 1.1)	216 ( 5.1)!	22 ( 3.0)	220 ( 3.3)	42 ( 3.4)	225 ( 1.6)	32 ( 3.3)	226 ( 1.9)
PENNSYLVANIA†	5 ( 1.3)	222 ( 4.0)!	24 ( 2.9)	224 ( 1.9)	31 ( 3.2)	229 ( 2.1)	40 ( 3.6)	227 ( 2.0)
RHODE ISLAND	8 ( 1.5)	213 ( 4.5)	24 ( 2.8)	219 ( 3.3)	42 ( 3.3)	220 ( 2.2)	26 ( 3.4)	224 ( 2.2)
SOUTH CAROLINA†	5 ( 1.7)	213 ( 4.9)!	21 ( 2.4)	212 ( 1.8)	41 ( 3.3)	216 ( 2.1)	33 ( 2.8)	211 ( 1.8)
TENNESSEE	10 ( 2.3)	215 ( 5.4)!	22 ( 2.5)	218 ( 2.5)	39 ( 3.6)	222 ( 1.7)	30 ( 3.4)	219 ( 2.2)
TEXAS	5 ( 1.6)	209 ( 6.5)!	18 ( 2.6)	223 ( 2.7)	35 ( 3.2)	228 ( 1.9)	43 ( 3.1)	232 ( 2.5)
UTAH	5 ( 1.5)	226 ( 7.5)!	19 ( 2.3)	226 ( 2.4)	37 ( 3.3)	227 ( 1.9)	39 ( 3.1)	227 ( 2.0)
VERMONT†	5 ( 1.4)	219 ( 5.2)!	20 ( 2.6)	225 ( 2.5)	45 ( 3.4)	225 ( 1.8)	30 ( 3.4)	225 ( 2.1)
VIRGINIA	3 ( 1.0)	209 ( 3.8)!	21 ( 2.6)	219 ( 2.9)	39 ( 3.0)	222 ( 1.5)	36 ( 3.5)	227 ( 2.0)
WASHINGTON	8 ( 2.1)	218 ( 3.5)!	26 ( 2.7)	225 ( 2.3)	34 ( 2.5)	226 ( 1.8)	32 ( 2.5)	225 ( 2.0)
WEST VIRGINIA	4 ( 1.3)	215 ( 3.3)!	24 ( 3.2)	222 ( 2.2)	41 ( 3.7)	224 ( 1.6)	31 ( 3.5)	224 ( 1.7)
WISCONSIN	5 ( 1.6)	232 ( 6.2)!	25 ( 3.3)	229 ( 1.4)	37 ( 3.5)	232 ( 1.7)	33 ( 3.5)	232 ( 2.1)
WYOMING	5 ( 1.7)	218 ( 5.5)!	22 ( 3.0)	221 ( 1.7)	44 ( 3.2)	224 ( 2.0)	29 ( 3.0)	224 ( 2.5)
<b>Other Jurisdictions</b>								
DDESS	3 ( 0.3)	... ( ... )	23 ( 1.0)	225 ( 2.1)	33 ( 1.2)	224 ( 1.7)	41 ( 1.0)	226 ( 2.1)
DoDDS	1 ( 0.1)	... ( ... )	5 ( 0.9)	223 ( 4.2)	27 ( 1.7)	222 ( 1.4)	67 ( 1.9)	224 ( 1.0)
GUAM	8 ( 0.7)	189 ( 4.3)	21 ( 1.1)	192 ( 3.1)	35 ( 1.3)	193 ( 2.0)	37 ( 1.3)	185 ( 2.3)

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).

... Characteristics of the sample do not permit a reliable estimate.

! Interpret with caution — the nature of the sample does not allow accurate determination of the variability of this statistic.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.



**TABLE 6.11**

**1996 Mathematics Assessment**



POPULATION:

1996 Grade 4 Public School Students

REPORTED STATISTICS:

Percentage of Students and Average Mathematics Scale Score

STUDENTS' REPORTS ON:

Discussing Mathematics Problems

*In this mathematics class, how often do you discuss solutions to mathematics problems with other students?*

Never or Hardly Ever

Once or Twice a Month

Once or Twice a Week

Almost Every Day

**JURISDICTIONS**

PCT ( SE) SS ( SE) PCT ( SE) SS ( SE) PCT ( SE) SS ( SE) PCT ( SE) SS ( SE)

**Nation**

NATION	33 ( 1.0)	222 ( 1.0)	18 ( 0.6)	227 ( 1.7)	29 ( 0.7)	224 ( 1.4)	19 ( 0.8)	217 ( 1.5)
NORTHEAST	32 ( 2.6)	226 ( 2.8)	18 ( 1.3)	230 ( 3.7)	28 ( 1.6)	231 ( 2.9)	22 ( 2.0)	220 ( 3.2)
SOUTHEAST	32 ( 1.4)	216 ( 2.1)	16 ( 1.0)	221 ( 5.6)	30 ( 1.4)	217 ( 3.0)	21 ( 1.5)	211 ( 3.1)
CENTRAL	36 ( 2.6)	230 ( 1.9)	20 ( 1.5)	234 ( 2.4)	29 ( 1.9)	231 ( 2.5)	15 ( 1.7)	225 ( 3.6)
WEST	32 ( 1.3)	219 ( 2.0)	18 ( 0.9)	223 ( 3.1)	30 ( 0.8)	220 ( 2.9)	20 ( 1.5)	215 ( 3.0)

**States**

ALABAMA	40 ( 1.2)	212 ( 1.5)	13 ( 0.7)	219 ( 2.2)	25 ( 1.1)	214 ( 1.7)	22 ( 0.9)	205 ( 2.0)
ALASKA†	34 ( 1.7)	222 ( 1.9)	17 ( 1.0)	230 ( 2.2)	29 ( 1.2)	226 ( 1.7)	20 ( 1.0)	220 ( 2.6)
ARIZONA	33 ( 1.7)	219 ( 1.8)	18 ( 1.0)	222 ( 2.3)	30 ( 1.2)	219 ( 2.1)	19 ( 1.0)	212 ( 2.5)
ARKANSAS†	44 ( 1.5)	217 ( 1.5)	17 ( 0.8)	219 ( 2.7)	23 ( 0.9)	218 ( 2.0)	16 ( 1.0)	209 ( 2.3)
CALIFORNIA	29 ( 1.5)	210 ( 2.1)	16 ( 1.0)	217 ( 3.1)	33 ( 1.3)	214 ( 1.9)	22 ( 1.0)	198 ( 2.7)
COLORADO	29 ( 1.3)	224 ( 1.5)	21 ( 0.9)	231 ( 1.7)	33 ( 1.2)	227 ( 1.3)	17 ( 0.9)	220 ( 2.0)
CONNECTICUT	30 ( 1.3)	228 ( 1.3)	17 ( 0.9)	237 ( 1.7)	33 ( 1.2)	236 ( 1.4)	21 ( 0.9)	227 ( 2.2)
DELAWARE	35 ( 0.8)	213 ( 1.1)	15 ( 0.8)	222 ( 2.0)	30 ( 0.9)	219 ( 1.7)	21 ( 0.9)	210 ( 1.3)
DISTRICT OF COLUMBIA	28 ( 1.0)	188 ( 1.6)	12 ( 0.5)	191 ( 2.4)	32 ( 0.9)	191 ( 2.0)	28 ( 1.0)	184 ( 1.5)
FLORIDA	36 ( 1.3)	220 ( 1.2)	17 ( 0.7)	220 ( 1.5)	27 ( 0.9)	216 ( 1.8)	21 ( 1.0)	207 ( 1.9)
GEORGIA	33 ( 1.2)	215 ( 1.5)	16 ( 0.9)	224 ( 2.1)	28 ( 0.8)	216 ( 2.0)	23 ( 1.0)	212 ( 2.2)
HAWAII	35 ( 1.3)	215 ( 1.8)	15 ( 0.9)	221 ( 3.1)	29 ( 1.2)	217 ( 2.0)	21 ( 0.9)	210 ( 2.1)
INDIANA	36 ( 1.3)	229 ( 1.2)	18 ( 1.0)	236 ( 1.7)	30 ( 1.0)	230 ( 1.3)	17 ( 1.0)	224 ( 2.1)
IOWA†	32 ( 1.6)	228 ( 1.4)	23 ( 0.9)	233 ( 1.4)	32 ( 1.1)	230 ( 1.7)	14 ( 1.0)	225 ( 1.9)
KENTUCKY	29 ( 1.4)	220 ( 1.4)	19 ( 0.8)	226 ( 1.8)	32 ( 1.1)	221 ( 1.5)	21 ( 1.3)	213 ( 1.8)
LOUISIANA	39 ( 1.4)	210 ( 1.2)	12 ( 0.8)	215 ( 2.3)	27 ( 1.2)	211 ( 1.9)	21 ( 1.0)	203 ( 1.9)
MAINE	27 ( 1.5)	230 ( 1.4)	24 ( 1.1)	235 ( 1.5)	33 ( 1.2)	234 ( 1.5)	16 ( 1.0)	231 ( 2.2)
MARYLAND	27 ( 1.3)	220 ( 1.6)	19 ( 0.8)	230 ( 1.9)	32 ( 1.1)	222 ( 1.8)	22 ( 0.9)	215 ( 3.0)
MASSACHUSETTS	26 ( 1.6)	224 ( 1.7)	19 ( 0.8)	235 ( 2.0)	36 ( 1.4)	232 ( 1.5)	20 ( 0.9)	226 ( 2.1)
MICHIGAN†	34 ( 1.5)	225 ( 1.7)	19 ( 0.9)	232 ( 2.1)	30 ( 1.2)	228 ( 1.6)	18 ( 0.9)	220 ( 1.9)
MINNESOTA	31 ( 1.3)	231 ( 1.5)	21 ( 0.9)	236 ( 1.6)	31 ( 1.1)	234 ( 1.5)	17 ( 1.2)	228 ( 2.3)
MISSISSIPPI	38 ( 1.2)	210 ( 1.5)	12 ( 0.6)	217 ( 2.0)	27 ( 1.1)	210 ( 1.8)	22 ( 0.8)	202 ( 1.6)
MISSOURI	39 ( 1.4)	225 ( 1.1)	18 ( 0.8)	229 ( 1.5)	25 ( 1.1)	228 ( 1.6)	18 ( 0.9)	218 ( 2.1)
MONTANA†	37 ( 1.9)	225 ( 1.7)	20 ( 0.8)	231 ( 1.7)	29 ( 1.4)	230 ( 1.8)	14 ( 0.9)	225 ( 2.1)
NEBRASKA	34 ( 1.4)	227 ( 1.4)	21 ( 0.9)	232 ( 1.5)	29 ( 1.2)	230 ( 1.7)	16 ( 1.1)	221 ( 2.8)
NEVADA†	37 ( 1.4)	217 ( 1.5)	16 ( 0.8)	223 ( 2.3)	28 ( 1.1)	218 ( 1.9)	18 ( 1.0)	217 ( 2.0)
NEW JERSEY†	29 ( 1.6)	227 ( 2.0)	17 ( 1.0)	232 ( 2.1)	32 ( 1.3)	230 ( 2.1)	22 ( 1.1)	222 ( 2.0)
NEW MEXICO	39 ( 1.3)	214 ( 1.4)	17 ( 0.7)	219 ( 2.3)	27 ( 0.9)	216 ( 2.4)	17 ( 0.7)	209 ( 3.0)
NEW YORK†	34 ( 1.5)	224 ( 1.2)	16 ( 0.9)	230 ( 2.0)	30 ( 1.0)	224 ( 1.7)	21 ( 1.1)	213 ( 2.3)
NORTH CAROLINA	34 ( 1.4)	221 ( 1.4)	16 ( 0.8)	232 ( 1.7)	30 ( 1.2)	228 ( 1.7)	21 ( 1.2)	222 ( 2.0)
NORTH DAKOTA	45 ( 1.4)	230 ( 1.4)	20 ( 0.8)	234 ( 2.0)	24 ( 0.9)	231 ( 1.6)	11 ( 0.9)	229 ( 1.9)
OREGON	33 ( 1.5)	221 ( 1.5)	21 ( 1.0)	231 ( 1.9)	30 ( 1.1)	225 ( 2.0)	16 ( 1.1)	219 ( 2.8)
PENNSYLVANIA†	31 ( 1.3)	225 ( 1.6)	17 ( 0.8)	230 ( 2.1)	31 ( 1.1)	228 ( 1.3)	21 ( 1.0)	224 ( 2.0)
RHODE ISLAND	32 ( 1.6)	221 ( 1.7)	18 ( 1.0)	224 ( 2.2)	32 ( 1.4)	222 ( 1.7)	18 ( 1.1)	216 ( 2.2)
SOUTH CAROLINA†	38 ( 1.1)	212 ( 1.5)	15 ( 0.8)	223 ( 2.3)	26 ( 1.0)	215 ( 1.9)	21 ( 1.1)	206 ( 1.9)
TENNESSEE	35 ( 1.6)	221 ( 1.5)	20 ( 0.9)	224 ( 2.1)	28 ( 1.2)	219 ( 1.9)	17 ( 1.0)	212 ( 2.1)
TEXAS	36 ( 1.2)	227 ( 1.3)	16 ( 0.8)	237 ( 2.1)	29 ( 1.1)	231 ( 1.8)	19 ( 1.1)	222 ( 2.2)
UTAH	35 ( 1.1)	226 ( 1.5)	19 ( 1.0)	234 ( 1.5)	29 ( 1.1)	227 ( 1.6)	17 ( 0.9)	223 ( 1.9)
VERMONT†	27 ( 1.2)	224 ( 1.9)	20 ( 1.1)	229 ( 2.3)	36 ( 1.2)	228 ( 1.6)	17 ( 0.9)	221 ( 2.5)
VIRGINIA	37 ( 1.5)	220 ( 1.5)	18 ( 0.9)	231 ( 1.8)	28 ( 1.2)	224 ( 1.6)	17 ( 1.0)	218 ( 2.4)
WASHINGTON	33 ( 1.2)	224 ( 1.4)	22 ( 0.8)	227 ( 2.0)	31 ( 1.0)	228 ( 1.4)	15 ( 0.7)	220 ( 1.8)
WEST VIRGINIA	37 ( 1.4)	224 ( 1.0)	18 ( 0.9)	228 ( 1.7)	30 ( 1.0)	224 ( 1.5)	16 ( 1.1)	219 ( 2.1)
WISCONSIN	34 ( 1.6)	229 ( 1.2)	22 ( 1.0)	239 ( 1.7)	31 ( 1.3)	233 ( 1.4)	13 ( 0.8)	223 ( 1.8)
WYOMING	34 ( 1.8)	221 ( 1.6)	21 ( 0.7)	227 ( 2.1)	31 ( 1.5)	225 ( 1.8)	14 ( 1.0)	220 ( 2.1)

**Other Jurisdictions**

DDESS	37 ( 1.6)	227 ( 1.6)	15 ( 1.3)	229 ( 2.5)	29 ( 1.2)	222 ( 2.3)	19 ( 1.2)	219 ( 2.0)
DoDDS	20 ( 1.1)	220 ( 1.5)	14 ( 0.8)	230 ( 1.9)	35 ( 1.1)	226 ( 1.3)	31 ( 1.3)	220 ( 1.3)
GUAM	38 ( 1.4)	190 ( 2.4)	12 ( 0.9)	194 ( 4.8)	26 ( 1.4)	190 ( 2.8)	24 ( 1.0)	186 ( 2.2)

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).  
 SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 6.12**

**1996 Mathematics Assessment**



POPULATION:  
REPORTED STATISTICS:  
TEACHERS' REPORTS ON:

1996 Grade 4 Public School Students  
Percentage of Students and Average Mathematics Scale Score  
Solving Mathematics Problems in Small Groups or with a Partner

JURISDICTIONS	Never or Hardly Ever		Once or Twice a Month		Once or Twice a Week		Almost Every Day	
	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )
<b>Nation</b>								
NATION	7 ( 1.6)	224 ( 2.9)!	18 ( 1.5)	218 ( 1.7)	50 ( 2.2)	222 ( 1.6)	25 ( 2.1)	227 ( 1.9)
NORTHEAST	9 ( 4.5)	... ( ... )	7 ( 1.3)	... ( ... )	59 ( 5.6)	221 ( 2.8)	25 ( 3.7)	236 ( 4.2)!
SOUTHEAST	4 ( 1.5)	... ( ... )	23 ( 4.1)	210 ( 3.1)	58 ( 3.2)	218 ( 4.0)	15 ( 3.3)	218 ( 2.9)!
CENTRAL	11 ( 5.0)	226 ( 2.7)!	21 ( 3.8)	229 ( 3.3)	44 ( 5.1)	231 ( 3.3)	24 ( 5.1)	234 ( 3.4)!
WEST	4 ( 1.2)	216 ( 7.7)!	19 ( 2.0)	214 ( 2.5)	44 ( 3.7)	221 ( 3.1)	33 ( 3.6)	224 ( 3.2)
<b>States</b>								
ALABAMA	8 ( 2.2)	210 ( 3.7)!	23 ( 3.0)	213 ( 2.1)	54 ( 2.8)	211 ( 1.7)	15 ( 2.4)	209 ( 3.5)
ALASKA†	5 ( 2.1)	207 ( 6.8)!	16 ( 2.3)	224 ( 5.1)	42 ( 3.1)	226 ( 1.7)	36 ( 3.3)	223 ( 2.9)
ARIZONA	4 ( 1.5)	209 (11.4)!	19 ( 2.6)	215 ( 2.6)	53 ( 3.8)	218 ( 2.8)	24 ( 3.6)	223 ( 3.1)
ARKANSAS†	8 ( 2.6)	218 ( 3.4)!	32 ( 4.0)	212 ( 2.6)	49 ( 4.3)	217 ( 2.1)	11 ( 2.7)	221 ( 2.7)!
CALIFORNIA	3 ( 1.2)	... ( ... )	15 ( 2.9)	205 ( 4.3)	42 ( 4.1)	209 ( 2.1)	40 ( 4.0)	211 ( 3.3)
COLORADO	2 ( 0.7)	... ( ... )	14 ( 2.4)	222 ( 3.3)	62 ( 3.3)	227 ( 1.5)	22 ( 2.8)	227 ( 2.7)
CONNECTICUT	4 ( 1.2)	224 ( 8.3)!	16 ( 2.4)	224 ( 2.3)	53 ( 2.6)	233 ( 1.3)	27 ( 2.4)	237 ( 2.3)
DELAWARE	5 ( 0.4)	218 ( 4.6)	22 ( 0.8)	216 ( 1.5)	49 ( 0.9)	214 ( 1.2)	24 ( 0.8)	216 ( 2.0)
DISTRICT OF COLUMBIA	2 ( 0.3)	... ( ... )	10 ( 0.5)	180 ( 1.9)	56 ( 0.8)	188 ( 1.3)	32 ( 0.7)	188 ( 1.9)
FLORIDA	4 ( 1.0)	215 ( 4.0)!	21 ( 2.6)	217 ( 2.3)	52 ( 2.7)	218 ( 1.7)	22 ( 2.2)	212 ( 1.9)
GEORGIA	3 ( 0.9)	217 ( 5.4)!	20 ( 2.1)	214 ( 2.4)	52 ( 3.0)	215 ( 1.7)	25 ( 2.6)	219 ( 3.3)
HAWAII	7 ( 1.1)	212 ( 3.5)	24 ( 2.3)	222 ( 2.4)	50 ( 3.2)	215 ( 1.8)	19 ( 2.4)	210 ( 4.6)
INDIANA	8 ( 2.5)	231 ( 5.2)!	24 ( 3.3)	227 ( 1.5)	53 ( 3.5)	231 ( 1.4)	15 ( 2.7)	226 ( 3.9)
IOWA†	2 ( 1.4)	... ( ... )	22 ( 3.2)	229 ( 2.2)	58 ( 4.0)	229 ( 1.5)	18 ( 2.8)	232 ( 2.1)
KENTUCKY	2 ( 0.7)	... ( ... )	18 ( 3.3)	224 ( 2.1)	57 ( 4.2)	219 ( 1.8)	23 ( 3.2)	219 ( 2.1)
LOUISIANA	6 ( 1.1)	210 ( 3.4)	23 ( 2.6)	211 ( 1.9)	52 ( 3.4)	209 ( 1.8)	18 ( 3.2)	206 ( 3.7)
MAINE	1 ( 0.8)	... ( ... )	17 ( 2.3)	230 ( 2.3)	55 ( 4.1)	235 ( 1.4)	26 ( 3.8)	231 ( 2.1)
MARYLAND	2 ( 0.9)	... ( ... )	15 ( 2.6)	220 ( 3.4)	55 ( 3.1)	221 ( 1.8)	28 ( 2.8)	226 ( 3.5)
MASSACHUSETTS	4 ( 1.7)	211 ( 6.0)!	14 ( 2.3)	223 ( 3.3)	53 ( 3.1)	230 ( 1.6)	29 ( 3.2)	234 ( 2.1)
MICHIGAN†	8 ( 2.2)	222 ( 3.8)!	17 ( 2.8)	224 ( 2.9)	50 ( 3.4)	227 ( 1.7)	25 ( 3.4)	228 ( 2.8)
MINNESOTA	3 ( 1.2)	223 ( 8.8)!	15 ( 2.7)	232 ( 2.5)	55 ( 3.2)	232 ( 1.8)	27 ( 2.5)	235 ( 1.6)
MISSISSIPPI	5 ( 1.6)	205 ( 3.5)!	18 ( 2.5)	212 ( 3.5)	53 ( 3.2)	207 ( 1.3)	24 ( 3.2)	211 ( 2.7)
MISSOURI	8 ( 2.3)	227 ( 2.2)!	28 ( 3.2)	222 ( 1.4)	43 ( 3.2)	227 ( 1.5)	21 ( 2.8)	224 ( 3.5)
MONTANA†	4 ( 1.5)	227 ( 7.0)!	19 ( 2.7)	224 ( 2.5)	58 ( 3.2)	229 ( 1.6)	19 ( 3.5)	231 ( 2.9)
NEBRASKA	2 ( 1.1)	... ( ... )	24 ( 3.4)	227 ( 2.0)	51 ( 3.7)	226 ( 2.0)	23 ( 3.4)	230 ( 2.9)
NEVADA†	5 ( 2.0)	216 ( 4.5)!	12 ( 2.3)	214 ( 3.7)	46 ( 3.9)	217 ( 1.7)	36 ( 3.3)	221 ( 2.2)
NEW JERSEY†	2 ( 1.0)	... ( ... )	17 ( 2.7)	231 ( 3.4)	54 ( 3.8)	228 ( 2.0)	28 ( 3.4)	226 ( 2.2)
NEW MEXICO	4 ( 1.4)	217 ( 2.5)!	23 ( 2.7)	210 ( 2.4)	49 ( 2.8)	214 ( 2.6)	24 ( 3.1)	218 ( 3.0)
NEW YORK†	8 ( 1.7)	222 ( 4.3)!	20 ( 2.8)	224 ( 2.3)	54 ( 2.8)	224 ( 2.0)	19 ( 2.6)	222 ( 2.6)
NORTH CAROLINA	1 ( 0.5)	... ( ... )	17 ( 2.7)	217 ( 2.4)	60 ( 3.4)	225 ( 1.6)	22 ( 2.5)	226 ( 2.6)
NORTH DAKOTA	10 ( 2.2)	231 ( 2.9)!	21 ( 2.6)	234 ( 1.8)	57 ( 3.4)	231 ( 1.3)	11 ( 2.3)	229 ( 2.5)!
OREGON	3 ( 1.0)	228 ( 2.6)!	19 ( 2.5)	222 ( 2.7)	52 ( 2.6)	224 ( 1.6)	26 ( 2.5)	223 ( 2.6)
PENNSYLVANIA†	7 ( 2.2)	223 ( 4.3)!	14 ( 2.3)	226 ( 2.9)	51 ( 3.5)	227 ( 1.7)	27 ( 3.4)	228 ( 2.7)
RHODE ISLAND	4 ( 1.3)	223 ( 5.3)!	23 ( 2.8)	215 ( 3.2)	54 ( 3.2)	222 ( 1.9)	18 ( 2.6)	221 ( 2.3)
SOUTH CAROLINA†	3 ( 1.1)	209 ( 9.6)!	20 ( 2.8)	212 ( 2.8)	55 ( 3.6)	213 ( 1.5)	22 ( 2.9)	213 ( 2.8)
TENNESSEE	8 ( 1.7)	220 ( 4.7)!	27 ( 2.9)	218 ( 1.9)	49 ( 3.3)	221 ( 1.8)	16 ( 2.7)	219 ( 3.7)
TEXAS	5 ( 2.1)	219 ( 4.1)!	17 ( 2.4)	225 ( 2.6)	55 ( 3.3)	231 ( 1.8)	22 ( 3.2)	225 ( 4.1)
UTAH	4 ( 1.2)	224 ( 4.9)!	19 ( 2.8)	226 ( 2.5)	51 ( 3.0)	228 ( 1.6)	27 ( 3.0)	226 ( 2.3)
VERMONT†	2 ( 0.5)	... ( ... )	18 ( 2.7)	222 ( 2.8)	57 ( 3.0)	225 ( 1.5)	23 ( 2.9)	225 ( 2.2)
VIRGINIA	6 ( 1.5)	214 ( 3.4)!	20 ( 3.0)	217 ( 2.5)	54 ( 3.4)	224 ( 1.7)	20 ( 2.6)	227 ( 2.5)
WASHINGTON	4 ( 1.3)	219 ( 5.8)!	21 ( 2.6)	224 ( 2.2)	48 ( 3.5)	225 ( 1.8)	26 ( 2.3)	227 ( 1.7)
WEST VIRGINIA	6 ( 1.7)	214 ( 4.0)!	19 ( 3.0)	223 ( 2.5)	58 ( 4.0)	223 ( 1.6)	17 ( 3.1)	227 ( 3.0)
WISCONSIN	5 ( 1.5)	228 ( 5.1)!	25 ( 3.7)	230 ( 2.2)	54 ( 3.8)	232 ( 1.1)	16 ( 2.5)	232 ( 3.0)
WYOMING	3 ( 1.1)	226 ( 5.3)!	18 ( 2.9)	222 ( 2.0)	59 ( 3.5)	223 ( 1.6)	19 ( 2.5)	223 ( 2.9)
<b>Other Jurisdictions</b>								
DDESS	3 ( 0.5)	... ( ... )	24 ( 0.9)	221 ( 2.3)	51 ( 1.4)	224 ( 1.7)	22 ( 1.3)	227 ( 2.5)
DoDDS	1 ( 0.1)	... ( ... )	4 ( 0.6)	220 ( 2.9)	22 ( 1.3)	224 ( 1.3)	72 ( 1.5)	223 ( 0.9)
GUAM	7 ( 0.6)	185 ( 3.9)	15 ( 1.2)	188 ( 5.0)	49 ( 1.4)	190 ( 2.0)	28 ( 1.5)	190 ( 2.3)

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).

... Characteristics of the sample do not permit a reliable estimate.

! Interpret with caution — the nature of the sample does not allow accurate determination of the variability of this statistic.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 6.13**

**1996 Mathematics Assessment**



POPULATION:

1996 Grade 4 Public School Students

REPORTED STATISTICS:

Percentage of Students and Average Mathematics Scale Score

STUDENTS' REPORTS ON:

Solving Mathematics Problems in Small Groups or with a Partner

*In this mathematics class, how often do you solve mathematics problems in small groups or with a partner?*

Never or Hardly Ever	Once or Twice a Month	Once or Twice a Week	Almost Every Day
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JURISDICTIONS	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )
<b>Nation</b>								
NATION	42 ( 1.3 )	222 ( 1.0 )	22 ( 0.7 )	233 ( 1.3 )	26 ( 1.0 )	221 ( 1.4 )	10 ( 0.7 )	205 ( 2.3 )
NORTHEAST	44 ( 1.4 )	226 ( 2.8 )	24 ( 2.0 )	239 ( 2.3 )	24 ( 1.3 )	226 ( 1.5 )	8 ( 1.3 )	194 ( 3.9 )
SOUTHEAST	42 ( 2.9 )	216 ( 1.9 )	20 ( 1.3 )	228 ( 3.4 )	27 ( 2.4 )	212 ( 3.8 )	11 ( 1.3 )	203 ( 4.5 )
CENTRAL	43 ( 3.0 )	229 ( 2.1 )	25 ( 1.7 )	235 ( 2.7 )	24 ( 2.2 )	231 ( 2.5 )	7 ( 1.2 )	219 ( 5.5 )
WEST	39 ( 2.3 )	220 ( 1.7 )	21 ( 1.2 )	229 ( 2.6 )	28 ( 1.7 )	218 ( 2.6 )	12 ( 1.4 )	204 ( 4.3 )
<b>States</b>								
ALABAMA	50 ( 2.1 )	213 ( 1.3 )	19 ( 1.1 )	222 ( 2.1 )	22 ( 1.2 )	209 ( 1.9 )	10 ( 0.8 )	195 ( 2.1 )
ALASKA†	41 ( 1.9 )	223 ( 1.5 )	18 ( 0.8 )	229 ( 1.9 )	27 ( 1.3 )	229 ( 1.7 )	13 ( 1.2 )	213 ( 2.8 )
ARIZONA	41 ( 1.6 )	219 ( 1.3 )	20 ( 1.1 )	229 ( 2.4 )	25 ( 1.2 )	218 ( 2.3 )	14 ( 1.1 )	202 ( 2.9 )
ARKANSAS†	55 ( 2.0 )	218 ( 1.5 )	19 ( 1.3 )	224 ( 2.1 )	17 ( 1.3 )	212 ( 2.3 )	8 ( 0.9 )	192 ( 2.5 )
CALIFORNIA	36 ( 1.8 )	212 ( 2.0 )	21 ( 0.9 )	218 ( 2.2 )	28 ( 1.2 )	210 ( 2.3 )	15 ( 1.0 )	194 ( 2.9 )
COLORADO	35 ( 1.5 )	224 ( 1.5 )	24 ( 1.1 )	235 ( 1.3 )	31 ( 1.4 )	226 ( 1.5 )	10 ( 0.9 )	213 ( 2.5 )
CONNECTICUT	35 ( 1.7 )	225 ( 1.4 )	24 ( 1.1 )	242 ( 1.5 )	31 ( 1.4 )	236 ( 1.5 )	10 ( 0.9 )	219 ( 2.8 )
DELAWARE	43 ( 1.4 )	214 ( 1.3 )	20 ( 0.9 )	228 ( 2.0 )	25 ( 1.2 )	217 ( 2.4 )	12 ( 0.7 )	195 ( 2.5 )
DISTRICT OF COLUMBIA	32 ( 0.9 )	190 ( 2.1 )	15 ( 0.7 )	192 ( 2.4 )	32 ( 0.8 )	191 ( 1.3 )	21 ( 1.0 )	178 ( 1.9 )
FLORIDA	45 ( 1.7 )	217 ( 1.3 )	20 ( 0.9 )	225 ( 1.7 )	24 ( 1.2 )	213 ( 2.0 )	11 ( 0.8 )	202 ( 2.5 )
GEORGIA	41 ( 1.7 )	215 ( 1.5 )	21 ( 1.1 )	224 ( 2.1 )	26 ( 1.4 )	216 ( 2.4 )	12 ( 0.9 )	204 ( 2.9 )
HAWAII	44 ( 1.4 )	217 ( 1.8 )	18 ( 0.8 )	224 ( 2.8 )	27 ( 1.1 )	214 ( 2.2 )	11 ( 0.8 )	201 ( 2.5 )
INDIANA	44 ( 1.9 )	229 ( 1.3 )	23 ( 1.1 )	235 ( 1.6 )	26 ( 1.4 )	229 ( 1.7 )	8 ( 0.7 )	216 ( 3.2 )
IOWA†	37 ( 2.3 )	228 ( 1.3 )	28 ( 1.4 )	235 ( 1.5 )	28 ( 1.7 )	229 ( 1.6 )	7 ( 0.8 )	216 ( 3.1 )
KENTUCKY	41 ( 1.6 )	221 ( 1.0 )	24 ( 1.2 )	228 ( 1.7 )	24 ( 1.2 )	217 ( 1.8 )	10 ( 0.9 )	207 ( 2.4 )
LOUISIANA	48 ( 2.0 )	210 ( 1.2 )	18 ( 1.2 )	217 ( 2.0 )	22 ( 1.1 )	210 ( 2.1 )	13 ( 1.0 )	194 ( 1.7 )
MAINE	28 ( 1.8 )	229 ( 1.6 )	35 ( 1.3 )	237 ( 1.3 )	30 ( 1.8 )	233 ( 1.7 )	8 ( 1.0 )	225 ( 3.0 )
MARYLAND	34 ( 1.8 )	219 ( 1.5 )	25 ( 1.2 )	234 ( 1.8 )	29 ( 1.4 )	221 ( 2.7 )	12 ( 0.8 )	201 ( 2.5 )
MASSACHUSETTS	30 ( 2.0 )	223 ( 1.7 )	24 ( 1.5 )	235 ( 1.6 )	34 ( 1.7 )	232 ( 1.5 )	11 ( 1.2 )	223 ( 2.9 )
MICHIGAN†	37 ( 1.9 )	226 ( 1.6 )	23 ( 1.1 )	234 ( 1.7 )	29 ( 1.3 )	227 ( 1.9 )	11 ( 1.1 )	211 ( 4.5 )
MINNESOTA	33 ( 2.0 )	230 ( 1.4 )	25 ( 1.2 )	239 ( 1.5 )	32 ( 1.7 )	235 ( 1.4 )	10 ( 0.9 )	218 ( 3.1 )
MISSISSIPPI	44 ( 1.6 )	207 ( 1.6 )	18 ( 0.9 )	220 ( 1.6 )	25 ( 1.2 )	209 ( 1.6 )	12 ( 0.7 )	195 ( 2.2 )
MISSOURI	45 ( 2.0 )	225 ( 1.1 )	24 ( 1.3 )	231 ( 1.4 )	22 ( 1.5 )	226 ( 1.7 )	9 ( 0.9 )	207 ( 3.5 )
MONTANA†	41 ( 2.2 )	224 ( 1.5 )	26 ( 1.3 )	236 ( 1.6 )	25 ( 1.5 )	227 ( 2.0 )	8 ( 1.2 )	219 ( 2.8 )
NEBRASKA	38 ( 2.0 )	224 ( 1.4 )	27 ( 1.2 )	235 ( 1.6 )	28 ( 1.4 )	230 ( 1.7 )	7 ( 0.7 )	210 ( 3.3 )
NEVADA†	42 ( 1.8 )	218 ( 1.5 )	18 ( 1.0 )	225 ( 2.0 )	28 ( 1.4 )	218 ( 2.1 )	12 ( 1.2 )	205 ( 2.9 )
NEW JERSEY†	37 ( 1.9 )	226 ( 1.8 )	24 ( 1.3 )	237 ( 1.8 )	29 ( 1.4 )	227 ( 1.4 )	10 ( 1.1 )	210 ( 3.3 )
NEW MEXICO	45 ( 1.7 )	214 ( 1.9 )	19 ( 1.0 )	223 ( 2.0 )	23 ( 1.2 )	213 ( 2.5 )	13 ( 0.9 )	204 ( 3.4 )
NEW YORK†	46 ( 1.8 )	224 ( 1.1 )	21 ( 1.0 )	234 ( 2.0 )	22 ( 1.3 )	222 ( 1.9 )	11 ( 0.9 )	202 ( 2.9 )
NORTH CAROLINA	40 ( 1.7 )	222 ( 1.2 )	23 ( 1.0 )	236 ( 1.6 )	26 ( 1.2 )	225 ( 1.7 )	11 ( 0.9 )	208 ( 2.8 )
NORTH DAKOTA	49 ( 1.9 )	230 ( 1.5 )	28 ( 1.3 )	237 ( 1.4 )	19 ( 1.5 )	230 ( 1.7 )	5 ( 0.7 )	212 ( 4.2 )
OREGON	40 ( 1.5 )	224 ( 1.5 )	22 ( 1.0 )	230 ( 1.6 )	26 ( 1.2 )	225 ( 2.1 )	11 ( 1.1 )	213 ( 3.2 )
PENNSYLVANIA†	40 ( 2.2 )	223 ( 1.5 )	22 ( 1.2 )	235 ( 1.6 )	29 ( 1.9 )	230 ( 1.7 )	9 ( 0.9 )	211 ( 2.5 )
RHODE ISLAND	39 ( 1.8 )	219 ( 1.9 )	22 ( 1.2 )	229 ( 1.9 )	27 ( 1.3 )	222 ( 1.8 )	11 ( 1.1 )	206 ( 3.3 )
SOUTH CAROLINA†	45 ( 1.5 )	213 ( 1.6 )	20 ( 1.0 )	222 ( 1.8 )	22 ( 1.2 )	213 ( 1.9 )	12 ( 0.9 )	199 ( 2.3 )
TENNESSEE	43 ( 2.0 )	221 ( 1.4 )	26 ( 1.4 )	226 ( 2.0 )	21 ( 1.3 )	217 ( 2.2 )	9 ( 0.9 )	201 ( 3.7 )
TEXAS	44 ( 1.9 )	228 ( 1.4 )	22 ( 1.0 )	238 ( 1.7 )	26 ( 1.6 )	228 ( 2.4 )	8 ( 0.9 )	213 ( 3.2 )
UTAH	42 ( 1.5 )	226 ( 1.5 )	22 ( 1.0 )	235 ( 1.2 )	26 ( 1.2 )	226 ( 1.6 )	10 ( 0.8 )	216 ( 2.5 )
VERMONT†	28 ( 1.6 )	222 ( 1.9 )	25 ( 1.2 )	231 ( 1.8 )	36 ( 1.4 )	228 ( 1.8 )	11 ( 0.9 )	218 ( 3.5 )
VIRGINIA	45 ( 1.5 )	220 ( 1.7 )	23 ( 1.1 )	232 ( 1.6 )	22 ( 1.1 )	225 ( 2.0 )	10 ( 0.8 )	209 ( 2.9 )
WASHINGTON	40 ( 1.5 )	223 ( 1.3 )	24 ( 1.0 )	232 ( 1.8 )	26 ( 1.1 )	224 ( 2.1 )	10 ( 0.8 )	218 ( 2.9 )
WEST VIRGINIA	45 ( 2.1 )	222 ( 1.2 )	23 ( 1.0 )	232 ( 1.4 )	25 ( 1.4 )	222 ( 2.0 )	7 ( 0.7 )	211 ( 2.5 )
WISCONSIN	40 ( 2.1 )	230 ( 1.2 )	27 ( 1.2 )	241 ( 1.4 )	26 ( 1.6 )	230 ( 1.4 )	7 ( 0.8 )	216 ( 3.6 )
WYOMING	39 ( 1.8 )	221 ( 1.6 )	23 ( 1.0 )	229 ( 2.0 )	29 ( 1.2 )	225 ( 1.8 )	9 ( 0.7 )	216 ( 3.9 )
<b>Other Jurisdictions</b>								
DDESS	43 ( 1.4 )	226 ( 1.5 )	22 ( 1.6 )	231 ( 2.3 )	25 ( 1.4 )	221 ( 1.9 )	11 ( 0.9 )	212 ( 3.3 )
DoDDS	21 ( 1.0 )	220 ( 1.2 )	14 ( 0.8 )	231 ( 2.0 )	35 ( 1.1 )	225 ( 1.3 )	29 ( 1.1 )	220 ( 1.4 )
GUAM	47 ( 1.2 )	193 ( 1.7 )	11 ( 1.0 )	192 ( 3.1 )	23 ( 1.0 )	188 ( 3.4 )	19 ( 1.1 )	180 ( 3.3 )

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 6.14**

**1992 Mathematics Assessment**



POPULATION:

1992 Grade 4 Public School Students

REPORTED STATISTICS:

Percentage of Students and Average Mathematics Scale Score

TEACHERS' REPORTS ON:

Amount of Homework Assigned

Approximately how much mathematics homework do you assign each day?	None		15 Minutes		30 Minutes		45 Minutes		One Hour or More	
	PCT ( SE)	SS ( SE)	PCT ( SE)	SS ( SE)	PCT ( SE)	SS ( SE)	PCT ( SE)	SS ( SE)	PCT ( SE)	SS ( SE)
<b>JURISDICTIONS</b>										
<b>Nation</b>										
NATION	6 ( 1.4)	221 ( 2.6)!	53 ( 2.1)	221 ( 1.4)	36 ( 2.6)	216 ( 1.8)	4 ( 0.9)	202 ( 4.6)!	1 ( 0.4)	... ( ... )
NORTHEAST	2 ( ... )	... ( ... )	50 ( 6.2)	225 ( 4.6)	44 ( 5.7)	221 ( 3.0)	3 ( 1.4)	... ( ... )	1 ( ... )	... ( ... )
SOUTHEAST	4 ( 1.1)	... ( ... )	41 ( 3.0)	209 ( 2.7)	50 ( 3.5)	210 ( 2.8)	3 ( 1.2)	... ( ... )	1 ( ... )	... ( ... )
CENTRAL	13 ( 4.4)	227 ( 3.8)!	53 ( 3.8)	225 ( 2.2)	28 ( 7.0)	225 ( 4.1)!	4 ( 1.9)	... ( ... )	1 ( ... )	... ( ... )
WEST	5 ( 2.5)	... ( ... )	65 ( 3.6)	223 ( 2.6)	24 ( 3.3)	212 ( 4.1)	4 ( 2.4)	200 ( 4.4)!	1 ( 0.9)	... ( ... )
<b>States</b>										
ALABAMA	1 ( 0.3)	... ( ... )	37 ( 3.6)	208 ( 2.2)	54 ( 3.5)	210 ( 2.0)	5 ( 1.6)	206 ( 4.0)!	3 ( 1.0)	198 ( 6.4)!
ALASKA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
ARIZONA	8 ( 1.6)	213 ( 4.2)!	60 ( 2.8)	217 ( 1.3)	28 ( 2.5)	212 ( 2.1)	3 ( 1.3)	210 ( 8.3)!	1 ( 0.5)	... ( ... )
ARKANSAS	9 ( 2.0)	214 ( 3.3)!	54 ( 3.3)	210 ( 1.3)	33 ( 3.3)	210 ( 1.5)	4 ( 1.5)	212 ( 4.8)!	0 ( ... )	... ( ... )
CALIFORNIA	4 ( 1.2)	207 ( 6.1)!	46 ( 3.5)	213 ( 2.1)	42 ( 2.8)	206 ( 2.6)	6 ( 1.7)	202 ( 4.6)!	2 ( 0.8)	... ( ... )
COLORADO	11 ( 1.7)	220 ( 2.6)	53 ( 3.0)	224 ( 1.5)	30 ( 2.7)	220 ( 2.0)	5 ( 1.2)	208 ( 3.1)!	1 ( ... )	... ( ... )
CONNECTICUT	6 ( 2.4)	231 ( 3.4)!	51 ( 4.0)	232 ( 1.3)	36 ( 3.1)	227 ( 2.6)	6 ( 1.5)	216 ( 6.9)!	2 ( 1.1)	... ( ... )
DELAWARE	3 ( 0.4)	... ( ... )	55 ( 1.2)	217 ( 1.2)	41 ( 1.1)	221 ( 1.6)	0 ( 0.0)	... ( ... )	1 ( 0.2)	... ( ... )
DISTRICT OF COLUMBIA	0 ( ... )	... ( ... )	17 ( 0.9)	191 ( 1.7)	60 ( 1.2)	195 ( 1.2)	18 ( 0.8)	186 ( 2.2)	5 ( 0.4)	188 ( 3.1)
FLORIDA	2 ( 0.8)	... ( ... )	41 ( 3.1)	215 ( 1.7)	47 ( 3.4)	213 ( 1.8)	7 ( 1.6)	210 ( 3.6)!	3 ( 0.9)	... ( ... )
GEORGIA	1 ( 0.4)	... ( ... )	47 ( 3.4)	217 ( 2.0)	46 ( 3.3)	214 ( 2.1)	5 ( 1.3)	206 ( 5.2)!	2 ( 0.6)	... ( ... )
HAWAII	1 ( 0.4)	... ( ... )	24 ( 2.4)	210 ( 2.6)	60 ( 3.0)	217 ( 1.6)	12 ( 2.1)	212 ( 2.6)	4 ( 1.2)	209 ( 5.3)!
INDIANA	8 ( 2.0)	221 ( 1.8)!	59 ( 3.4)	221 ( 1.6)	32 ( 3.4)	219 ( 2.1)	0 ( ... )	... ( ... )	1 ( ... )	... ( ... )
IOWA	18 ( 3.0)	231 ( 1.8)	63 ( 4.3)	231 ( 1.3)	18 ( 2.9)	226 ( 1.8)	0 ( ... )	... ( ... )	0 ( ... )	... ( ... )
KENTUCKY	8 ( 2.1)	212 ( 3.1)!	52 ( 3.7)	216 ( 1.6)	36 ( 3.8)	215 ( 1.8)	4 ( 1.2)	209 ( 6.5)!	1 ( 0.8)	... ( ... )
LOUISIANA	1 ( 0.9)	... ( ... )	44 ( 3.8)	208 ( 1.9)	47 ( 3.6)	204 ( 2.0)	7 ( 1.7)	182 ( 6.9)!	0 ( 0.3)	... ( ... )
MAINE	5 ( 1.7)	233 ( 5.6)!	62 ( 3.7)	231 ( 1.5)	31 ( 3.5)	232 ( 1.1)	2 ( 0.8)	... ( ... )	1 ( ... )	... ( ... )
MARYLAND	0 ( ... )	... ( ... )	41 ( 3.5)	219 ( 2.1)	53 ( 3.5)	219 ( 2.0)	4 ( 1.1)	212 ( 7.3)!	1 ( 0.6)	... ( ... )
MASSACHUSETTS	4 ( 1.4)	230 ( 5.7)!	49 ( 4.2)	230 ( 1.6)	44 ( 4.0)	226 ( 2.3)	2 ( 0.6)	... ( ... )	1 ( 0.7)	... ( ... )
MICHIGAN	15 ( 2.0)	223 ( 2.4)	53 ( 3.6)	223 ( 2.2)	29 ( 3.3)	213 ( 3.7)	2 ( 0.8)	... ( ... )	1 ( ... )	... ( ... )
MINNESOTA	15 ( 2.8)	228 ( 3.1)	61 ( 3.6)	228 ( 1.4)	24 ( 2.9)	229 ( 2.2)	0 ( ... )	... ( ... )	0 ( ... )	... ( ... )
MISSISSIPPI	2 ( 0.9)	... ( ... )	43 ( 3.4)	202 ( 2.2)	50 ( 3.4)	202 ( 1.7)	3 ( 1.3)	202 ( 4.7)!	2 ( 1.1)	... ( ... )
MISSOURI	11 ( 2.0)	226 ( 3.5)	45 ( 3.0)	227 ( 1.8)	40 ( 3.4)	219 ( 2.3)	2 ( 0.8)	... ( ... )	2 ( ... )	... ( ... )
MONTANA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
NEBRASKA	21 ( 3.4)	227 ( 2.3)	49 ( 3.6)	224 ( 1.8)	28 ( 3.4)	228 ( 2.5)	0 ( ... )	... ( ... )	2 ( 0.9)	... ( ... )
NEVADA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
NEW JERSEY	0 ( ... )	... ( ... )	44 ( 4.2)	232 ( 2.1)	52 ( 4.3)	225 ( 2.5)	3 ( 1.0)	223 ( 8.9)!	1 ( 0.4)	... ( ... )
NEW MEXICO	9 ( 2.1)	211 ( 3.5)!	45 ( 3.7)	215 ( 1.9)	42 ( 3.3)	212 ( 2.2)	3 ( 1.1)	... ( ... )	1 ( 0.3)	... ( ... )
NEW YORK	1 ( 0.5)	... ( ... )	41 ( 3.5)	223 ( 2.1)	51 ( 3.6)	215 ( 1.9)	6 ( 1.5)	218 ( 5.7)!	2 ( 0.6)	... ( ... )
NORTH CAROLINA	2 ( 0.8)	... ( ... )	44 ( 2.8)	215 ( 1.6)	51 ( 2.9)	213 ( 1.3)	2 ( 0.8)	... ( ... )	1 ( 0.7)	... ( ... )
NORTH DAKOTA	10 ( 2.5)	231 ( 1.9)!	47 ( 4.3)	228 ( 1.3)	40 ( 3.8)	230 ( 1.4)	2 ( 1.0)	... ( ... )	0 ( ... )	... ( ... )
OREGON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
PENNSYLVANIA	1 ( 0.4)	... ( ... )	53 ( 3.6)	226 ( 1.6)	44 ( 3.6)	222 ( 2.1)	2 ( 0.8)	... ( ... )	0 ( ... )	... ( ... )
RHODE ISLAND	2 ( 0.9)	... ( ... )	52 ( 3.4)	216 ( 1.9)	41 ( 3.3)	216 ( 2.5)	3 ( 1.1)	219 ( 10.6)!	1 ( 0.7)	... ( ... )
SOUTH CAROLINA	1 ( 0.5)	... ( ... )	48 ( 3.6)	212 ( 1.4)	48 ( 3.9)	214 ( 1.6)	2 ( 0.5)	... ( ... )	2 ( 0.7)	... ( ... )
TENNESSEE	6 ( 1.6)	210 ( 4.3)!	35 ( 3.2)	214 ( 2.1)	49 ( 3.0)	210 ( 1.7)	7 ( 1.7)	214 ( 3.1)!	3 ( 1.0)	200 ( 5.2)!
TEXAS	7 ( 2.3)	218 ( 4.2)!	52 ( 3.6)	221 ( 1.9)	35 ( 2.9)	218 ( 2.5)	4 ( 1.0)	200 ( 5.6)!	3 ( 0.8)	203 ( 7.4)!
UTAH	18 ( 2.6)	220 ( 2.2)	54 ( 2.9)	225 ( 1.3)	25 ( 3.0)	226 ( 2.0)	2 ( 0.8)	... ( ... )	0 ( ... )	... ( ... )
VERMONT	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
VIRGINIA	0 ( ... )	... ( ... )	51 ( 2.7)	222 ( 1.6)	46 ( 2.9)	220 ( 2.3)	3 ( 0.9)	211 ( 5.2)!	0 ( ... )	... ( ... )
WASHINGTON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
WEST VIRGINIA	12 ( 1.9)	213 ( 3.0)	60 ( 3.2)	215 ( 1.5)	28 ( 3.6)	216 ( 1.7)	0 ( ... )	... ( ... )	0 ( ... )	... ( ... )
WISCONSIN	10 ( 2.4)	236 ( 2.2)!	57 ( 3.5)	230 ( 1.5)	32 ( 3.0)	225 ( 1.9)	1 ( 0.4)	... ( ... )	0 ( ... )	... ( ... )
WYOMING	23 ( 2.9)	225 ( 1.8)	58 ( 3.5)	226 ( 1.2)	17 ( 2.6)	226 ( 1.8)	2 ( 0.8)	... ( ... )	0 ( ... )	... ( ... )
<b>Other Jurisdictions</b>										
DDESS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
DoDDS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
GUAM	1 ( 0.1)	... ( ... )	28 ( 1.1)	189 ( 1.5)	56 ( 1.0)	194 ( 1.2)	9 ( 0.5)	197 ( 2.4)	6 ( 0.7)	197 ( 3.1)

— State or other jurisdiction did not participate in the NAEP assessment year presented in this table.

... Characteristics of the sample do not permit a reliable estimate.

! Interpret with caution — the nature of the sample does not allow accurate determination of the variability of this statistic.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 6.14** (continued)

**1996 Mathematics Assessment**



POPULATION:

1996 Grade 4 Public School Students

REPORTED STATISTICS:

Percentage of Students and Average Mathematics Scale Score

TEACHERS' REPORTS ON:

Amount of Homework Assigned

Approximately how much mathematics homework do you assign each day?	None		15 Minutes		30 Minutes		45 Minutes		One Hour or More	
	PCT ( SE)	SS ( SE)	PCT ( SE)	SS ( SE)	PCT ( SE)	SS ( SE)	PCT ( SE)	SS ( SE)	PCT ( SE)	SS ( SE)
<b>JURISDICTIONS</b>										
<b>Nation</b>										
NATION	4 ( 0.8)	232 ( 3.8)	50 ( 2.6)	225 ( 1.6)	40 ( 2.5)	220 ( 1.7)	4 ( 0.9)	210 ( 5.1)!	2 ( 0.6)	208 ( 5.0)!
NORTHEAST	1 ( ...)	... ( ...)	43 ( 5.1)	232 ( 5.4)	51 ( 5.2)	221 ( 3.8)	2 ( 1.3)	... ( ...)	2 ( 1.5)	... ( ...)
SOUTHEAST	2 ( 0.9)	... ( ...)	39 ( 4.8)	217 ( 3.9)	48 ( 5.0)	215 ( 2.4)	5 ( 3.0)	... ( ...)	5 ( 2.2)	... ( ...)
CENTRAL	11 ( 1.4)	236 ( 2.5)	51 ( 7.4)	234 ( 2.6)	33 ( 7.1)	224 ( 2.7)!	5 ( 2.2)	... ( ...)	0 ( ...)	... ( ...)
WEST	3 ( 2.0)	... ( ...)	61 ( 2.8)	220 ( 1.9)	33 ( 2.9)	221 ( 4.3)	3 ( 1.0)	... ( ...)	0 ( ...)	... ( ...)
<b>States</b>										
ALABAMA	1 ( 0.5)	... ( ...)	44 ( 3.8)	213 ( 2.1)	52 ( 3.7)	210 ( 1.6)	2 ( 0.8)	... ( ...)	1 ( 0.4)	... ( ...)
ALASKA†	10 ( 2.0)	220 ( 5.6)!	55 ( 3.3)	228 ( 1.6)	32 ( 3.5)	219 ( 3.2)	2 ( 1.0)	... ( ...)	2 ( 0.8)	... ( ...)
ARIZONA	14 ( 2.6)	208 ( 4.6)	52 ( 3.1)	219 ( 2.3)	31 ( 2.7)	221 ( 2.8)	1 ( 0.8)	... ( ...)	1 ( 0.8)	... ( ...)
ARKANSAS†	12 ( 2.7)	219 ( 3.7)!	51 ( 4.0)	218 ( 1.8)>	32 ( 3.6)	213 ( 2.4)	4 ( 0.8)	209 ( 9.1)!	1 ( 0.4)	... ( ...)
CALIFORNIA	4 ( 1.2)	214 ( 6.5)!	48 ( 3.9)	210 ( 2.3)	41 ( 4.1)	206 ( 3.1)	5 ( 1.3)	216 ( 6.1)!	2 ( 0.8)	... ( ...)
COLORADO	8 ( 1.5)	230 ( 2.6)!	57 ( 2.8)	225 ( 1.4)	32 ( 2.8)	226 ( 1.8)	2 ( 0.8)	232 ( 7.1)!	1 ( 0.7)	... ( ...)
CONNECTICUT	2 ( 0.9)	... ( ...)	51 ( 2.9)	234 ( 1.9)	44 ( 3.0)	231 ( 2.0)	2 ( 0.9)	215 ( 14.7)!	0 ( ...)	... ( ...)
DELAWARE	1 ( 0.3)<	... ( ...)	60 ( 1.1)	210 ( 0.7)<	37 ( 1.1)	232 ( 1.3)	2 ( 0.2)>	... ( ...)	1 ( 0.3)	... ( ...)
DISTRICT OF COLUMBIA	1 ( 0.3)	... ( ...)	24 ( 0.9)>	190 ( 1.7)	60 ( 0.8)	185 ( 1.3)<	9 ( 0.5)<	183 ( 2.5)	6 ( 0.4)	186 ( 5.6)
FLORIDA	5 ( 1.3)	221 ( 4.7)!	44 ( 3.0)	219 ( 1.7)	46 ( 3.0)	213 ( 1.7)	4 ( 0.9)	212 ( 5.9)!	2 ( 0.7)	... ( ...)
GEORGIA	2 ( 0.6)	... ( ...)	50 ( 3.2)	219 ( 2.0)	42 ( 2.9)	213 ( 2.0)	4 ( 1.0)	209 ( 4.7)!	2 ( 0.6)	... ( ...)
HAWAII	1 ( 0.6)	... ( ...)	29 ( 2.3)	211 ( 2.0)	59 ( 2.7)	219 ( 1.9)	10 ( 1.6)	209 ( 6.3)	1 ( ...)	... ( ...)
INDIANA	4 ( 1.4)	225 ( 4.5)!	63 ( 4.0)	231 ( 1.5)>	32 ( 3.7)	227 ( 1.9)>	1 ( 0.6)	... ( ...)	0 ( ...)	... ( ...)
IOWA†	14 ( 2.8)	227 ( 3.5)!	70 ( 3.9)	230 ( 1.2)	15 ( 2.7)	228 ( 2.5)	1 ( ...)	... ( ...)	0 ( ...)	... ( ...)
KENTUCKY	3 ( 1.0)	... ( ...)	36 ( 3.3)<	218 ( 1.9)	58 ( 3.4)>	221 ( 1.7)	3 ( 1.1)	231 ( 8.3)!	0 ( ...)	... ( ...)
LOUISIANA	2 ( 0.8)	... ( ...)	51 ( 3.2)	210 ( 1.6)	43 ( 3.0)	209 ( 1.6)	3 ( 1.2)	205 ( 8.8)!	1 ( 0.5)	... ( ...)
MAINE	6 ( 1.9)	232 ( 2.6)!	61 ( 2.9)	231 ( 1.3)	31 ( 2.7)	235 ( 1.6)	1 ( 0.9)	... ( ...)	1 ( ...)	... ( ...)
MARYLAND	0 ( ...)	... ( ...)	44 ( 4.0)	220 ( 2.2)	52 ( 3.9)	223 ( 2.3)	4 ( 1.5)	228 ( 16.9)!	0 ( ...)	... ( ...)
MASSACHUSETTS	2 ( 1.1)	... ( ...)	53 ( 3.6)	229 ( 1.9)	40 ( 3.7)	228 ( 2.1)	4 ( 1.6)	232 ( 6.8)!	0 ( ...)	... ( ...)
MICHIGAN†	14 ( 2.6)	229 ( 3.2)	61 ( 3.6)	228 ( 1.8)	23 ( 2.8)	219 ( 2.7)	2 ( 1.2)	232 ( 6.2)!	0 ( ...)	... ( ...)
MINNESOTA	13 ( 2.2)	229 ( 3.3)	64 ( 2.9)	233 ( 1.5)	22 ( 2.4)	233 ( 2.7)	1 ( 0.5)	... ( ...)	0 ( ...)	... ( ...)
MISSISSIPPI	2 ( 0.7)	... ( ...)	49 ( 3.8)	209 ( 1.6)	44 ( 3.8)	209 ( 2.0)>	4 ( 1.4)	203 ( 5.4)!	1 ( 0.6)	... ( ...)
MISSOURI	9 ( 2.0)	229 ( 2.4)!	56 ( 3.6)	227 ( 1.4)	31 ( 3.4)	221 ( 2.1)	3 ( 1.2)	221 ( 6.0)!	1 ( ...)	... ( ...)
MONTANA†	23 ( 3.1)	226 ( 1.8)	52 ( 3.8)	229 ( 1.5)	23 ( 3.5)	227 ( 2.4)	1 ( ...)	... ( ...)	1 ( ...)	... ( ...)
NEBRASKA	15 ( 2.5)	232 ( 3.1)	61 ( 3.9)	227 ( 1.7)	23 ( 3.4)	225 ( 2.7)	1 ( ...)	... ( ...)	0 ( ...)	... ( ...)
NEVADA†	9 ( 2.5)	211 ( 4.3)!	55 ( 3.7)	218 ( 1.6)	31 ( 3.7)	220 ( 2.3)	2 ( 1.0)	... ( ...)	2 ( 0.9)	... ( ...)
NEW JERSEY†	0 ( ...)	... ( ...)	38 ( 3.9)	232 ( 2.0)	56 ( 4.1)	227 ( 2.2)	4 ( 1.2)	212 ( 5.6)!	2 ( 0.8)	... ( ...)
NEW MEXICO	11 ( 2.3)	206 ( 4.9)!	44 ( 3.0)	219 ( 2.5)	39 ( 3.4)	213 ( 2.1)	4 ( 0.8)	212 ( 4.6)!	3 ( 0.9)	... ( ...)
NEW YORK†	1 ( 0.7)	... ( ...)	45 ( 3.1)	230 ( 1.5)	46 ( 3.6)	220 ( 2.0)	6 ( 1.3)	207 ( 5.6)!	2 ( 0.8)	... ( ...)
NORTH CAROLINA	0 ( ...)	... ( ...)	43 ( 3.5)	224 ( 1.7)>	52 ( 3.4)	225 ( 1.7)>	3 ( 1.1)	218 ( 5.8)!	1 ( 0.5)	... ( ...)
NORTH DAKOTA	15 ( 2.2)	229 ( 2.1)	57 ( 3.9)	232 ( 1.4)	28 ( 3.5)	231 ( 2.2)	0 ( ...)	... ( ...)	0 ( ...)	... ( ...)
OREGON	14 ( 2.8)	222 ( 2.7)	71 ( 3.5)	223 ( 1.6)	13 ( 2.4)	230 ( 2.9)	1 ( 0.7)	... ( ...)	0 ( ...)	... ( ...)
PENNSYLVANIA†	1 ( ...)	... ( ...)	57 ( 4.3)	228 ( 1.5)	41 ( 4.1)	225 ( 1.8)	2 ( 0.9)	... ( ...)	0 ( ...)	... ( ...)
RHODE ISLAND	2 ( 0.9)	... ( ...)	56 ( 2.9)	223 ( 1.7)>	39 ( 2.6)	216 ( 2.0)	2 ( 0.9)	... ( ...)	0 ( ...)	... ( ...)
SOUTH CAROLINA†	1 ( 0.5)	... ( ...)	57 ( 3.3)	214 ( 1.4)	39 ( 3.2)	214 ( 1.8)	3 ( 1.5)	... ( ...)	0 ( ...)	... ( ...)
TENNESSEE	3 ( 1.4)	217 ( 6.5)!	48 ( 3.6)	220 ( 2.0)	46 ( 3.6)	219 ( 2.0)>	2 ( 0.7)	... ( ...)	1 ( 0.6)	... ( ...)
TEXAS	3 ( 1.1)	224 ( 3.5)!	59 ( 3.5)	228 ( 1.9)	33 ( 3.4)	229 ( 2.3)>	4 ( 0.9)	217 ( 6.9)!	2 ( ...)	... ( ...)
UTAH	13 ( 2.4)	225 ( 3.5)	63 ( 3.4)	226 ( 1.4)	21 ( 3.0)	228 ( 2.5)	2 ( 0.9)	... ( ...)	0 ( ...)	... ( ...)
VERMONT†	13 ( 2.6)	223 ( 2.7)!	63 ( 3.7)	225 ( 1.7)	22 ( 3.2)	225 ( 2.2)	2 ( 0.7)	... ( ...)	1 ( 0.5)	... ( ...)
VIRGINIA	1 ( 0.6)	... ( ...)	52 ( 3.3)	223 ( 1.6)	44 ( 3.3)	224 ( 2.3)	3 ( 0.7)	208 ( 5.5)!	0 ( ...)	... ( ...)
WASHINGTON	14 ( 1.7)	217 ( 3.2)	61 ( 2.9)	226 ( 1.3)	22 ( 2.6)	226 ( 2.0)	1 ( 0.5)	... ( ...)	1 ( 0.2)	... ( ...)
WEST VIRGINIA	9 ( 1.8)	221 ( 3.4)!	66 ( 3.6)	222 ( 1.3)>	24 ( 3.1)	227 ( 1.7)>	1 ( ...)	... ( ...)	1 ( ...)	... ( ...)
WISCONSIN	7 ( 1.9)	228 ( 7.1)!	62 ( 3.4)	232 ( 1.0)	30 ( 3.4)	231 ( 2.4)	1 ( 0.2)	... ( ...)	0 ( ...)	... ( ...)
WYOMING	20 ( 3.2)	221 ( 2.1)	54 ( 3.3)	223 ( 1.8)	23 ( 2.9)	223 ( 3.0)	2 ( 1.2)	... ( ...)	0 ( ...)	... ( ...)
<b>Other Jurisdictions</b>										
DDESS	3 ( 0.3)	... ( ...)	51 ( 1.3)	221 ( 1.5)	42 ( 1.4)	228 ( 1.3)	2 ( 0.4)	... ( ...)	2 ( 0.2)	... ( ...)
DoDDS	7 ( 1.0)	224 ( 3.5)	60 ( 2.1)	224 ( 0.9)	32 ( 1.8)	222 ( 1.5)	0 ( ...)	... ( ...)	1 ( 0.1)	... ( ...)
GUAM	1 ( 0.2)	... ( ...)	21 ( 1.4)<	194 ( 3.2)	58 ( 1.3)	188 ( 1.6)<	16 ( 0.7)>	190 ( 3.7)	4 ( 0.7)	... ( ...)

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).  
 ... Characteristics of the sample do not permit a reliable estimate.  
 > (<) The value for the students was significantly higher (lower) than in the 1992 assessment at about the 95% confidence level using appropriate multiple comparison procedures.  
 ! Interpret with caution — the nature of the sample does not allow accurate determination of the variability of this statistic.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 6.15**

**1992 Mathematics Assessment**



POPULATION: 1992 Grade 4 Public School Students  
 REPORTED STATISTICS: Percentage of Students and Average Mathematics Scale Score  
 STUDENTS' REPORTS ON: Time Spent on Homework

*Approximately how much time do you spend on mathematics homework each day?*

	I Am Not Taking Mathematics This Year	None	15 Minutes			
JURISDICTIONS	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )
<b>Nation</b>						
NATION	1 ( 0.1 )	... ( ... )	7 ( 0.6 )	222 ( 2.3 )	39 ( 1.1 )	221 ( 1.2 )
NORTHEAST	0 ( 0.2 )	... ( ... )	3 ( 0.5 )	... ( ... )	44 ( 3.4 )	227 ( 3.0 )
SOUTHEAST	1 ( 0.2 )	... ( ... )	5 ( 0.6 )	200 ( 4.1 )	36 ( 2.0 )	213 ( 2.1 )
CENTRAL	0 ( 0.1 )	... ( ... )	11 ( 1.3 )	230 ( 3.4 )	36 ( 1.9 )	225 ( 2.8 )
WEST	1 ( 0.4 )	... ( ... )	8 ( 1.8 )	226 ( 3.6 )!	41 ( 1.7 )	220 ( 2.1 )
<b>States</b>						
ALABAMA	1 ( 0.2 )	... ( ... )	4 ( 0.4 )	202 ( 4.9 )	36 ( 1.2 )	211 ( 2.2 )
ALASKA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
ARIZONA	1 ( 0.2 )	... ( ... )	9 ( 0.9 )	220 ( 2.8 )	39 ( 1.1 )	219 ( 1.2 )
ARKANSAS	1 ( 0.2 )	... ( ... )	7 ( 0.8 )	213 ( 3.1 )	34 ( 1.1 )	213 ( 1.2 )
CALIFORNIA	1 ( 0.3 )	... ( ... )	5 ( 0.6 )	210 ( 5.2 )	39 ( 1.1 )	213 ( 2.0 )
COLORADO	1 ( 0.2 )	... ( ... )	9 ( 0.7 )	225 ( 2.4 )	36 ( 1.0 )	224 ( 1.3 )
CONNECTICUT	0 ( 0.1 )	... ( ... )	4 ( 0.5 )	229 ( 5.0 )	45 ( 1.4 )	232 ( 1.4 )
DELAWARE	1 ( 0.2 )	... ( ... )	5 ( 0.8 )	213 ( 4.1 )	45 ( 1.2 )	219 ( 1.1 )
DISTRICT OF COLUMBIA	1 ( 0.2 )	... ( ... )	3 ( 0.3 )	178 ( 3.5 )	38 ( 1.2 )	194 ( 1.1 )
FLORIDA	0 ( 0.1 )	... ( ... )	4 ( 0.5 )	208 ( 3.6 )	41 ( 1.3 )	217 ( 1.9 )
GEORGIA	1 ( 0.1 )	... ( ... )	4 ( 0.5 )	222 ( 4.0 )	42 ( 1.2 )	217 ( 1.8 )
HAWAII	1 ( 0.2 )	... ( ... )	2 ( 0.4 )	195 ( 6.3 )	32 ( 1.1 )	212 ( 2.1 )
INDIANA	0 ( 0.1 )	... ( ... )	8 ( 0.7 )	233 ( 3.0 )	37 ( 1.2 )	221 ( 1.3 )
IOWA	1 ( 0.2 )	... ( ... )	11 ( 0.9 )	235 ( 2.1 )	35 ( 1.0 )	234 ( 1.5 )
KENTUCKY	0 ( 0.1 )	... ( ... )	7 ( 0.7 )	217 ( 3.1 )	35 ( 1.1 )	218 ( 1.5 )
LOUISIANA	0 ( 0.1 )	... ( ... )	4 ( 0.6 )	210 ( 5.6 )	46 ( 1.3 )	208 ( 1.6 )
MAINE	1 ( 0.2 )	... ( ... )	8 ( 1.2 )	231 ( 2.4 )	38 ( 1.2 )	236 ( 1.3 )
MARYLAND	0 ( 0.1 )	... ( ... )	3 ( 0.3 )	200 ( 6.5 )	45 ( 1.2 )	222 ( 1.6 )
MASSACHUSETTS	0 ( 0.1 )	... ( ... )	4 ( 0.6 )	225 ( 5.0 )	44 ( 1.3 )	231 ( 1.4 )
MICHIGAN	1 ( 0.3 )	... ( ... )	9 ( 0.7 )	230 ( 3.4 )	36 ( 1.4 )	222 ( 2.1 )
MINNESOTA	1 ( 0.2 )	... ( ... )	12 ( 1.0 )	236 ( 2.4 )	36 ( 1.4 )	231 ( 1.3 )
MISSISSIPPI	1 ( 0.3 )	... ( ... )	4 ( 0.4 )	197 ( 4.4 )	38 ( 1.3 )	203 ( 1.4 )
MISSOURI	1 ( 0.1 )	... ( ... )	10 ( 1.1 )	231 ( 3.1 )	36 ( 1.1 )	225 ( 1.4 )
MONTANA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
NEBRASKA	1 ( 0.3 )	... ( ... )	15 ( 1.3 )	235 ( 2.0 )	33 ( 1.4 )	228 ( 1.9 )
NEVADA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
NEW JERSEY	0 ( 0.1 )	... ( ... )	2 ( 0.3 )	... ( ... )	49 ( 1.4 )	231 ( 1.6 )
NEW MEXICO	1 ( 0.2 )	... ( ... )	7 ( 0.9 )	217 ( 3.0 )	33 ( 1.4 )	216 ( 1.9 )
NEW YORK	0 ( 0.2 )	... ( ... )	4 ( 0.6 )	227 ( 4.7 )	43 ( 1.7 )	222 ( 1.6 )
NORTH CAROLINA	1 ( 0.2 )	... ( ... )	4 ( 0.8 )	212 ( 5.5 )!	40 ( 1.2 )	217 ( 1.3 )
NORTH DAKOTA	1 ( 0.2 )	... ( ... )	10 ( 0.9 )	240 ( 2.2 )	34 ( 1.2 )	231 ( 1.2 )
OREGON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
PENNSYLVANIA	0 ( 0.1 )	... ( ... )	2 ( 0.4 )	216 ( 5.2 )	50 ( 1.6 )	229 ( 1.6 )
RHODE ISLAND	0 ( 0.1 )	... ( ... )	4 ( 0.5 )	200 ( 4.1 )	46 ( 1.4 )	220 ( 1.6 )
SOUTH CAROLINA	1 ( 0.2 )	... ( ... )	3 ( 0.3 )	205 ( 5.8 )	46 ( 1.4 )	214 ( 1.4 )
TENNESSEE	1 ( 0.1 )	... ( ... )	4 ( 0.5 )	212 ( 3.8 )	34 ( 1.1 )	213 ( 1.8 )
TEXAS	1 ( 0.2 )	... ( ... )	7 ( 0.9 )	218 ( 3.4 )	39 ( 1.3 )	222 ( 1.6 )
UTAH	1 ( 0.2 )	... ( ... )	12 ( 1.0 )	228 ( 1.9 )	39 ( 1.1 )	228 ( 1.1 )
VERMONT	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
VIRGINIA	0 ( 0.1 )	... ( ... )	3 ( 0.4 )	217 ( 5.1 )	43 ( 1.5 )	224 ( 1.4 )
WASHINGTON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
WEST VIRGINIA	0 ( 0.1 )	... ( ... )	8 ( 0.6 )	223 ( 2.8 )	35 ( 1.3 )	218 ( 1.5 )
WISCONSIN	1 ( 0.1 )	... ( ... )	7 ( 0.7 )	232 ( 2.8 )	38 ( 1.1 )	231 ( 1.3 )
WYOMING	1 ( 0.2 )	... ( ... )	14 ( 1.0 )	232 ( 1.6 )	36 ( 1.2 )	227 ( 1.3 )
<b>Other Jurisdictions</b>						
DDESS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
DoDDS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
GUAM	1 ( 0.2 )	... ( ... )	4 ( 0.5 )	180 ( 4.7 )	33 ( 1.3 )	193 ( 1.4 )

— State or other jurisdiction did not participate in the NAEP assessment year presented in this table.  
 ... Characteristics of the sample do not permit a reliable estimate.  
 ! Interpret with caution — the nature of the sample does not allow accurate determination of the variability of this statistic.  
 SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 6.15** (continued) **1992 Mathematics Assessment**



POPULATION: **1992 Grade 4 Public School Students**  
 REPORTED STATISTICS: **Percentage of Students and Average Mathematics Scale Score**  
 STUDENTS' REPORTS ON: **Time Spent on Homework**

*Approximately how much time do you spend on mathematics homework each day?*

30 Minutes	45 Minutes	One Hour or More
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JURISDICTIONS	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )
<b>Nation</b>						
NATION	29 ( 0.8 )	222 ( 1.0 )	12 ( 0.5 )	218 ( 1.5 )	12 ( 0.7 )	205 ( 1.8 )
NORTHEAST	29 ( 2.7 )	230 ( 3.0 )	12 ( 1.2 )	218 ( 3.9 )	11 ( 1.4 )	207 ( 4.5 )
SOUTHEAST	30 ( 0.8 )	215 ( 2.4 )	12 ( 1.0 )	211 ( 2.3 )	16 ( 1.6 )	200 ( 3.0 )
CENTRAL	26 ( 1.5 )	224 ( 2.3 )	15 ( 0.8 )	223 ( 2.9 )	12 ( 1.8 )	211 ( 3.6 )
WEST	30 ( 1.4 )	221 ( 1.3 )	10 ( 0.9 )	218 ( 3.5 )	11 ( 0.9 )	205 ( 3.0 )
<b>States</b>						
ALABAMA	28 ( 0.8 )	213 ( 1.8 )	13 ( 0.7 )	209 ( 2.4 )	19 ( 0.8 )	200 ( 1.7 )
ALASKA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
ARIZONA	27 ( 1.0 )	216 ( 1.3 )	12 ( 0.7 )	211 ( 2.4 )	12 ( 0.7 )	206 ( 2.6 )
ARKANSAS	27 ( 0.9 )	215 ( 1.6 )	15 ( 0.8 )	208 ( 1.9 )	16 ( 0.9 )	201 ( 1.9 )
CALIFORNIA	29 ( 1.0 )	211 ( 1.9 )	13 ( 0.8 )	208 ( 2.8 )	13 ( 0.7 )	198 ( 2.7 )
COLORADO	27 ( 1.0 )	224 ( 1.3 )	13 ( 0.5 )	221 ( 1.8 )	15 ( 0.8 )	211 ( 1.4 )
CONNECTICUT	29 ( 1.2 )	227 ( 1.5 )	13 ( 0.7 )	222 ( 2.2 )	9 ( 0.7 )	210 ( 2.5 )
DELAWARE	27 ( 1.1 )	224 ( 1.3 )	10 ( 0.7 )	215 ( 1.9 )	11 ( 0.5 )	206 ( 3.0 )
DISTRICT OF COLUMBIA	27 ( 1.2 )	201 ( 1.4 )	12 ( 0.7 )	196 ( 2.2 )	19 ( 0.8 )	184 ( 1.5 )
FLORIDA	29 ( 1.1 )	216 ( 1.6 )	12 ( 0.7 )	213 ( 2.6 )	13 ( 0.7 )	203 ( 2.3 )
GEORGIA	28 ( 0.8 )	220 ( 1.6 )	12 ( 0.7 )	214 ( 2.3 )	14 ( 0.8 )	206 ( 1.8 )
HAWAII	27 ( 0.9 )	221 ( 1.6 )	17 ( 0.8 )	220 ( 1.5 )	21 ( 0.9 )	210 ( 1.7 )
INDIANA	30 ( 0.9 )	224 ( 1.2 )	13 ( 0.8 )	219 ( 1.7 )	13 ( 0.7 )	209 ( 1.5 )
IOWA	29 ( 0.9 )	229 ( 1.2 )	12 ( 0.7 )	230 ( 1.9 )	12 ( 0.8 )	220 ( 2.0 )
KENTUCKY	29 ( 0.9 )	217 ( 1.4 )	13 ( 0.9 )	215 ( 1.9 )	16 ( 0.9 )	207 ( 1.6 )
LOUISIANA	24 ( 0.8 )	207 ( 1.6 )	11 ( 0.7 )	204 ( 2.2 )	14 ( 0.9 )	193 ( 2.0 )
MAINE	30 ( 1.2 )	232 ( 1.3 )	13 ( 0.9 )	232 ( 2.2 )	11 ( 0.8 )	221 ( 2.8 )
MARYLAND	27 ( 1.0 )	223 ( 1.7 )	12 ( 0.7 )	214 ( 2.8 )	13 ( 0.6 )	201 ( 1.8 )
MASSACHUSETTS	30 ( 1.0 )	227 ( 1.5 )	12 ( 0.8 )	222 ( 2.1 )	10 ( 0.6 )	213 ( 2.3 )
MICHIGAN	26 ( 1.0 )	224 ( 1.7 )	13 ( 0.7 )	220 ( 2.1 )	15 ( 0.9 )	205 ( 2.4 )
MINNESOTA	28 ( 1.1 )	230 ( 1.3 )	12 ( 0.7 )	225 ( 2.4 )	12 ( 1.0 )	219 ( 2.1 )
MISSISSIPPI	27 ( 0.9 )	205 ( 1.5 )	13 ( 0.7 )	205 ( 2.3 )	18 ( 0.9 )	196 ( 1.6 )
MISSOURI	28 ( 1.1 )	223 ( 1.6 )	12 ( 0.7 )	221 ( 2.0 )	13 ( 0.8 )	210 ( 2.1 )
MONTANA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
NEBRASKA	26 ( 1.0 )	225 ( 1.6 )	13 ( 0.8 )	223 ( 1.7 )	12 ( 0.9 )	214 ( 2.3 )
NEVADA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
NEW JERSEY	27 ( 1.0 )	229 ( 1.9 )	11 ( 0.7 )	224 ( 2.5 )	10 ( 0.7 )	214 ( 2.7 )
NEW MEXICO	28 ( 1.0 )	216 ( 1.8 )	15 ( 0.8 )	214 ( 2.6 )	16 ( 0.7 )	204 ( 2.4 )
NEW YORK	27 ( 1.0 )	222 ( 1.5 )	13 ( 1.0 )	212 ( 2.7 )	13 ( 0.9 )	206 ( 2.7 )
NORTH CAROLINA	28 ( 0.9 )	218 ( 1.5 )	13 ( 0.7 )	210 ( 1.9 )	14 ( 0.8 )	199 ( 1.8 )
NORTH DAKOTA	29 ( 1.0 )	229 ( 1.2 )	14 ( 0.8 )	229 ( 1.4 )	12 ( 1.0 )	216 ( 2.1 )
OREGON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
PENNSYLVANIA	28 ( 1.1 )	226 ( 1.4 )	10 ( 0.7 )	217 ( 2.2 )	10 ( 0.7 )	209 ( 2.1 )
RHODE ISLAND	28 ( 1.0 )	215 ( 1.9 )	10 ( 0.7 )	216 ( 2.3 )	12 ( 0.8 )	205 ( 2.7 )
SOUTH CAROLINA	25 ( 1.1 )	218 ( 1.4 )	12 ( 0.6 )	210 ( 2.4 )	13 ( 0.8 )	201 ( 1.8 )
TENNESSEE	32 ( 1.0 )	215 ( 1.5 )	14 ( 0.8 )	211 ( 2.1 )	16 ( 0.8 )	204 ( 1.8 )
TEXAS	28 ( 1.1 )	219 ( 1.7 )	13 ( 0.8 )	217 ( 2.2 )	13 ( 0.9 )	210 ( 2.2 )
UTAH	25 ( 1.1 )	222 ( 1.5 )	11 ( 0.7 )	221 ( 2.0 )	12 ( 0.7 )	216 ( 2.2 )
VERMONT	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
VIRGINIA	29 ( 1.0 )	224 ( 1.8 )	12 ( 0.6 )	218 ( 2.6 )	13 ( 0.8 )	209 ( 1.9 )
WASHINGTON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
WEST VIRGINIA	29 ( 0.9 )	217 ( 1.2 )	12 ( 0.7 )	212 ( 1.7 )	15 ( 0.8 )	206 ( 1.7 )
WISCONSIN	28 ( 1.0 )	230 ( 1.5 )	14 ( 0.7 )	231 ( 1.7 )	13 ( 0.7 )	217 ( 2.1 )
WYOMING	24 ( 0.9 )	226 ( 1.2 )	13 ( 0.8 )	224 ( 1.8 )	12 ( 0.8 )	217 ( 2.2 )
<b>Other Jurisdictions</b>						
DDESS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
DoDDS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
GUAM	27 ( 1.2 )	201 ( 1.7 )	13 ( 0.8 )	194 ( 2.2 )	21 ( 1.0 )	187 ( 2.1 )

— State or other jurisdiction did not participate in the NAEP assessment year presented in this table.  
 SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 6.15** (continued) **1996 Mathematics Assessment**



POPULATION: **1996 Grade 4 Public School Students**  
 REPORTED STATISTICS: **Percentage of Students and Average Mathematics Scale Score**  
 STUDENTS' REPORTS ON: **Time Spent on Homework**

*Approximately how much time do you spend on mathematics homework each day?*

<b>I Am Not Taking Mathematics This Year</b>	<b>None</b>	<b>15 Minutes</b>
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JURISDICTIONS	I Am Not Taking Mathematics This Year		None		15 Minutes	
	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )
<b>Nation</b>						
NATION	1 ( 0.2 )	... ( ... )	6 ( 0.6 )	226 ( 3.2 )	40 ( 1.1 )	224 ( 1.3 )
NORTHEAST	1 ( 0.4 )	... ( ... )	3 ( 0.8 )	... ( ... )	42 ( 2.5 )	229 ( 2.6 )
SOUTHEAST	1 ( 0.2 )	... ( ... )	4 ( 0.9 )	... ( ... )	39 ( 2.3 )	220 ( 2.0 )
CENTRAL	1 ( 0.4 )	... ( ... )	10 ( 1.6 )	238 ( 5.2 )	38 ( 2.0 )	231 ( 3.1 )
WEST	1 ( 0.4 )	... ( ... )	6 ( 0.9 )	223 ( 4.3 )	41 ( 1.8 )	220 ( 2.4 )
<b>States</b>						
ALABAMA	1 ( 0.1 )	... ( ... )	4 ( 0.5 )	198 ( 4.6 )	37 ( 1.1 )	215 ( 1.4 )
ALASKA†	2 ( 0.3 )	... ( ... )	10 ( 0.9 )	223 ( 3.7 )	35 ( 1.2 )	225 ( 1.7 )
ARIZONA	2 ( 0.3 )	... ( ... )	6 ( 0.7 )	217 ( 3.8 )	41 ( 1.4 )	221 ( 1.9 )
ARKANSAS†	2 ( 0.3 )	... ( ... )	8 ( 0.8 )	216 ( 3.3 )	37 ( 1.4 )	219 ( 1.6 )>
CALIFORNIA	3 ( 0.4 )	... ( ... )	5 ( 0.7 )	194 ( 6.4 )	38 ( 1.6 )	214 ( 2.1 )
COLORADO	2 ( 0.4 )	... ( ... )	7 ( 0.7 )	229 ( 3.5 )	37 ( 1.0 )	228 ( 1.5 )
CONNECTICUT	1 ( 0.3 )	... ( ... )	3 ( 0.5 )	219 ( 6.5 )	45 ( 1.6 )	236 ( 1.3 )
DELAWARE	1 ( 0.3 )	... ( ... )	4 ( 0.4 )	199 ( 4.8 )	42 ( 1.0 )	218 ( 1.1 )
DISTRICT OF COLUMBIA	2 ( 0.3 )	... ( ... )	3 ( 0.4 )	163 ( 5.3 )	39 ( 1.1 )	192 ( 2.0 )
FLORIDA	1 ( 0.2 )	... ( ... )	5 ( 0.7 )	212 ( 5.1 )	39 ( 1.0 )	221 ( 1.4 )
GEORGIA	1 ( 0.2 )	... ( ... )	4 ( 0.5 )	203 ( 4.0)<	38 ( 1.4 )	220 ( 1.8 )
HAWAII	2 ( 0.3 )	... ( ... )	4 ( 0.4 )	187 ( 6.1 )	33 ( 1.1 )	218 ( 1.7 )
INDIANA	0 ( 0.1 )	... ( ... )	5 ( 0.5 )	234 ( 3.0 )	38 ( 1.3 )	233 ( 1.4 )>
IOWA†	2 ( 0.3 )	... ( ... )	11 ( 1.1 )	235 ( 2.0 )	40 ( 1.3 )	232 ( 1.4 )
KENTUCKY	1 ( 0.2 )	... ( ... )	4 ( 0.5 )	205 ( 4.4 )	36 ( 1.3 )	225 ( 1.3 )>
LOUISIANA	1 ( 0.2 )	... ( ... )	4 ( 0.5 )	205 ( 4.2 )	46 ( 1.3 )	212 ( 1.4 )
MAINE	2 ( 0.4 )	... ( ... )	5 ( 0.7 )	227 ( 2.9 )	38 ( 1.6 )	235 ( 1.5 )
MARYLAND	1 ( 0.3 )	... ( ... )	2 ( 0.3 )	... ( ... )	44 ( 1.5 )	223 ( 1.5 )
MASSACHUSETTS	1 ( 0.2 )	... ( ... )	2 ( 0.3 )	... ( ... )	46 ( 1.4 )	233 ( 1.4 )
MICHIGAN†	1 ( 0.2 )	... ( ... )	9 ( 0.9 )	230 ( 2.9 )	39 ( 1.4 )	228 ( 1.5 )
MINNESOTA	2 ( 0.4 )	... ( ... )	9 ( 0.7 )	239 ( 2.6 )	38 ( 1.4 )	235 ( 1.5 )
MISSISSIPPI	1 ( 0.2 )	... ( ... )	3 ( 0.4 )	195 ( 3.5 )	39 ( 1.2 )	214 ( 1.6 )>
MISSOURI	1 ( 0.2 )	... ( ... )	7 ( 0.8 )	234 ( 2.6 )	41 ( 1.5 )	228 ( 1.3 )
MONTANA†	1 ( 0.3 )	... ( ... )	14 ( 1.1 )	236 ( 2.6 )	35 ( 0.9 )	229 ( 1.5 )
NEBRASKA	1 ( 0.3 )	... ( ... )	12 ( 1.1 )	233 ( 2.0 )	34 ( 1.2 )	230 ( 1.5 )
NEVADA†	2 ( 0.4 )	... ( ... )	5 ( 0.6 )	208 ( 3.4 )	44 ( 1.3 )	223 ( 1.4 )
NEW JERSEY†	0 ( 0.1 )	... ( ... )	2 ( 0.5 )	... ( ... )	49 ( 1.6 )	232 ( 1.5 )
NEW MEXICO	2 ( 0.4 )	... ( ... )	9 ( 0.9 )	213 ( 3.6 )	32 ( 0.9 )	219 ( 2.0 )
NEW YORK†	1 ( 0.2 )	... ( ... )	4 ( 0.5 )	225 ( 3.4 )	42 ( 1.5 )	229 ( 1.3 )>
NORTH CAROLINA	1 ( 0.2 )	... ( ... )	2 ( 0.4 )	... ( ... )	42 ( 1.0 )	230 ( 1.2 )>
NORTH DAKOTA	1 ( 0.2 )	... ( ... )	13 ( 0.8 )	239 ( 2.4 )	37 ( 1.2 )	233 ( 1.5 )
OREGON	2 ( 0.4 )	... ( ... )	10 ( 1.0 )	217 ( 3.2 )	37 ( 1.2 )	227 ( 1.6 )
PENNSYLVANIA†	1 ( 0.2 )	... ( ... )	3 ( 0.5 )	214 ( 4.6 )	48 ( 1.1 )	230 ( 1.5 )
RHODE ISLAND	1 ( 0.2 )	... ( ... )	2 ( 0.4 )	... ( ... )	47 ( 1.2 )	226 ( 1.5 )
SOUTH CAROLINA†	0 ( 0.2 )	... ( ... )	3 ( 0.3 )	... ( ... )	45 ( 1.4 )	218 ( 1.5 )
TENNESSEE	1 ( 0.1 )	... ( ... )	5 ( 0.7 )	215 ( 4.3 )	35 ( 1.2 )	223 ( 1.8 )>
TEXAS	1 ( 0.3 )	... ( ... )	4 ( 0.4 )	223 ( 3.8 )	38 ( 1.5 )	233 ( 1.7 )>
UTAH	2 ( 0.3 )	... ( ... )	13 ( 1.1 )	231 ( 2.3 )	38 ( 1.3 )	229 ( 1.6 )
VERMONT†	2 ( 0.3 )	... ( ... )	7 ( 0.7 )	220 ( 4.7 )	42 ( 1.3 )	229 ( 1.6 )
VIRGINIA	1 ( 0.2 )	... ( ... )	3 ( 0.4 )	203 ( 4.4 )	41 ( 1.3 )	227 ( 1.6 )
WASHINGTON	2 ( 0.3 )	... ( ... )	10 ( 0.8 )	227 ( 2.8 )	38 ( 1.1 )	228 ( 1.5 )
WEST VIRGINIA	1 ( 0.2 )	... ( ... )	7 ( 0.7 )	226 ( 2.8 )	36 ( 1.3 )	229 ( 1.3 )>
WISCONSIN	1 ( 0.2 )	... ( ... )	8 ( 0.9 )	238 ( 2.2 )	41 ( 1.2 )	235 ( 1.3 )
WYOMING	1 ( 0.3 )	... ( ... )	11 ( 0.7 )	233 ( 1.8 )	35 ( 1.0 )	225 ( 1.7 )
<b>Other Jurisdictions</b>						
DDESS	1 ( 0.4 )	... ( ... )	3 ( 0.5 )	... ( ... )	37 ( 1.1 )	229 ( 1.6 )
DoDDS	1 ( 0.2 )	... ( ... )	6 ( 0.5 )	222 ( 3.6 )	45 ( 1.1 )	226 ( 1.0 )
GUAM	2 ( 0.4 )	... ( ... )	3 ( 0.5 )	... ( ... )	34 ( 1.5 )	189 ( 2.3 )

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).  
 ... Characteristics of the sample do not permit a reliable estimate.  
 > (<) The value for the students was significantly higher (lower) than in the 1992 assessment at about the 95% confidence level using appropriate multiple comparison procedures.  
 SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.



**TABLE 6.15** (continued) **1996 Mathematics Assessment**



POPULATION: **1996 Grade 4 Public School Students**  
 REPORTED STATISTICS: **Percentage of Students and Average Mathematics Scale Score**  
 STUDENTS' REPORTS ON: **Time Spent on Homework**

Approximately how much time do you spend on mathematics homework each day?	30 Minutes		45 Minutes		One Hour or More	
	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )
<b>JURISDICTIONS</b>						
<b>Nation</b>						
NATION	29 ( 0.8)	227 ( 1.5)>	13 ( 0.7)	225 ( 1.5)>	12 ( 0.6)	209 ( 1.9)
NORTHEAST	31 ( 2.0)	234 ( 2.5)	13 ( 0.8)	228 ( 2.4)	10 ( 1.2)	210 ( 6.3)
SOUTHEAST	29 ( 1.2)	220 ( 3.5)	12 ( 1.3)	216 ( 3.4)	15 ( 1.4)	204 ( 3.5)
CENTRAL	29 ( 1.5)	231 ( 2.1)	12 ( 1.8)	235 ( 3.9)	10 ( 1.4)	213 ( 2.8)
WEST	27 ( 1.6)	223 ( 3.4)	13 ( 1.2)	220 ( 3.0)	12 ( 1.1)	208 ( 3.7)
<b>States</b>						
ALABAMA	27 ( 0.8)	216 ( 1.5)	15 ( 0.8)	212 ( 1.8)	17 ( 0.9)	201 ( 2.1)
ALASKA†	29 ( 1.0)	227 ( 2.1)	12 ( 0.8)	224 ( 3.4)	14 ( 0.9)	221 ( 3.7)
ARIZONA	27 ( 0.9)	222 ( 1.9)	12 ( 0.8)	217 ( 2.8)	11 ( 0.9)	206 ( 2.9)
ARKANSAS†	26 ( 0.9)	219 ( 1.9)	13 ( 1.0)	216 ( 2.4)	14 ( 1.0)	206 ( 2.4)
CALIFORNIA	29 ( 1.1)	215 ( 1.9)	11 ( 0.8)	212 ( 2.4)	14 ( 1.1)	197 ( 2.5)
COLORADO	29 ( 0.9)	229 ( 1.2)>	13 ( 0.6)	225 ( 1.9)	12 ( 0.7)	217 ( 2.3)
CONNECTICUT	28 ( 1.3)	236 ( 1.3)>	12 ( 0.8)	226 ( 2.0)	11 ( 0.8)	217 ( 2.3)
DELAWARE	29 ( 0.9)	225 ( 2.0)	12 ( 0.7)	215 ( 2.3)	12 ( 0.8)	201 ( 3.8)
DISTRICT OF COLUMBIA	23 ( 0.8)	192 ( 2.2)<	13 ( 0.7)	191 ( 2.0)	20 ( 0.9)	178 ( 1.6)<
FLORIDA	30 ( 1.0)	219 ( 1.4)	13 ( 0.7)	215 ( 1.9)	13 ( 0.7)	204 ( 2.6)
GEORGIA	30 ( 1.0)	218 ( 2.0)	13 ( 0.8)	217 ( 1.7)	14 ( 1.0)	205 ( 1.9)
HAWAII	28 ( 0.9)	222 ( 2.1)	15 ( 0.8)	215 ( 2.1)	18 ( 0.8)	210 ( 2.2)
INDIANA	31 ( 1.1)	231 ( 1.5)>	14 ( 0.8)	228 ( 1.6)>	12 ( 0.9)	216 ( 2.1)>
IOWA†	25 ( 1.2)	230 ( 1.5)	12 ( 0.8)	225 ( 2.1)	10 ( 0.8)	219 ( 2.6)
KENTUCKY	29 ( 0.9)	225 ( 1.4)>	14 ( 0.8)	220 ( 1.8)	15 ( 0.9)	208 ( 2.6)
LOUISIANA	24 ( 1.0)	213 ( 1.8)	11 ( 0.8)	207 ( 2.4)	14 ( 0.7)	200 ( 1.8)
MAINE	30 ( 1.3)	237 ( 1.3)	13 ( 1.0)	229 ( 2.1)	13 ( 0.8)	225 ( 1.9)
MARYLAND	29 ( 1.2)	228 ( 2.2)	11 ( 0.8)	221 ( 3.7)	13 ( 0.7)	208 ( 2.1)
MASSACHUSETTS	29 ( 1.1)	231 ( 1.5)	13 ( 0.7)	225 ( 2.4)	9 ( 0.7)	215 ( 2.4)
MICHIGAN†	27 ( 0.9)	230 ( 1.5)	12 ( 0.7)	226 ( 2.3)	12 ( 0.9)	214 ( 2.7)
MINNESOTA	27 ( 1.0)	234 ( 1.5)	13 ( 0.8)	230 ( 1.8)	11 ( 0.8)	225 ( 2.2)
MISSISSIPPI	28 ( 1.0)	212 ( 1.6)>	12 ( 0.8)	207 ( 2.0)	18 ( 0.8)	198 ( 1.8)
MISSOURI	28 ( 0.8)	225 ( 1.4)	12 ( 0.7)	224 ( 1.9)	12 ( 0.8)	214 ( 2.1)
MONTANA†	27 ( 0.8)	231 ( 1.9)	12 ( 0.9)	224 ( 2.5)	11 ( 0.7)	215 ( 2.7)
NEBRASKA	27 ( 0.9)	231 ( 1.4)>	13 ( 0.7)	224 ( 2.1)	12 ( 0.8)	217 ( 2.7)
NEVADA†	28 ( 1.0)	218 ( 1.7)	11 ( 0.8)	220 ( 2.2)	10 ( 0.9)	204 ( 2.1)
NEW JERSEY†	26 ( 1.3)	229 ( 1.6)	11 ( 0.9)	223 ( 2.8)	11 ( 0.9)	210 ( 3.2)
NEW MEXICO	29 ( 0.8)	217 ( 1.9)	13 ( 0.9)	216 ( 3.1)	15 ( 1.0)	203 ( 2.3)
NEW YORK†	27 ( 1.2)	228 ( 1.3)>	13 ( 0.8)	218 ( 2.7)	13 ( 0.9)	201 ( 3.2)
NORTH CAROLINA	30 ( 0.9)	227 ( 1.5)>	13 ( 0.7)	221 ( 2.4)>	12 ( 0.7)	208 ( 2.1)>
NORTH DAKOTA	28 ( 1.1)	230 ( 1.2)	12 ( 0.7)	229 ( 1.7)	10 ( 0.8)	220 ( 3.2)
OREGON	27 ( 0.9)	227 ( 1.8)	12 ( 0.8)	226 ( 2.2)	13 ( 0.9)	219 ( 2.3)
PENNSYLVANIA†	27 ( 1.0)	229 ( 1.5)	13 ( 0.8)	223 ( 1.9)	9 ( 0.7)	214 ( 2.2)
RHODE ISLAND	29 ( 1.1)	222 ( 1.4)>	11 ( 0.6)	214 ( 2.6)	10 ( 0.8)	209 ( 2.4)
SOUTH CAROLINA†	26 ( 1.1)	216 ( 2.0)	12 ( 0.8)	212 ( 2.2)	14 ( 0.9)	198 ( 2.2)
TENNESSEE	32 ( 0.9)	221 ( 1.8)>	15 ( 0.8)	218 ( 2.1)	13 ( 0.8)	209 ( 2.3)
TEXAS	29 ( 1.0)	230 ( 1.8)>	14 ( 0.8)	228 ( 2.3)>	14 ( 0.9)	220 ( 2.0)>
UTAH	25 ( 1.0)	229 ( 1.6)>	11 ( 0.8)	225 ( 2.0)	11 ( 0.8)	217 ( 2.1)
VERMONT†	27 ( 1.0)	228 ( 1.9)	11 ( 0.6)	230 ( 2.2)	10 ( 0.8)	217 ( 2.9)
VIRGINIA	31 ( 1.0)	226 ( 1.4)	13 ( 0.8)	220 ( 2.4)	12 ( 0.7)	211 ( 2.0)
WASHINGTON	28 ( 1.0)	227 ( 1.1)	12 ( 0.7)	224 ( 2.2)	10 ( 0.8)	217 ( 2.8)
WEST VIRGINIA	30 ( 0.8)	224 ( 1.3)>	14 ( 0.7)	219 ( 1.6)>	13 ( 0.9)	214 ( 2.1)>
WISCONSIN	27 ( 1.1)	233 ( 1.4)	12 ( 0.8)	229 ( 1.7)	11 ( 0.9)	220 ( 2.2)
WYOMING	26 ( 0.9)	224 ( 2.2)	13 ( 0.6)	220 ( 2.4)	12 ( 0.7)	217 ( 2.3)
<b>Other Jurisdictions</b>						
DDESS	30 ( 1.4)	226 ( 1.8)	14 ( 1.2)	224 ( 2.5)	15 ( 1.0)	213 ( 2.9)
DoDDS	26 ( 1.0)	225 ( 1.2)	11 ( 0.7)	219 ( 2.1)	12 ( 0.6)	215 ( 2.3)
GUAM	27 ( 1.4)	196 ( 2.3)	13 ( 1.0)	195 ( 2.6)	22 ( 1.2)	183 ( 2.6)

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).  
 > (<) The value for the students was significantly higher (lower) than in the 1992 assessment at about the 95% confidence level using appropriate multiple comparison procedures.  
 SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 6.16**

**1996 Mathematics Assessment**



POPULATION:

1996 Grade 4 Public School Students

REPORTED STATISTICS:

Percentage of Students and Average Mathematics Scale Score

STUDENTS' REPORTS ON:

Using Computers at Home

How often do you use a computer at home for schoolwork?	There Is No Computer at Home		Never or Hardly Ever		Once or Twice a Month		Once or Twice a Week		Almost Every Day	
	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )
<b>JURISDICTIONS</b>										
<b>Nation</b>										
NATION	44 ( 1.4 )	214 ( 1.3 )	26 ( 0.9 )	229 ( 1.3 )	11 ( 0.6 )	239 ( 1.6 )	10 ( 0.6 )	228 ( 2.4 )	8 ( 0.5 )	214 ( 2.4 )
NORTHEAST	37 ( 3.2 )	216 ( 3.2 )	28 ( 2.7 )	234 ( 2.0 )	14 ( 1.5 )	244 ( 2.1 )	12 ( 1.1 )	231 ( 4.9 )	9 ( 1.4 )	213 ( 5.9 )!
SOUTHEAST	53 ( 2.4 )	210 ( 1.9 )	19 ( 2.0 )	224 ( 3.0 )	9 ( 1.2 )	233 ( 5.8 )	9 ( 0.8 )	224 ( 3.6 )	10 ( 1.2 )	207 ( 4.0 )
CENTRAL	41 ( 3.3 )	224 ( 1.9 )	29 ( 1.8 )	234 ( 2.5 )	14 ( 1.6 )	242 ( 2.7 )	9 ( 1.5 )	230 ( 5.2 )	7 ( 1.0 )	223 ( 5.1 )
WEST	44 ( 2.6 )	210 ( 2.9 )	27 ( 1.4 )	223 ( 2.8 )	9 ( 1.1 )	236 ( 3.2 )	11 ( 1.1 )	228 ( 4.2 )	8 ( 0.6 )	214 ( 4.2 )
<b>States</b>										
ALABAMA	56 ( 1.6 )	205 ( 1.3 )	22 ( 0.9 )	222 ( 1.8 )	7 ( 0.8 )	235 ( 2.6 )	8 ( 0.5 )	218 ( 2.7 )	7 ( 0.7 )	202 ( 2.7 )
ALASKA†	36 ( 1.6 )	213 ( 1.8 )	36 ( 1.4 )	230 ( 1.6 )	11 ( 0.7 )	238 ( 2.1 )	11 ( 0.9 )	228 ( 2.3 )	6 ( 0.6 )	226 ( 3.0 )
ARIZONA	47 ( 1.7 )	208 ( 1.8 )	29 ( 1.5 )	227 ( 1.5 )	10 ( 1.0 )	237 ( 2.6 )	7 ( 0.6 )	222 ( 4.0 )	7 ( 0.8 )	211 ( 3.5 )
ARKANSAS†	56 ( 1.5 )	211 ( 1.7 )	23 ( 1.1 )	226 ( 1.6 )	7 ( 0.7 )	232 ( 2.6 )	7 ( 0.5 )	218 ( 2.8 )	7 ( 0.7 )	204 ( 2.8 )
CALIFORNIA	47 ( 1.8 )	199 ( 2.3 )	26 ( 1.3 )	217 ( 1.8 )	10 ( 0.9 )	229 ( 2.6 )	9 ( 0.8 )	222 ( 3.6 )	7 ( 0.8 )	199 ( 3.1 )
COLORADO	35 ( 1.4 )	215 ( 1.4 )	31 ( 1.2 )	230 ( 1.5 )	15 ( 1.0 )	240 ( 1.7 )	13 ( 0.8 )	231 ( 1.5 )	7 ( 0.6 )	220 ( 3.3 )
CONNECTICUT	34 ( 1.3 )	221 ( 1.4 )	29 ( 1.6 )	237 ( 1.2 )	17 ( 0.8 )	243 ( 1.4 )	12 ( 0.9 )	239 ( 2.0 )	9 ( 0.7 )	227 ( 2.9 )
DELAWARE	45 ( 1.1 )	206 ( 1.3 )	30 ( 1.0 )	223 ( 1.7 )	10 ( 0.6 )	231 ( 2.4 )	9 ( 0.7 )	225 ( 2.9 )	6 ( 0.7 )	202 ( 3.8 )
DISTRICT OF COLUMBIA	49 ( 1.0 )	181 ( 2.0 )	22 ( 0.8 )	192 ( 2.1 )	8 ( 0.7 )	212 ( 3.0 )	9 ( 0.5 )	193 ( 3.6 )	11 ( 0.6 )	180 ( 2.4 )
FLORIDA	49 ( 1.5 )	209 ( 1.3 )	26 ( 1.1 )	224 ( 1.4 )	9 ( 0.7 )	228 ( 2.3 )	9 ( 0.7 )	223 ( 2.8 )	7 ( 0.5 )	208 ( 2.4 )
GEORGIA	50 ( 1.8 )	209 ( 1.3 )	26 ( 1.2 )	225 ( 1.9 )	8 ( 0.9 )	235 ( 2.2 )	8 ( 0.6 )	216 ( 3.1 )	8 ( 0.7 )	205 ( 3.4 )
HAWAII	47 ( 1.4 )	207 ( 1.9 )	28 ( 1.0 )	223 ( 1.5 )	9 ( 0.7 )	235 ( 2.7 )	10 ( 0.9 )	217 ( 2.8 )	6 ( 0.4 )	209 ( 2.8 )
INDIANA	45 ( 2.1 )	222 ( 1.2 )	27 ( 1.3 )	235 ( 1.5 )	11 ( 0.9 )	241 ( 2.0 )	9 ( 0.9 )	236 ( 2.4 )	7 ( 1.0 )	229 ( 3.1 )
IOWA†	47 ( 1.6 )	224 ( 1.2 )	29 ( 1.1 )	234 ( 1.4 )	11 ( 0.9 )	242 ( 2.1 )	9 ( 0.8 )	232 ( 2.2 )	5 ( 0.5 )	220 ( 3.0 )
KENTUCKY	55 ( 1.3 )	215 ( 1.2 )	21 ( 0.8 )	225 ( 1.7 )	9 ( 0.6 )	236 ( 2.5 )	9 ( 0.7 )	227 ( 2.3 )	6 ( 0.5 )	214 ( 3.0 )
LOUISIANA	56 ( 1.3 )	207 ( 1.2 )	23 ( 1.0 )	214 ( 1.6 )	6 ( 0.6 )	226 ( 3.3 )	7 ( 0.6 )	210 ( 2.7 )	8 ( 0.6 )	198 ( 2.2 )
MAINE	38 ( 1.5 )	225 ( 1.4 )	27 ( 1.1 )	235 ( 1.5 )	18 ( 1.0 )	243 ( 1.3 )	12 ( 0.9 )	236 ( 2.4 )	6 ( 0.6 )	230 ( 2.5 )
MARYLAND	37 ( 1.4 )	209 ( 1.5 )	30 ( 1.3 )	227 ( 1.9 )	13 ( 1.0 )	240 ( 2.7 )	12 ( 0.8 )	228 ( 3.1 )	8 ( 0.6 )	211 ( 3.8 )
MASSACHUSETTS	35 ( 1.8 )	219 ( 1.5 )	29 ( 1.3 )	231 ( 1.5 )	16 ( 1.3 )	241 ( 1.7 )	13 ( 1.0 )	238 ( 3.0 )	8 ( 0.9 )	228 ( 3.8 )
MICHIGAN†	46 ( 1.3 )	219 ( 1.2 )	26 ( 1.2 )	232 ( 1.5 )	11 ( 0.9 )	241 ( 2.2 )	10 ( 0.9 )	232 ( 3.1 )	6 ( 0.7 )	219 ( 3.9 )
MINNESOTA	40 ( 1.2 )	224 ( 1.3 )	30 ( 1.0 )	237 ( 1.4 )	13 ( 0.9 )	244 ( 1.9 )	11 ( 0.8 )	237 ( 2.4 )	6 ( 0.6 )	226 ( 3.5 )
MISSISSIPPI	62 ( 1.0 )	206 ( 1.3 )	18 ( 0.9 )	217 ( 1.9 )	5 ( 0.5 )	218 ( 3.4 )	7 ( 0.5 )	208 ( 3.3 )	8 ( 0.5 )	202 ( 2.3 )
MISSOURI	49 ( 1.3 )	219 ( 1.3 )	28 ( 1.1 )	231 ( 1.2 )	10 ( 0.7 )	240 ( 2.2 )	8 ( 0.7 )	226 ( 2.0 )	5 ( 0.6 )	216 ( 3.7 )
MONTANA†	44 ( 1.6 )	222 ( 1.7 )	31 ( 1.3 )	232 ( 1.6 )	12 ( 1.0 )	237 ( 1.7 )	8 ( 0.7 )	236 ( 3.3 )	5 ( 0.5 )	220 ( 3.6 )
NEBRASKA	45 ( 1.2 )	221 ( 1.3 )	30 ( 1.1 )	234 ( 1.5 )	11 ( 0.6 )	239 ( 1.7 )	9 ( 0.8 )	231 ( 2.0 )	5 ( 0.7 )	219 ( 4.5 )
NEVADA†	51 ( 1.6 )	212 ( 1.3 )	28 ( 1.2 )	223 ( 1.8 )	8 ( 0.8 )	236 ( 2.6 )	7 ( 0.7 )	222 ( 3.9 )	6 ( 0.5 )	214 ( 3.4 )
NEW JERSEY†	39 ( 1.7 )	215 ( 1.9 )	28 ( 1.0 )	232 ( 1.5 )	16 ( 1.1 )	247 ( 1.9 )	10 ( 0.8 )	230 ( 2.5 )	6 ( 0.6 )	225 ( 3.6 )
NEW MEXICO	51 ( 1.8 )	206 ( 1.9 )	28 ( 1.3 )	223 ( 1.5 )	9 ( 0.9 )	233 ( 2.4 )	7 ( 0.6 )	219 ( 3.1 )	5 ( 0.6 )	203 ( 5.9 )
NEW YORK†	45 ( 1.2 )	214 ( 1.5 )	28 ( 1.1 )	230 ( 1.4 )	11 ( 0.7 )	239 ( 2.3 )	10 ( 0.8 )	228 ( 2.5 )	7 ( 0.6 )	215 ( 3.7 )
NORTH CAROLINA	50 ( 1.6 )	216 ( 1.4 )	25 ( 1.3 )	231 ( 1.4 )	9 ( 0.7 )	242 ( 2.0 )	10 ( 0.7 )	233 ( 2.7 )	6 ( 0.5 )	220 ( 2.7 )
NORTH DAKOTA	43 ( 1.3 )	227 ( 1.7 )	34 ( 1.1 )	233 ( 1.4 )	10 ( 0.7 )	239 ( 1.6 )	8 ( 0.7 )	233 ( 3.3 )	5 ( 0.4 )	227 ( 2.4 )
OREGON	37 ( 1.7 )	214 ( 1.5 )	32 ( 1.3 )	226 ( 1.6 )	13 ( 1.4 )	240 ( 2.1 )	10 ( 1.0 )	233 ( 2.4 )	7 ( 0.6 )	215 ( 3.0 )
PENNSYLVANIA‡	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
RHODE ISLAND	44 ( 1.6 )	213 ( 1.4 )	25 ( 1.0 )	229 ( 1.9 )	12 ( 0.9 )	234 ( 2.3 )	10 ( 0.7 )	223 ( 3.6 )	7 ( 0.7 )	213 ( 3.7 )
SOUTH CAROLINA†	53 ( 1.1 )	208 ( 1.3 )	24 ( 0.9 )	220 ( 1.8 )	7 ( 0.6 )	229 ( 2.9 )	8 ( 0.6 )	219 ( 2.4 )	8 ( 0.7 )	207 ( 2.2 )
TENNESSEE	51 ( 1.4 )	214 ( 1.4 )	25 ( 1.1 )	226 ( 1.5 )	10 ( 0.8 )	237 ( 2.8 )	8 ( 0.6 )	222 ( 2.9 )	6 ( 0.5 )	208 ( 3.5 )
TEXAS	46 ( 1.6 )	219 ( 1.4 )	27 ( 1.4 )	236 ( 1.6 )	11 ( 0.9 )	250 ( 2.4 )	10 ( 0.6 )	236 ( 2.7 )	6 ( 0.6 )	220 ( 3.1 )
UTAH	29 ( 1.6 )	217 ( 1.5 )	40 ( 1.0 )	231 ( 1.2 )	14 ( 0.9 )	238 ( 1.6 )	11 ( 0.6 )	227 ( 2.3 )	7 ( 0.5 )	224 ( 2.5 )
VERMONT†	37 ( 1.2 )	217 ( 1.8 )	31 ( 1.1 )	227 ( 1.5 )	12 ( 0.6 )	242 ( 2.0 )	12 ( 0.8 )	232 ( 2.8 )	7 ( 0.8 )	219 ( 3.9 )
VIRGINIA	42 ( 1.4 )	214 ( 1.3 )	32 ( 1.2 )	229 ( 1.5 )	12 ( 0.8 )	237 ( 2.3 )	8 ( 0.6 )	227 ( 2.9 )	6 ( 0.6 )	216 ( 3.3 )
WASHINGTON	36 ( 1.3 )	216 ( 1.7 )	34 ( 1.1 )	230 ( 1.2 )	12 ( 0.9 )	237 ( 1.6 )	10 ( 0.8 )	229 ( 2.5 )	7 ( 0.6 )	219 ( 2.9 )
WEST VIRGINIA	55 ( 1.4 )	218 ( 1.0 )	26 ( 1.0 )	230 ( 1.5 )	7 ( 0.8 )	238 ( 2.2 )	7 ( 0.5 )	228 ( 2.5 )	4 ( 0.5 )	221 ( 2.9 )
WISCONSIN	44 ( 1.4 )	224 ( 1.1 )	26 ( 1.3 )	238 ( 1.5 )	13 ( 0.9 )	246 ( 1.4 )	10 ( 0.6 )	236 ( 1.9 )	7 ( 0.6 )	221 ( 2.9 )
WYOMING	43 ( 1.2 )	217 ( 1.9 )	32 ( 1.2 )	228 ( 1.4 )	10 ( 0.8 )	235 ( 2.1 )	10 ( 0.6 )	229 ( 2.7 )	5 ( 0.5 )	215 ( 3.6 )
<b>Other Jurisdictions</b>										
DDESS	40 ( 1.4 )	219 ( 2.0 )	36 ( 1.5 )	226 ( 2.0 )	12 ( 1.0 )	236 ( 2.3 )	7 ( 0.7 )	229 ( 3.8 )	5 ( 0.6 )	216 ( 3.7 )
DoDDS	29 ( 1.0 )	216 ( 1.3 )	40 ( 1.2 )	225 ( 1.3 )	14 ( 0.7 )	237 ( 1.7 )	11 ( 0.7 )	224 ( 2.3 )	6 ( 0.5 )	213 ( 2.2 )
GUAM	62 ( 1.1 )	186 ( 1.7 )	20 ( 1.1 )	197 ( 3.3 )	5 ( 0.6 )	205 ( 3.8 )	7 ( 0.7 )	186 ( 4.2 )	7 ( 0.6 )	178 ( 3.8 )

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).  
 — State or other jurisdiction did not participate in the NAEP assessment year presented in this table.  
 ! Interpret with caution — the nature of the sample does not allow accurate determination of the variability of this statistic.  
 ‡ 1996 results for Pennsylvania are not reported for this table; the PA Department of Education requested that students refrain from answering this home environment background question.  
 SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 6.17**

**1996 Mathematics Assessment**



POPULATION:

1996 Grade 4 Public School Students

REPORTED STATISTICS:

Percentage of Students and Average Mathematics Scale Score

TEACHERS' REPORTS ON:

Frequency of Calculator Use

How often do the students in this class use a calculator?

Never or Hardly Ever

Once or Twice a Month

Once or Twice a Week

Almost Every Day

**JURISDICTIONS**

PCT ( SE) SS ( SE) PCT ( SE) SS ( SE) PCT ( SE) SS ( SE) PCT ( SE) SS ( SE)

**Nation**

NATION	24 ( 2.5)	216 ( 2.3)	42 ( 2.6)	223 ( 1.6)	29 ( 2.4)	229 ( 1.8)	5 ( 0.9)	227 ( 5.0)
NORTHEAST	20 ( 4.0)	202 ( 6.6)!	39 ( 6.4)	230 ( 2.9)	32 ( 4.7)	238 ( 3.6)	9 ( 3.1)	... ( ... )
SOUTHEAST	23 ( 2.9)	207 ( 3.5)	49 ( 4.3)	218 ( 4.2)	23 ( 3.4)	224 ( 3.4)	5 ( 1.7)	216 ( 7.5)!
CENTRAL	24 ( 6.8)	227 ( 2.8)!	41 ( 6.6)	227 ( 2.5)	32 ( 5.2)	236 ( 3.5)	3 ( 1.2)	... ( ... )
WEST	27 ( 4.4)	219 ( 3.4)	41 ( 3.6)	221 ( 2.7)	28 ( 4.4)	220 ( 3.6)	4 ( 1.6)	... ( ... )

**States**

ALABAMA	45 ( 3.7)	209 ( 1.9)	37 ( 3.4)	213 ( 2.2)	16 ( 2.8)	215 ( 3.0)	1 ( 0.7)	... ( ... )
ALASKA†	28 ( 3.3)	219 ( 2.0)	39 ( 3.5)	228 ( 2.0)	29 ( 2.7)	222 ( 3.2)	4 ( 1.4)	224 (10.0)!
ARIZONA	35 ( 3.3)	214 ( 2.3)	43 ( 3.6)	218 ( 2.8)	17 ( 2.7)	222 ( 3.6)	5 ( 1.3)	235 ( 7.2)!
ARKANSAS†	33 ( 4.0)	215 ( 2.3)	42 ( 4.1)	216 ( 1.7)	24 ( 3.4)	217 ( 4.4)	1 ( 0.9)	... ( ... )
CALIFORNIA	21 ( 2.6)	197 ( 3.1)	38 ( 3.8)	210 ( 2.0)	34 ( 3.6)	215 ( 3.4)	7 ( 1.9)	217 ( 5.2)!
COLORADO	22 ( 2.8)	220 ( 2.4)	44 ( 2.9)	225 ( 1.9)	29 ( 2.8)	232 ( 1.7)	5 ( 1.4)	227 ( 5.5)!
CONNECTICUT	18 ( 2.6)	217 ( 3.4)	46 ( 2.9)	233 ( 1.6)	29 ( 2.6)	237 ( 2.3)	7 ( 1.7)	242 ( 3.0)!
DELAWARE	15 ( 0.7)	209 ( 2.8)	51 ( 1.2)	216 ( 1.0)	30 ( 0.9)	215 ( 1.8)	4 ( 0.4)	224 ( 4.8)
DISTRICT OF COLUMBIA	13 ( 0.6)	186 ( 2.3)	39 ( 0.9)	189 ( 1.7)	38 ( 0.7)	187 ( 1.5)	10 ( 0.5)	181 ( 2.9)
FLORIDA	25 ( 2.7)	208 ( 1.9)	43 ( 2.7)	218 ( 1.8)	27 ( 2.5)	222 ( 2.7)	5 ( 1.3)	212 ( 7.1)!
GEORGIA	31 ( 3.6)	210 ( 2.5)	39 ( 3.4)	215 ( 2.2)	24 ( 2.6)	221 ( 2.8)	6 ( 1.6)	227 ( 5.5)!
HAWAII	31 ( 3.0)	211 ( 1.8)	46 ( 2.9)	217 ( 2.0)	21 ( 2.8)	217 ( 3.6)	2 ( 0.9)	... ( ... )
INDIANA	28 ( 3.2)	227 ( 2.0)	48 ( 3.2)	229 ( 1.4)	20 ( 3.2)	231 ( 2.5)	4 ( 2.0)	239 ( 4.6)!
IOWA†	26 ( 4.6)	226 ( 2.7)	48 ( 4.1)	229 ( 1.3)	24 ( 3.6)	233 ( 2.1)	2 ( 1.3)	... ( ... )
KENTUCKY	5 ( 1.5)	210 ( 6.2)!	44 ( 4.5)	220 ( 1.5)	40 ( 4.3)	219 ( 2.1)	12 ( 2.6)	226 ( 2.8)!
LOUISIANA	31 ( 3.2)	206 ( 2.2)	48 ( 3.2)	211 ( 1.7)	19 ( 2.8)	211 ( 3.5)	2 ( 0.7)	... ( ... )
MAINE	5 ( 1.4)	231 ( 4.1)!	44 ( 4.0)	231 ( 1.7)	43 ( 3.4)	235 ( 1.8)	8 ( 1.7)	232 ( 2.6)!
MARYLAND	9 ( 2.2)	202 ( 3.9)!	44 ( 3.7)	220 ( 2.3)	39 ( 3.2)	228 ( 2.5)	9 ( 1.8)	225 ( 6.5)!
MASSACHUSETTS	24 ( 3.4)	220 ( 3.0)	39 ( 3.1)	229 ( 1.6)	31 ( 3.2)	235 ( 1.8)	6 ( 1.6)	235 ( 6.2)!
MICHIGAN†	4 ( 1.6)	213 (10.5)!	39 ( 3.8)	222 ( 2.3)	47 ( 3.1)	229 ( 1.8)	9 ( 1.8)	235 ( 5.1)
MINNESOTA	14 ( 2.3)	221 ( 3.8)	35 ( 3.0)	233 ( 2.2)	42 ( 3.1)	235 ( 1.9)	10 ( 2.2)	235 ( 2.3)!
MISSISSIPPI	41 ( 3.6)	204 ( 1.7)	37 ( 3.3)	211 ( 1.6)	18 ( 2.8)	213 ( 3.7)	3 ( 1.4)	212 ( 4.2)!
MISSOURI	41 ( 3.7)	223 ( 1.3)	47 ( 3.5)	225 ( 1.8)	11 ( 1.8)	230 ( 3.1)	1 ( 0.6)	... ( ... )
MONTANA†	17 ( 3.2)	220 ( 3.2)	45 ( 3.9)	228 ( 1.8)	34 ( 3.9)	232 ( 1.9)	4 ( 1.3)	230 ( 4.8)!
NEBRASKA	19 ( 2.8)	222 ( 1.7)	44 ( 3.7)	224 ( 2.4)	32 ( 3.5)	236 ( 1.7)	5 ( 1.7)	221 ( 6.5)!
NEVADA†	29 ( 3.5)	214 ( 2.1)	39 ( 3.2)	219 ( 2.0)	27 ( 3.6)	221 ( 3.1)	5 ( 1.4)	227 ( 3.2)!
NEW JERSEY†	15 ( 3.1)	218 ( 3.3)!	40 ( 3.9)	225 ( 2.7)	39 ( 3.9)	234 ( 2.6)	6 ( 1.9)	228 ( 4.9)!
NEW MEXICO	40 ( 3.5)	213 ( 2.8)	30 ( 2.8)	215 ( 2.3)	24 ( 2.9)	215 ( 3.0)	6 ( 1.8)	218 ( 6.4)!
NEW YORK†	41 ( 3.6)	218 ( 2.0)	37 ( 3.2)	227 ( 2.1)	19 ( 2.3)	228 ( 3.1)	3 ( 0.7)	... ( ... )
NORTH CAROLINA	5 ( 1.4)	217 ( 6.0)!	33 ( 3.4)	223 ( 1.6)	47 ( 3.4)	224 ( 2.1)	15 ( 2.6)	229 ( 2.5)
NORTH DAKOTA	30 ( 3.1)	230 ( 1.9)	36 ( 3.3)	232 ( 1.6)	29 ( 3.2)	231 ( 1.8)	5 ( 1.2)	236 ( 3.3)!
OREGON	17 ( 2.9)	220 ( 2.5)	43 ( 3.1)	220 ( 1.8)	30 ( 3.2)	230 ( 1.7)	10 ( 2.0)	230 ( 4.4)!
PENNSYLVANIA†	29 ( 3.9)	221 ( 2.5)	41 ( 3.6)	228 ( 1.9)	25 ( 3.3)	230 ( 2.3)	5 ( 1.7)	232 ( 6.5)!
RHODE ISLAND	20 ( 2.8)	214 ( 2.5)	41 ( 3.2)	221 ( 2.5)	31 ( 2.9)	222 ( 1.9)	9 ( 2.2)	226 ( 3.6)!
SOUTH CAROLINA†	26 ( 2.4)	210 ( 2.0)	50 ( 3.6)	212 ( 1.9)	20 ( 2.8)	218 ( 2.2)	4 ( 1.2)	223 ( 3.3)!
TENNESSEE	43 ( 3.8)	213 ( 1.9)	39 ( 3.4)	225 ( 2.3)	14 ( 2.3)	223 ( 2.4)	4 ( 1.2)	227 ( 5.6)!
TEXAS	41 ( 4.3)	221 ( 2.0)	39 ( 3.7)	229 ( 2.3)	16 ( 2.8)	238 ( 3.4)	4 ( 1.7)	246 ( 7.3)!
UTAH	19 ( 2.9)	222 ( 3.1)	39 ( 3.7)	226 ( 1.9)	35 ( 4.0)	230 ( 1.7)	8 ( 1.7)	230 ( 2.9)!
VERMONT†	16 ( 3.1)	221 ( 2.7)!	34 ( 3.1)	226 ( 2.4)	40 ( 3.2)	225 ( 1.9)	10 ( 2.0)	227 ( 3.1)
VIRGINIA	23 ( 2.7)	215 ( 2.4)	46 ( 3.6)	223 ( 1.6)	27 ( 3.2)	228 ( 2.7)	3 ( 1.0)	217 ( 7.0)!
WASHINGTON	30 ( 3.3)	221 ( 2.2)	38 ( 3.5)	223 ( 1.6)	25 ( 2.7)	231 ( 1.8)	6 ( 1.7)	229 ( 2.4)!
WEST VIRGINIA	10 ( 2.3)	222 ( 3.3)!	40 ( 3.3)	220 ( 1.5)	43 ( 3.0)	226 ( 1.4)	7 ( 2.2)	229 ( 4.6)!
WISCONSIN	18 ( 2.9)	226 ( 2.5)	44 ( 4.0)	232 ( 1.4)	34 ( 3.7)	233 ( 2.1)	4 ( 1.6)	231 ( 8.2)!
WYOMING	22 ( 2.9)	220 ( 2.2)	49 ( 3.2)	222 ( 1.6)	24 ( 2.5)	227 ( 2.5)	4 ( 1.2)	226 ( 8.5)!

**Other Jurisdictions**

DDESS	19 ( 0.4)	226 ( 2.5)	38 ( 1.0)	223 ( 1.7)	34 ( 1.2)	225 ( 1.7)	9 ( 0.6)	229 ( 3.0)
DoDDS	3 ( 0.4)	... ( ... )	24 ( 1.9)	221 ( 1.6)	49 ( 2.4)	224 ( 1.1)	24 ( 1.9)	223 ( 1.4)
GUAM	64 ( 1.3)	187 ( 2.3)	20 ( 1.0)	193 ( 2.8)	15 ( 1.0)	192 ( 4.5)	1 ( 0.4)	... ( ... )

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).

... Characteristics of the sample do not permit a reliable estimate.

! Interpret with caution — the nature of the sample does not allow accurate determination of the variability of this statistic.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 6.18**

**1996 Mathematics Assessment**



POPULATION:

1996 Grade 4 Public School Students

REPORTED STATISTICS:

Percentage of Students and Average Mathematics Scale Score

STUDENTS' REPORTS ON:

Frequency of Calculator Use

How often in this class do you use a calculator?	Never or Hardly Ever		Once or Twice a Month		Once or Twice a Week		Almost Every Day	
	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )
<b>JURISDICTIONS</b>								
<b>Nation</b>								
NATION	40 ( 1.4 )	220 ( 1.3 )	26 ( 0.8 )	233 ( 1.0 )	23 ( 1.0 )	223 ( 1.4 )	11 ( 0.6 )	206 ( 1.9 )
NORTHEAST	34 ( 3.0 )	226 ( 2.4 )	28 ( 1.8 )	239 ( 2.2 )	26 ( 2.8 )	225 ( 2.8 )	12 ( 1.5 )	206 ( 4.4 )
SOUTHEAST	38 ( 2.0 )	213 ( 3.3 )	23 ( 1.8 )	228 ( 2.2 )	26 ( 2.2 )	216 ( 3.6 )	13 ( 1.6 )	204 ( 3.3 )
CENTRAL	38 ( 3.7 )	227 ( 2.4 )	29 ( 2.3 )	237 ( 2.0 )	24 ( 1.8 )	231 ( 2.5 )	9 ( 0.8 )	218 ( 4.4 )
WEST	46 ( 2.2 )	217 ( 2.6 )	25 ( 1.1 )	230 ( 1.8 )	20 ( 1.3 )	221 ( 2.6 )	9 ( 1.0 )	199 ( 3.6 )
<b>States</b>								
ALABAMA	56 ( 2.0 )	211 ( 1.4 )	19 ( 1.3 )	220 ( 1.9 )	17 ( 1.1 )	212 ( 1.8 )	9 ( 0.8 )	198 ( 2.4 )
ALASKA†	44 ( 1.8 )	223 ( 1.7 )	24 ( 1.1 )	229 ( 2.1 )	21 ( 1.3 )	228 ( 1.8 )	10 ( 1.0 )	211 ( 3.4 )
ARIZONA	49 ( 2.0 )	218 ( 1.9 )	22 ( 1.3 )	226 ( 1.8 )	19 ( 1.3 )	221 ( 2.4 )	10 ( 0.7 )	200 ( 3.0 )
ARKANSAS†	47 ( 2.3 )	216 ( 1.5 )	24 ( 1.5 )	223 ( 1.7 )	19 ( 1.5 )	217 ( 2.4 )	10 ( 1.1 )	199 ( 2.8 )
CALIFORNIA	41 ( 1.6 )	208 ( 1.8 )	23 ( 1.2 )	218 ( 2.5 )	23 ( 1.2 )	211 ( 2.3 )	13 ( 1.1 )	197 ( 2.5 )
COLORADO	38 ( 1.9 )	224 ( 1.6 )	30 ( 1.2 )	233 ( 1.5 )	24 ( 1.4 )	226 ( 1.5 )	8 ( 0.8 )	210 ( 2.7 )
CONNECTICUT	34 ( 1.7 )	228 ( 1.4 )	29 ( 1.0 )	239 ( 1.3 )	26 ( 1.3 )	235 ( 1.6 )	11 ( 1.0 )	220 ( 2.9 )
DELAWARE	38 ( 1.3 )	210 ( 1.7 )	27 ( 1.1 )	227 ( 1.5 )	23 ( 1.2 )	221 ( 2.0 )	12 ( 0.8 )	199 ( 3.7 )
DISTRICT OF COLUMBIA	34 ( 1.1 )	188 ( 1.8 )	18 ( 0.7 )	200 ( 2.0 )	28 ( 0.9 )	191 ( 2.2 )	21 ( 0.8 )	175 ( 1.7 )
FLORIDA	45 ( 1.9 )	216 ( 1.2 )	23 ( 1.1 )	227 ( 1.5 )	20 ( 1.2 )	216 ( 1.9 )	12 ( 0.8 )	199 ( 3.0 )
GEORGIA	43 ( 1.8 )	213 ( 1.4 )	22 ( 1.2 )	225 ( 2.3 )	22 ( 1.3 )	219 ( 2.1 )	13 ( 1.0 )	202 ( 2.7 )
HAWAII	44 ( 1.8 )	216 ( 1.4 )	23 ( 1.1 )	225 ( 2.1 )	23 ( 1.3 )	215 ( 2.2 )	10 ( 1.0 )	192 ( 4.6 )
INDIANA	45 ( 2.1 )	228 ( 1.2 )	26 ( 1.0 )	236 ( 1.4 )	20 ( 1.4 )	229 ( 1.9 )	8 ( 0.7 )	218 ( 2.4 )
IOWA†	40 ( 2.4 )	227 ( 1.6 )	31 ( 1.7 )	234 ( 1.1 )	22 ( 1.4 )	229 ( 2.1 )	6 ( 0.8 )	219 ( 3.0 )
KENTUCKY	28 ( 1.6 )	218 ( 1.6 )	30 ( 1.2 )	226 ( 1.4 )	29 ( 1.4 )	222 ( 1.5 )	13 ( 1.0 )	209 ( 2.1 )
LOUISIANA	48 ( 1.8 )	209 ( 1.4 )	22 ( 1.3 )	220 ( 1.5 )	19 ( 1.0 )	209 ( 2.0 )	12 ( 0.7 )	194 ( 2.3 )
MAINE	16 ( 1.2 )	231 ( 1.6 )	38 ( 1.4 )	236 ( 1.2 )	36 ( 1.3 )	232 ( 1.4 )	10 ( 1.2 )	223 ( 2.8 )
MARYLAND	29 ( 1.9 )	214 ( 2.1 )	29 ( 1.2 )	232 ( 1.8 )	30 ( 1.5 )	225 ( 2.2 )	12 ( 1.0 )	204 ( 2.5 )
MASSACHUSETTS	36 ( 2.3 )	226 ( 1.6 )	27 ( 1.2 )	236 ( 1.6 )	27 ( 1.3 )	231 ( 1.7 )	10 ( 1.1 )	219 ( 2.7 )
MICHIGAN†	27 ( 1.6 )	224 ( 1.8 )	29 ( 1.1 )	234 ( 1.5 )	33 ( 1.4 )	227 ( 1.5 )	12 ( 1.0 )	211 ( 2.6 )
MINNESOTA	29 ( 1.6 )	229 ( 1.5 )	30 ( 1.4 )	238 ( 1.4 )	29 ( 1.4 )	235 ( 1.7 )	12 ( 1.2 )	223 ( 2.2 )
MISSISSIPPI	50 ( 2.1 )	209 ( 1.4 )	18 ( 1.1 )	218 ( 1.8 )	18 ( 1.0 )	208 ( 2.1 )	14 ( 1.0 )	196 ( 2.0 )
MISSOURI	51 ( 1.9 )	223 ( 1.3 )	26 ( 1.7 )	233 ( 1.5 )	17 ( 1.1 )	226 ( 1.9 )	7 ( 0.6 )	207 ( 2.5 )
MONTANA†	39 ( 1.9 )	225 ( 1.7 )	33 ( 1.3 )	233 ( 1.5 )	21 ( 1.4 )	227 ( 2.2 )	8 ( 0.9 )	217 ( 3.9 )
NEBRASKA	37 ( 2.0 )	224 ( 1.6 )	30 ( 1.0 )	235 ( 1.4 )	24 ( 1.5 )	231 ( 1.7 )	8 ( 0.8 )	211 ( 4.0 )
NEVADA†	46 ( 2.0 )	216 ( 1.6 )	21 ( 0.9 )	225 ( 1.7 )	22 ( 1.5 )	222 ( 2.0 )	11 ( 1.2 )	205 ( 3.5 )
NEW JERSEY†	30 ( 2.2 )	223 ( 1.8 )	30 ( 1.7 )	236 ( 1.9 )	28 ( 1.7 )	229 ( 2.1 )	12 ( 1.1 )	215 ( 3.3 )
NEW MEXICO	53 ( 2.0 )	214 ( 1.7 )	20 ( 1.2 )	221 ( 2.1 )	18 ( 1.2 )	215 ( 2.6 )	9 ( 0.9 )	199 ( 3.6 )
NEW YORK†	47 ( 2.1 )	223 ( 1.5 )	22 ( 1.2 )	233 ( 1.5 )	21 ( 1.1 )	223 ( 1.6 )	10 ( 0.8 )	204 ( 3.0 )
NORTH CAROLINA	29 ( 1.3 )	220 ( 1.7 )	26 ( 1.3 )	234 ( 1.3 )	30 ( 1.4 )	228 ( 1.4 )	15 ( 1.1 )	211 ( 2.3 )
NORTH DAKOTA	46 ( 2.0 )	230 ( 1.5 )	28 ( 1.2 )	234 ( 1.6 )	20 ( 1.3 )	233 ( 2.1 )	6 ( 0.6 )	221 ( 2.7 )
OREGON	37 ( 1.7 )	222 ( 1.6 )	28 ( 1.0 )	232 ( 1.6 )	25 ( 1.3 )	224 ( 1.9 )	9 ( 0.8 )	209 ( 3.1 )
PENNSYLVANIA†	40 ( 2.3 )	226 ( 1.6 )	25 ( 1.3 )	231 ( 1.8 )	24 ( 1.4 )	228 ( 1.4 )	10 ( 1.0 )	214 ( 2.4 )
RHODE ISLAND	33 ( 1.7 )	217 ( 1.8 )	28 ( 1.1 )	226 ( 1.7 )	27 ( 1.6 )	225 ( 2.0 )	13 ( 1.2 )	209 ( 3.4 )
SOUTH CAROLINA†	44 ( 1.7 )	211 ( 1.5 )	22 ( 1.0 )	222 ( 2.0 )	22 ( 1.2 )	217 ( 1.7 )	12 ( 0.9 )	201 ( 2.2 )
TENNESSEE	49 ( 1.8 )	218 ( 1.7 )	24 ( 1.5 )	228 ( 2.0 )	18 ( 1.1 )	217 ( 1.8 )	9 ( 0.6 )	205 ( 2.7 )
TEXAS	49 ( 2.0 )	227 ( 1.4 )	24 ( 1.5 )	239 ( 1.9 )	18 ( 1.3 )	230 ( 2.2 )	10 ( 0.9 )	213 ( 3.1 )
UTAH	38 ( 2.0 )	226 ( 1.5 )	31 ( 1.3 )	230 ( 1.2 )	24 ( 1.6 )	228 ( 1.7 )	7 ( 0.6 )	213 ( 2.9 )
VERMONT†	34 ( 1.8 )	223 ( 1.6 )	26 ( 1.4 )	232 ( 1.6 )	27 ( 1.6 )	229 ( 1.6 )	13 ( 1.2 )	215 ( 3.0 )
VIRGINIA	46 ( 2.0 )	221 ( 1.6 )	25 ( 1.3 )	233 ( 1.6 )	21 ( 1.4 )	223 ( 2.3 )	8 ( 0.6 )	205 ( 2.6 )
WASHINGTON	44 ( 2.0 )	224 ( 1.4 )	26 ( 1.2 )	231 ( 1.4 )	21 ( 1.1 )	227 ( 2.0 )	9 ( 0.8 )	211 ( 3.3 )
WEST VIRGINIA	29 ( 2.2 )	220 ( 1.4 )	25 ( 1.1 )	231 ( 1.7 )	33 ( 1.7 )	226 ( 1.4 )	13 ( 1.2 )	212 ( 2.0 )
WISCONSIN	35 ( 1.9 )	228 ( 1.1 )	30 ( 1.6 )	238 ( 1.3 )	26 ( 1.6 )	235 ( 1.6 )	10 ( 0.9 )	213 ( 2.7 )
WYOMING	42 ( 1.7 )	222 ( 1.4 )	29 ( 1.3 )	229 ( 1.5 )	22 ( 1.1 )	224 ( 1.8 )	7 ( 0.7 )	204 ( 4.6 )
<b>Other Jurisdictions</b>								
DDESS	36 ( 1.4 )	225 ( 1.9 )	26 ( 1.3 )	229 ( 2.0 )	25 ( 1.1 )	225 ( 2.2 )	13 ( 0.9 )	212 ( 3.0 )
DoDDS	25 ( 1.1 )	220 ( 1.3 )	23 ( 0.9 )	231 ( 1.7 )	31 ( 0.9 )	227 ( 1.3 )	21 ( 1.2 )	215 ( 1.7 )
GUAM	63 ( 1.4 )	192 ( 1.2 )	10 ( 0.7 )	194 ( 4.4 )	14 ( 0.9 )	186 ( 4.5 )	13 ( 1.0 )	174 ( 4.2 )

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 6.19**

**1992 and 1996 Mathematics Assessment**



POPULATION:

1992 and 1996 Grade 4 Public School Students

REPORTED STATISTICS:

Percentage of Students and Average Mathematics Scale Score

TEACHERS' REPORTS ON:

Use of Calculators for Tests

NAEP assessment year...	1992				1996			
	Yes		No		Yes		No	
Do you permit students in this class to use calculators for tests?	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )
<b>JURISDICTIONS</b>								
<b>Nation</b>								
NATION	5 ( 1.2)	228 ( 4.3)!	95 ( 1.2)	218 ( 1.0)	10 ( 1.8)>	222 ( 2.4)	90 ( 1.8)<	223 ( 1.2)>
NORTHEAST	9 ( 4.0)	236 ( 7.6)!	91 ( 4.0)	220 ( 2.6)	16 ( 5.8)	225 ( 4.4)!	84 ( 5.8)	226 ( 2.8)
SOUTHEAST	2 ( 0.9)	... ( ... )	98 ( 0.9)	209 ( 2.0)	8 ( 2.2)	216 ( 2.7)!	92 ( 2.2)	216 ( 3.1)
CENTRAL	5 ( 2.8)	... ( ... )	95 ( 2.8)	225 ( 2.1)	10 ( 3.3)	229 ( 4.5)!	90 ( 3.3)	231 ( 2.0)
WEST	6 ( 1.9)	... ( ... )	94 ( 1.9)	218 ( 2.0)	9 ( 3.0)	219 ( 6.7)!	91 ( 3.0)	220 ( 2.2)
<b>States</b>								
ALABAMA	2 ( 0.8)	... ( ... )	98 ( 0.8)	209 ( 1.5)	2 ( 1.1)	... ( ... )	98 ( 1.1)	211 ( 1.3)
ALASKA†	— ( — )	— ( — )	— ( — )	— ( — )	11 ( 2.1)	224 ( 5.2)!	89 ( 2.1)	223 ( 1.3)
ARIZONA	4 ( 1.2)	219 ( 3.7)!	96 ( 1.2)	216 ( 1.1)	10 ( 1.8)>	214 ( 7.8)	90 ( 1.8)<	219 ( 1.8)
ARKANSAS†	3 ( 1.2)	210 ( 9.3)!	97 ( 1.2)	211 ( 0.9)	4 ( 1.7)	219 (12.1)!	96 ( 1.7)	216 ( 1.5)>
CALIFORNIA	12 ( 2.2)	215 ( 3.8)	88 ( 2.2)	208 ( 1.7)	16 ( 2.2)	209 ( 3.9)	84 ( 2.2)	209 ( 2.1)
COLORADO	9 ( 2.2)	228 ( 2.9)!	91 ( 2.2)	221 ( 1.2)	14 ( 2.6)	226 ( 4.3)	86 ( 2.6)	226 ( 1.2)>
CONNECTICUT	7 ( 1.8)	229 ( 3.6)!	93 ( 1.8)	228 ( 1.4)	8 ( 1.3)	244 ( 2.6)	92 ( 1.3)	231 ( 1.2)
DELAWARE	3 ( 0.6)	... ( ... )	97 ( 0.6)	219 ( 0.9)	12 ( 0.6)>	211 ( 2.8)	88 ( 0.6)<	215 ( 0.9)<
DISTRICT OF COLUMBIA	32 ( 1.1)	191 ( 1.4)	68 ( 1.1)	193 ( 1.1)	15 ( 0.7)<	184 ( 3.0)	85 ( 0.7)>	187 ( 1.1)<
FLORIDA	5 ( 1.2)	213 ( 4.1)!	95 ( 1.2)	214 ( 1.3)	4 ( 1.1)	219 ( 5.4)!	96 ( 1.1)	216 ( 1.2)
GEORGIA	4 ( 1.1)	219 ( 6.2)!	96 ( 1.1)	215 ( 1.3)	9 ( 2.0)	220 ( 5.0)!	91 ( 2.0)	215 ( 1.7)
HAWAII	14 ( 1.7)	213 ( 3.0)	86 ( 1.7)	215 ( 1.4)	10 ( 2.0)	218 ( 4.4)!	90 ( 2.0)	215 ( 1.5)
INDIANA	1 ( 0.6)	... ( ... )	99 ( 0.6)	221 ( 1.1)	4 ( 1.6)	242 ( 2.6)!	96 ( 1.6)	229 ( 1.1)>
IOWA†	2 ( 1.0)	... ( ... )	98 ( 1.0)	230 ( 1.1)	6 ( 2.0)	227 ( 3.8)!	94 ( 2.0)	229 ( 1.2)
KENTUCKY	13 ( 2.5)	214 ( 2.6)	87 ( 2.5)	215 ( 1.1)	28 ( 4.0)>	217 ( 2.4)	72 ( 4.0)<	221 ( 1.3)>
LOUISIANA	7 ( 2.0)	201 ( 3.9)!	93 ( 2.0)	204 ( 1.6)	4 ( 1.1)	198 ( 8.0)!	96 ( 1.1)	210 ( 1.2)>
MAINE	9 ( 1.9)	236 ( 3.8)!	91 ( 1.9)	231 ( 1.1)	26 ( 3.5)>	233 ( 2.3)	74 ( 3.5)<	232 ( 1.2)
MARYLAND	20 ( 2.9)	223 ( 3.0)	80 ( 2.9)	218 ( 1.5)	25 ( 3.5)	229 ( 2.7)	75 ( 3.5)	219 ( 2.0)
MASSACHUSETTS	5 ( 1.3)	243 ( 5.2)!	95 ( 1.3)	227 ( 1.2)	11 ( 2.2)	234 ( 3.3)!	89 ( 2.2)	229 ( 1.5)
MICHIGAN†	19 ( 3.2)	215 ( 4.4)	81 ( 3.2)	221 ( 1.9)	25 ( 3.2)	222 ( 2.3)	75 ( 3.2)	227 ( 1.6)
MINNESOTA	11 ( 2.6)	235 ( 2.2)!	89 ( 2.6)	227 ( 1.2)	17 ( 2.7)	232 ( 2.6)	83 ( 2.7)	233 ( 1.2)>
MISSISSIPPI	8 ( 2.4)	194 ( 6.8)!	92 ( 2.4)	202 ( 1.2)	7 ( 2.1)	209 ( 3.3)!	93 ( 2.1)	209 ( 1.3)>
MISSOURI	3 ( 1.2)	218 ( 6.0)!	97 ( 1.2)	223 ( 1.4)	3 ( 0.8)	... ( ... )	97 ( 0.8)	225 ( 1.2)
MONTANA†	— ( — )	— ( — )	— ( — )	— ( — )	8 ( 2.1)	230 ( 4.9)!	92 ( 2.1)	228 ( 1.3)
NEBRASKA	3 ( 1.0)	... ( ... )	97 ( 1.0)	226 ( 1.4)	7 ( 1.9)	236 ( 4.0)!	93 ( 1.9)	227 ( 1.3)
NEVADA†	— ( — )	— ( — )	— ( — )	— ( — )	10 ( 2.0)	216 ( 5.8)!	90 ( 2.0)	218 ( 1.3)
NEW JERSEY†	4 ( 1.5)	242 ( 9.3)!	96 ( 1.5)	227 ( 1.4)	6 ( 1.9)	213 ( 7.8)!	94 ( 1.9)	229 ( 1.5)
NEW MEXICO	2 ( 0.9)	... ( ... )	98 ( 0.9)	214 ( 1.3)	10 ( 2.1)>	214 ( 4.6)!	90 ( 2.1)<	215 ( 1.8)
NEW YORK†	4 ( 1.2)	223 ( 6.0)!	96 ( 1.2)	218 ( 1.3)	4 ( 1.0)	238 ( 3.3)!	96 ( 1.0)	223 ( 1.3)>
NORTH CAROLINA	6 ( 1.4)	215 ( 4.3)!	94 ( 1.4)	214 ( 1.1)	35 ( 3.4)>	227 ( 2.2)	65 ( 3.4)<	223 ( 1.3)>
NORTH DAKOTA	2 ( 1.1)	... ( ... )	98 ( 1.1)	229 ( 0.8)	9 ( 1.6)>	238 ( 2.5)	91 ( 1.6)<	231 ( 1.3)
OREGON	— ( — )	— ( — )	— ( — )	— ( — )	27 ( 3.2)	226 ( 2.7)	73 ( 3.2)	223 ( 1.3)
PENNSYLVANIA†	4 ( 1.5)	236 ( 6.6)!	96 ( 1.5)	224 ( 1.4)	8 ( 2.1)	230 ( 4.2)!	92 ( 2.1)	227 ( 1.3)
RHODE ISLAND	4 ( 1.3)	231 ( 3.9)!	96 ( 1.3)	215 ( 1.6)	22 ( 3.3)>	222 ( 3.9)	78 ( 3.3)<	220 ( 1.6)
SOUTH CAROLINA†	3 ( 1.0)	211 ( 9.9)!	97 ( 1.0)	213 ( 1.2)	6 ( 1.9)	214 ( 4.5)!	94 ( 1.9)	213 ( 1.3)
TENNESSEE	2 ( 0.7)	... ( ... )	98 ( 0.7)	211 ( 1.4)	2 ( 0.7)	... ( ... )	98 ( 0.7)	220 ( 1.5)>
TEXAS	6 ( 1.4)	225 ( 2.7)!	94 ( 1.4)	218 ( 1.5)	3 ( 1.2)	... ( ... )	97 ( 1.2)	228 ( 1.5)>
UTAH	6 ( 1.5)	231 ( 4.4)!	94 ( 1.5)	224 ( 1.0)	19 ( 2.7)>	228 ( 2.3)	81 ( 2.7)<	226 ( 1.2)
VERMONT†	— ( — )	— ( — )	— ( — )	— ( — )	26 ( 3.1)	225 ( 2.3)	74 ( 3.1)	225 ( 1.5)
VIRGINIA	4 ( 1.2)	227 ( 5.8)!	96 ( 1.2)	220 ( 1.3)	3 ( 1.2)	228 ( 4.6)!	97 ( 1.2)	222 ( 1.3)
WASHINGTON	— ( — )	— ( — )	— ( — )	— ( — )	9 ( 1.9)	229 ( 3.4)!	91 ( 1.9)	224 ( 1.3)
WEST VIRGINIA	6 ( 1.8)	219 ( 2.3)!	94 ( 1.8)	214 ( 1.1)	9 ( 2.3)	223 ( 3.4)!	91 ( 2.3)	223 ( 1.0)>
WISCONSIN	7 ( 1.8)	233 ( 3.7)!	93 ( 1.8)	229 ( 1.2)	13 ( 2.6)	233 ( 4.0)	87 ( 2.6)	231 ( 1.0)
WYOMING	8 ( 1.6)	230 ( 2.1)!	92 ( 1.6)	225 ( 1.0)	6 ( 1.6)	223 ( 3.0)!	94 ( 1.6)	223 ( 1.5)
<b>Other Jurisdictions</b>								
DDESS	— ( — )	— ( — )	— ( — )	— ( — )	14 ( 1.1)	223 ( 2.9)	86 ( 1.1)	225 ( 1.2)
DoDDS	— ( — )	— ( — )	— ( — )	— ( — )	38 ( 1.9)	225 ( 1.3)	62 ( 1.9)	222 ( 1.0)
GUAM	6 ( 0.5)	192 ( 3.4)	94 ( 0.5)	193 ( 0.9)	5 ( 0.7)	190 ( 5.7)	95 ( 0.7)	189 ( 1.6)

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).

— State or other jurisdiction did not participate in the NAEP assessment year presented in this table.

... Characteristics of the sample do not permit a reliable estimate.

> (<) The value for the students was significantly higher (lower) than in the 1992 assessment at about the 95% confidence level using appropriate multiple comparison procedures.

! Interpret with caution — the nature of the sample does not allow accurate determination of the variability of this statistic.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 6.20**

**1996 Mathematics Assessment**



POPULATION: **1996 Grade 4 Public School Students**  
 REPORTED STATISTICS: **Percentage of Students and Average Mathematics Scale Score**  
 TEACHERS' REPORTS ON: **Availability of Computers**

*Which best describes the availability of computers for use by students in your mathematics class?*

<b>None Available</b>	<b>One Within the Classroom</b>	<b>Two or Three Within the Classroom</b>
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JURISDICTIONS	None Available		One Within the Classroom		Two or Three Within the Classroom	
	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )
<b>Nation</b>						
NATION	6 ( 1.3)	218 ( 4.0)!	35 ( 3.3)	225 ( 1.7)	22 ( 2.2)	222 ( 2.1)
NORTHEAST	8 ( 2.0)	... ( ... )	28 ( 4.7)	230 ( 3.7)!	25 ( 2.8)	232 ( 5.3)
SOUTHEAST	6 ( 2.9)	224 (10.2)!	30 ( 7.9)	219 ( 3.8)!	28 ( 5.7)	217 ( 3.5)!
CENTRAL	5 ( 2.4)	... ( ... )	43 ( 8.7)	234 ( 2.7)!	17 ( 3.9)	226 ( 2.9)!
WEST	6 ( 2.3)	228 ( 5.7)!	37 ( 4.4)	216 ( 2.6)	21 ( 4.4)	218 ( 4.4)!
<b>States</b>						
ALABAMA	10 ( 2.8)	208 ( 4.1)!	42 ( 4.6)	209 ( 1.9)	25 ( 3.8)	214 ( 2.5)
ALASKA†	7 ( 1.9)	211 ( 7.1)!	21 ( 3.0)	226 ( 2.4)	27 ( 3.9)	220 ( 2.5)
ARIZONA	12 ( 2.3)	224 ( 3.7)	22 ( 3.3)	219 ( 3.2)	16 ( 3.3)	211 ( 4.9)!
ARKANSAS†	9 ( 2.5)	215 ( 4.2)!	20 ( 4.6)	214 ( 4.3)!	5 ( 2.1)	216 ( 4.8)!
CALIFORNIA	6 ( 1.8)	219 ( 7.0)!	25 ( 3.6)	204 ( 4.1)	21 ( 3.9)	208 ( 2.8)
COLORADO	4 ( 1.1)	216 ( 3.3)!	31 ( 3.3)	227 ( 2.2)	22 ( 3.1)	225 ( 2.6)
CONNECTICUT	7 ( 1.6)	214 ( 7.1)!	34 ( 4.3)	230 ( 1.8)	32 ( 4.1)	234 ( 2.6)
DELAWARE	18 ( 0.8)	217 ( 1.8)	33 ( 0.9)	213 ( 1.6)	13 ( 0.6)	223 ( 2.4)
DISTRICT OF COLUMBIA	16 ( 0.4)	179 ( 1.7)	30 ( 0.6)	195 ( 1.3)	12 ( 0.6)	180 ( 3.5)
FLORIDA	4 ( 1.2)	205 ( 6.4)!	28 ( 3.0)	216 ( 2.0)	29 ( 3.3)	218 ( 2.1)
GEORGIA	3 ( 1.2)	... ( ... )	31 ( 3.8)	217 ( 2.6)	25 ( 3.4)	211 ( 2.7)
HAWAII	8 ( 1.3)	206 ( 4.0)	46 ( 3.5)	218 ( 1.8)	24 ( 3.5)	213 ( 5.2)
INDIANA	1 ( 0.8)	... ( ... )	14 ( 3.2)	230 ( 3.5)!	22 ( 4.0)	229 ( 2.7)
IOWA†	3 ( 1.5)	227 ( 6.4)!	35 ( 4.7)	227 ( 2.3)	28 ( 4.5)	231 ( 1.9)
KENTUCKY	4 ( 1.7)	220 ( 5.1)!	24 ( 3.9)	222 ( 2.1)	21 ( 3.4)	225 ( 2.6)
LOUISIANA	21 ( 3.1)	208 ( 2.8)	29 ( 3.7)	212 ( 2.1)	9 ( 2.3)	208 ( 4.4)!
MAINE	7 ( 2.0)	231 ( 5.3)!	42 ( 4.5)	230 ( 1.7)	23 ( 3.0)	235 ( 2.8)
MARYLAND	5 ( 1.6)	199 ( 3.8)!	17 ( 3.3)	218 ( 4.4)	20 ( 3.2)	219 ( 3.6)
MASSACHUSETTS	6 ( 2.0)	210 ( 4.2)!	37 ( 4.0)	233 ( 1.9)	20 ( 3.3)	235 ( 3.2)
MICHIGAN†	8 ( 2.5)	215 ( 3.9)!	34 ( 4.5)	221 ( 2.5)	19 ( 3.8)	226 ( 4.4)!
MINNESOTA	5 ( 1.3)	210 ( 8.1)!	27 ( 4.2)	230 ( 2.7)	12 ( 2.2)	235 ( 3.6)
MISSISSIPPI	20 ( 3.7)	208 ( 4.0)!	12 ( 3.1)	214 ( 3.1)!	7 ( 2.1)	223 ( 6.3)!
MISSOURI	12 ( 2.9)	219 ( 3.4)!	31 ( 4.1)	225 ( 1.9)	12 ( 2.5)	225 ( 2.8)!
MONTANA†	5 ( 1.7)	227 ( 5.2)!	27 ( 3.2)	234 ( 1.9)	21 ( 4.3)	228 ( 2.9)!
NEBRASKA	2 ( 1.0)	... ( ... )	35 ( 4.2)	222 ( 2.3)	24 ( 3.9)	231 ( 2.8)
NEVADA†	10 ( 2.2)	210 ( 2.9)!	32 ( 3.7)	219 ( 2.2)	12 ( 2.7)	226 ( 3.2)!
NEW JERSEY†	14 ( 2.7)	214 ( 4.7)	43 ( 4.5)	227 ( 2.4)	11 ( 2.7)	240 ( 5.5)!
NEW MEXICO	11 ( 3.0)	209 ( 3.3)!	25 ( 3.5)	214 ( 3.2)	26 ( 4.1)	211 ( 5.7)
NEW YORK†	13 ( 2.4)	217 ( 4.2)	27 ( 3.5)	227 ( 2.3)	16 ( 3.2)	224 ( 3.4)!
NORTH CAROLINA	6 ( 2.0)	215 ( 3.0)!	22 ( 3.8)	225 ( 1.8)	16 ( 3.2)	226 ( 3.8)!
NORTH DAKOTA	2 ( 0.6)	... ( ... )	29 ( 3.7)	233 ( 1.5)	18 ( 3.5)	228 ( 3.6)!
OREGON	8 ( 1.9)	221 ( 5.0)!	35 ( 3.8)	223 ( 2.2)	22 ( 3.8)	226 ( 2.2)
PENNSYLVANIA†	13 ( 3.1)	218 ( 3.3)!	21 ( 3.5)	227 ( 2.9)	15 ( 3.6)	228 ( 4.0)!
RHODE ISLAND	13 ( 2.6)	220 ( 3.5)!	44 ( 3.4)	220 ( 1.8)	14 ( 2.2)	223 ( 4.1)
SOUTH CAROLINA†	8 ( 2.7)	200 ( 3.6)!	30 ( 4.1)	220 ( 2.6)	13 ( 2.7)	218 ( 3.4)!
TENNESSEE	9 ( 2.5)	222 ( 3.0)!	33 ( 4.0)	220 ( 1.9)	18 ( 3.3)	223 ( 2.5)
TEXAS	7 ( 2.1)	221 ( 6.1)!	24 ( 3.8)	231 ( 3.9)	15 ( 2.5)	228 ( 4.2)
UTAH	7 ( 2.2)	225 ( 4.0)!	15 ( 3.0)	225 ( 2.5)	6 ( 1.8)	229 ( 4.7)!
VERMONT†	7 ( 1.7)	227 ( 3.8)!	20 ( 3.1)	225 ( 2.9)	34 ( 3.7)	226 ( 2.0)
VIRGINIA	3 ( 1.1)	... ( ... )	34 ( 4.3)	220 ( 2.6)	22 ( 3.7)	226 ( 3.6)
WASHINGTON	5 ( 1.5)	224 ( 3.3)!	27 ( 3.3)	223 ( 3.0)	28 ( 3.5)	224 ( 1.9)
WEST VIRGINIA	2 ( 1.1)	... ( ... )	8 ( 2.1)	226 ( 2.8)!	35 ( 4.7)	223 ( 1.7)
WISCONSIN	5 ( 1.7)	226 ( 6.9)!	24 ( 3.6)	229 ( 3.2)	17 ( 3.5)	231 ( 2.8)!
WYOMING	3 ( 1.4)	227 ( 6.9)!	11 ( 2.5)	221 ( 5.2)!	17 ( 2.8)	222 ( 2.4)
<b>Other Jurisdictions</b>						
DDESS	6 ( 0.4)	... ( ... )	14 ( 0.8)	224 ( 3.3)	19 ( 1.2)	226 ( 3.4)
DoDDS	1 ( 0.3)	... ( ... )	23 ( 2.3)	222 ( 2.1)	54 ( 2.5)	222 ( 1.0)
GUAM	20 ( 0.9)	189 ( 4.0)	0 ( 0.2)	... ( ... )	2 ( 0.3)	... ( ... )

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).

... Characteristics of the sample do not permit a reliable estimate.

! Interpret with caution — the nature of the sample does not allow accurate determination of the variability of this statistic.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 6.20** (continued) **1996 Mathematics Assessment**



POPULATION: **1996 Grade 4 Public School Students**  
 REPORTED STATISTICS: **Percentage of Students and Average Mathematics Scale Score**  
 TEACHERS' REPORTS ON: **Availability of Computers**

Which best describes the availability of computers for use by students in your mathematics class?

Four or More Within the Classroom	Available in a Computer Laboratory but Difficult to Access or Schedule	Available in a Computer Laboratory and Easy to Access or Schedule
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JURISDICTIONS	PCT ( SE )		SS ( SE )		PCT ( SE )		SS ( SE )		PCT ( SE )		SS ( SE )	
<b>Nation</b>												
NATION	7 ( 1.5)	224 ( 7.5)!	13 ( 1.9)	222 ( 4.5)	16 ( 2.7)	224 ( 2.0)						
NORTHEAST	7 ( 1.9)	... ( ... )	18 ( 4.2)	218 ( 9.2)!	14 ( 2.7)	232 ( 3.4)!						
SOUTHEAST	13 ( 4.6)	218 ( 18.4)!	10 ( 4.1)	209 ( 4.6)!	14 ( 5.8)	208 ( 3.0)!						
CENTRAL	5 ( 3.6)	... ( ... )	11 ( 4.0)	230 ( 6.2)!	18 ( 7.7)	230 ( 2.9)!						
WEST	5 ( 1.7)	... ( ... )	13 ( 3.3)	226 ( 10.2)!	18 ( 3.7)	223 ( 2.6)!						
<b>States</b>												
ALABAMA	5 ( 1.7)	202 ( 5.1)!	9 ( 2.0)	223 ( 4.5)!	10 ( 2.4)	213 ( 4.0)!						
ALASKA†	12 ( 2.3)	228 ( 4.4)	15 ( 2.7)	229 ( 2.8)	18 ( 2.8)	220 ( 5.9)						
ARIZONA	3 ( 1.3)	... ( ... )	22 ( 4.0)	213 ( 4.5)	25 ( 3.7)	220 ( 2.7)						
ARKANSAS†	13 ( 3.3)	211 ( 5.7)!	16 ( 3.1)	216 ( 4.2)!	37 ( 5.5)	218 ( 2.7)						
CALIFORNIA	9 ( 2.4)	210 ( 7.1)!	18 ( 3.3)	212 ( 3.7)	20 ( 3.8)	210 ( 5.4)						
COLORADO	7 ( 2.4)	231 ( 4.9)!	18 ( 3.1)	223 ( 2.6)	18 ( 2.6)	227 ( 3.0)						
CONNECTICUT	9 ( 2.6)	229 ( 7.3)!	10 ( 2.0)	238 ( 2.7)	8 ( 1.6)	241 ( 4.3)!						
DELAWARE	3 ( 0.3)	... ( ... )	15 ( 1.1)	211 ( 2.0)	19 ( 1.1)	217 ( 1.8)						
DISTRICT OF COLUMBIA	7 ( 0.3)	190 ( 3.8)	16 ( 0.8)	182 ( 2.6)	19 ( 0.5)	184 ( 2.1)						
FLORIDA	23 ( 3.5)	217 ( 3.6)	3 ( 0.7)	220 ( 3.2)!	14 ( 2.5)	208 ( 3.1)						
GEORGIA	20 ( 3.9)	215 ( 3.4)	7 ( 1.9)	214 ( 6.6)!	14 ( 3.2)	217 ( 3.6)!						
HAWAII	6 ( 1.8)	218 ( 5.0)!	10 ( 1.5)	212 ( 4.0)	7 ( 1.3)	218 ( 5.8)						
INDIANA	20 ( 4.5)	227 ( 2.3)!	15 ( 3.6)	231 ( 2.7)!	27 ( 4.5)	230 ( 2.4)						
IOWA†	2 ( 1.2)	... ( ... )	17 ( 3.2)	228 ( 3.1)	14 ( 3.2)	234 ( 3.4)!						
KENTUCKY	18 ( 4.1)	217 ( 3.1)!	9 ( 2.3)	207 ( 4.1)!	24 ( 3.2)	220 ( 2.5)						
LOUISIANA	5 ( 1.5)	210 ( 5.1)!	14 ( 2.5)	205 ( 4.3)	22 ( 3.5)	209 ( 2.5)						
MAINE	3 ( 1.4)	230 ( 4.5)!	17 ( 3.5)	232 ( 2.5)!	8 ( 1.8)	237 ( 3.0)!						
MARYLAND	10 ( 3.0)	222 ( 8.6)!	23 ( 3.1)	226 ( 2.9)	26 ( 3.6)	221 ( 3.0)						
MASSACHUSETTS	7 ( 2.5)	236 ( 5.5)!	16 ( 3.4)	219 ( 3.8)!	14 ( 3.1)	227 ( 2.8)!						
MICHIGAN†	9 ( 3.2)	227 ( 4.2)!	12 ( 2.8)	227 ( 3.5)!	17 ( 3.3)	232 ( 3.0)						
MINNESOTA	4 ( 1.4)	241 ( 4.4)!	28 ( 2.9)	229 ( 1.9)	24 ( 3.1)	234 ( 2.3)						
MISSISSIPPI	9 ( 2.7)	203 ( 3.3)!	21 ( 3.4)	210 ( 1.9)	30 ( 3.3)	203 ( 2.2)						
MISSOURI	2 ( 0.9)	... ( ... )	21 ( 4.2)	227 ( 2.5)!	23 ( 3.4)	227 ( 1.9)						
MONTANA†	6 ( 2.1)	227 ( 6.2)!	18 ( 3.4)	222 ( 3.5)	23 ( 3.7)	226 ( 2.6)						
NEBRASKA	11 ( 3.8)	224 ( 4.3)!	14 ( 3.3)	232 ( 3.6)!	16 ( 2.9)	230 ( 3.0)						
NEVADA†	2 ( 1.3)	... ( ... )	24 ( 3.4)	217 ( 2.6)	20 ( 2.5)	214 ( 3.6)						
NEW JERSEY†	2 ( 1.0)	... ( ... )	14 ( 2.9)	236 ( 3.4)!	15 ( 3.4)	226 ( 4.2)!						
NEW MEXICO	8 ( 2.7)	210 ( 5.4)!	12 ( 2.2)	222 ( 2.7)	19 ( 3.2)	217 ( 3.2)						
NEW YORK†	9 ( 2.7)	226 ( 5.1)!	24 ( 3.5)	222 ( 3.1)	12 ( 2.3)	219 ( 5.1)						
NORTH CAROLINA	19 ( 2.7)	228 ( 3.1)	16 ( 3.3)	225 ( 2.1)!	20 ( 2.9)	220 ( 3.6)						
NORTH DAKOTA	10 ( 1.4)	224 ( 3.2)	21 ( 3.5)	233 ( 2.0)	21 ( 3.8)	233 ( 2.3)						
OREGON	5 ( 2.1)	227 ( 8.7)!	15 ( 3.3)	231 ( 2.6)!	15 ( 3.1)	218 ( 4.9)!						
PENNSYLVANIA†	13 ( 4.2)	235 ( 4.4)!	16 ( 3.3)	224 ( 3.5)!	21 ( 3.2)	226 ( 3.1)						
RHODE ISLAND	19 ( 3.6)	219 ( 4.9)	6 ( 1.4)	220 ( 3.6)!	6 ( 1.6)	223 ( 3.2)!						
SOUTH CAROLINA†	6 ( 2.4)	198 ( 4.9)!	14 ( 2.7)	216 ( 3.4)	28 ( 4.1)	208 ( 2.2)						
TENNESSEE	22 ( 3.8)	223 ( 3.1)	8 ( 2.3)	213 ( 4.4)!	10 ( 2.0)	209 ( 5.3)!						
TEXAS	7 ( 2.1)	230 ( 4.7)!	18 ( 3.2)	229 ( 3.7)	30 ( 3.5)	227 ( 2.9)						
UTAH	10 ( 2.8)	225 ( 2.9)!	31 ( 3.6)	227 ( 2.3)	30 ( 3.6)	226 ( 2.0)						
VERMONT†	13 ( 2.6)	230 ( 2.6)	16 ( 2.9)	222 ( 3.4)	9 ( 2.0)	212 ( 3.8)!						
VIRGINIA	10 ( 2.4)	228 ( 5.4)!	11 ( 2.3)	222 ( 2.3)!	20 ( 3.2)	220 ( 2.8)						
WASHINGTON	6 ( 2.3)	232 ( 2.2)!	12 ( 2.5)	223 ( 3.2)!	23 ( 3.2)	225 ( 2.4)						
WEST VIRGINIA	35 ( 4.5)	224 ( 1.8)	3 ( 1.0)	... ( ... )	18 ( 3.9)	223 ( 2.8)!						
WISCONSIN	11 ( 3.6)	232 ( 3.5)!	18 ( 3.7)	234 ( 3.2)!	25 ( 3.2)	231 ( 2.9)						
WYOMING	7 ( 1.8)	215 ( 4.4)!	20 ( 3.1)	223 ( 3.1)	42 ( 3.6)	223 ( 1.7)						
<b>Other Jurisdictions</b>												
DDESS	32 ( 1.2)	227 ( 1.4)	8 ( 0.6)	219 ( 3.0)	20 ( 0.7)	222 ( 2.7)						
DoDDS	12 ( 1.4)	226 ( 2.4)	4 ( 0.6)	223 ( 4.2)	6 ( 1.1)	222 ( 5.0)						
GUAM	1 ( 0.0)	... ( ... )	28 ( 1.3)	190 ( 3.2)	48 ( 1.2)	187 ( 2.1)						

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).

... Characteristics of the sample do not permit a reliable estimate.

! Interpret with caution — the nature of the sample does not allow accurate determination of the variability of this statistic.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 6.21**

**1996 Mathematics Assessment**



POPULATION:

1996 Grade 4 Public School Students

REPORTED STATISTICS:

Percentage of Students and Average Mathematics Scale Score

TEACHERS' REPORTS ON:

Primary Use of Computers

*If you do use computers, what is the primary use of these computers for mathematics instruction?*

	Drill and Practice		Demonstration of New Topics in Mathematics		Playing Mathematical/Learning Games		Simulations and Applications		I Do Not Use Computers for Instruction	
JURISDICTIONS	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )
<b>Nation</b>										
NATION	27 ( 2.4)	222 ( 2.1)	2 ( 0.6)	222 ( 7.5)!	41 ( 2.6)	225 ( 1.5)	6 ( 1.2)	225 ( 3.6)	23 ( 2.9)	220 ( 3.4)
NORTHEAST	19 ( 2.9)	229 ( 3.3)!	3 ( 1.6)	... ( ... )	47 ( 5.4)	236 ( 3.5)	7 ( 3.4)	... ( ... )	24 ( 4.0)	207 ( 7.6)!
SOUTHEAST	35 ( 6.5)	216 ( 6.3)!	2 ( ... )	... ( ... )	38 ( 6.1)	216 ( 2.9)	6 ( 3.5)	219 ( 5.4)!	19 ( 5.3)	220 ( 4.6)!
CENTRAL	26 ( 5.7)	227 ( 2.5)!	3 ( 1.8)	... ( ... )	38 ( 5.4)	230 ( 3.3)	6 ( 2.0)	... ( ... )	26 ( 6.8)	230 ( 3.7)!
WEST	28 ( 3.6)	219 ( 3.0)	0 ( ... )	... ( ... )	42 ( 4.3)	220 ( 2.5)	6 ( 1.2)	217 ( 8.2)!	24 ( 5.5)	219 ( 7.7)!
<b>States</b>										
ALABAMA	40 ( 4.0)	209 ( 1.7)	1 ( ... )	... ( ... )	40 ( 3.8)	216 ( 1.7)	3 ( 1.0)	... ( ... )	16 ( 2.6)	205 ( 4.2)
ALASKA†	21 ( 2.8)	228 ( 2.4)	0 ( ... )	... ( ... )	45 ( 3.2)	228 ( 2.7)	5 ( 2.5)	211 ( 3.0)!	28 ( 3.8)	218 ( 3.1)
ARIZONA	30 ( 3.3)	214 ( 3.0)	3 ( 1.0)	... ( ... )	36 ( 3.4)	216 ( 2.9)	5 ( 1.5)	217 ( 6.0)!	26 ( 3.7)	222 ( 3.1)
ARKANSAS†	50 ( 5.1)	218 ( 2.0)	4 ( 1.5)	219 ( 6.5)!	19 ( 3.2)	215 ( 3.8)	8 ( 2.2)	210 ( 5.9)!	19 ( 4.0)	212 ( 4.0)!
CALIFORNIA	24 ( 4.0)	206 ( 4.6)	2 ( 0.7)	... ( ... )	47 ( 3.9)	208 ( 2.9)	10 ( 2.2)	217 ( 4.7)!	18 ( 4.1)	209 ( 6.0)!
COLORADO	34 ( 3.0)	228 ( 1.9)	3 ( 1.6)	... ( ... )	37 ( 3.0)	227 ( 1.9)	5 ( 1.5)	224 ( 4.6)!	20 ( 3.2)	227 ( 2.6)
CONNECTICUT	28 ( 2.7)	226 ( 2.3)	0 ( ... )	... ( ... )	40 ( 3.7)	237 ( 1.8)	9 ( 2.4)	242 ( 5.8)!	23 ( 3.3)	227 ( 3.3)
DELAWARE	18 ( 1.0)	212 ( 2.4)	2 ( 0.6)	... ( ... )	35 ( 1.1)	213 ( 1.7)	4 ( 0.4)	213 ( 5.6)	41 ( 1.1)	217 ( 1.2)
DISTRICT OF COLUMBIA	30 ( 0.9)	183 ( 1.8)	1 ( 0.2)	... ( ... )	33 ( 0.7)	193 ( 1.8)	6 ( 0.6)	178 ( 3.9)	30 ( 0.9)	187 ( 1.7)
FLORIDA	38 ( 3.5)	217 ( 2.0)	1 ( 0.5)	... ( ... )	38 ( 3.3)	215 ( 1.5)	10 ( 2.2)	216 ( 4.4)!	13 ( 2.6)	212 ( 3.9)!
GEORGIA	42 ( 3.5)	213 ( 2.2)	2 ( 1.2)	... ( ... )	36 ( 3.1)	219 ( 2.2)	6 ( 1.5)	214 ( 6.0)!	15 ( 2.2)	218 ( 3.9)
HAWAII	19 ( 2.2)	214 ( 3.6)	0 ( 0.1)	... ( ... )	40 ( 2.7)	213 ( 2.4)	4 ( 1.2)	226 ( 8.5)!	36 ( 2.9)	217 ( 2.0)
INDIANA	52 ( 4.5)	228 ( 1.6)	1 ( 0.4)	... ( ... )	30 ( 3.8)	227 ( 2.0)	10 ( 2.8)	237 ( 2.5)!	8 ( 2.1)	232 ( 3.2)!
IOWA†	38 ( 4.3)	230 ( 2.1)	1 ( ... )	... ( ... )	47 ( 4.3)	230 ( 1.6)	4 ( 1.1)	... ( ... )	10 ( 2.8)	226 ( 4.0)!
KENTUCKY	31 ( 3.7)	218 ( 2.3)	4 ( 1.8)	215 ( 7.6)!	36 ( 4.2)	221 ( 1.9)	6 ( 1.5)	225 ( 6.3)!	23 ( 3.4)	221 ( 2.1)
LOUISIANA	32 ( 3.8)	209 ( 2.0)	3 ( 1.6)	204 ( 6.4)!	24 ( 3.7)	212 ( 3.4)	5 ( 2.0)	200 ( 6.1)!	36 ( 4.1)	210 ( 2.4)
MAINE	23 ( 3.5)	233 ( 2.2)	1 ( 0.5)	... ( ... )	45 ( 3.8)	233 ( 1.7)	4 ( 1.5)	230 ( 5.3)!	27 ( 3.6)	231 ( 1.9)
MARYLAND	40 ( 3.7)	218 ( 2.3)	2 ( 0.9)	... ( ... )	29 ( 3.5)	227 ( 2.9)	10 ( 2.0)	209 ( 4.3)!	19 ( 2.5)	226 ( 4.9)
MASSACHUSETTS	22 ( 3.2)	226 ( 2.2)	2 ( 0.8)	... ( ... )	44 ( 4.2)	232 ( 1.9)	4 ( 1.1)	237 ( 3.4)!	28 ( 4.5)	224 ( 3.0)
MICHIGAN†	31 ( 3.9)	224 ( 2.3)	1 ( 0.8)	... ( ... )	39 ( 3.7)	226 ( 2.7)	4 ( 1.6)	226 ( 11.4)!	25 ( 3.5)	224 ( 3.0)
MINNESOTA	34 ( 3.3)	232 ( 2.2)	1 ( 0.5)	... ( ... )	40 ( 3.9)	235 ( 1.4)	4 ( 1.4)	229 ( 7.6)!	21 ( 2.8)	224 ( 3.6)
MISSISSIPPI	35 ( 4.1)	208 ( 2.2)	3 ( 1.2)	217 ( 5.8)!	18 ( 3.0)	210 ( 2.9)	6 ( 1.9)	210 ( 3.6)!	38 ( 4.8)	206 ( 2.8)
MISSOURI	28 ( 3.2)	225 ( 2.6)	1 ( ... )	... ( ... )	39 ( 4.5)	228 ( 1.6)	3 ( 1.0)	... ( ... )	29 ( 4.3)	224 ( 1.6)
MONTANA†	21 ( 3.2)	222 ( 2.5)	1 ( 0.5)	... ( ... )	47 ( 4.0)	228 ( 1.7)	9 ( 2.4)	232 ( 3.8)!	22 ( 3.7)	233 ( 2.7)
NEBRASKA	47 ( 4.8)	227 ( 2.6)	0 ( ... )	... ( ... )	40 ( 4.8)	225 ( 1.9)	3 ( 1.3)	242 ( 6.3)!	10 ( 2.4)	225 ( 4.1)!
NEVADA†	31 ( 3.4)	222 ( 2.1)	0 ( ... )	... ( ... )	42 ( 3.3)	218 ( 1.8)	5 ( 1.3)	213 ( 6.6)!	21 ( 2.9)	212 ( 2.7)
NEW JERSEY†	30 ( 4.7)	225 ( 2.4)	1 ( ... )	... ( ... )	33 ( 4.2)	234 ( 2.6)	2 ( 1.0)	... ( ... )	34 ( 4.2)	225 ( 3.4)
NEW MEXICO	22 ( 3.2)	211 ( 2.7)	3 ( 1.3)	... ( ... )	48 ( 4.4)	212 ( 3.4)	6 ( 1.8)	230 ( 5.2)!	21 ( 3.6)	215 ( 2.4)
NEW YORK†	31 ( 3.5)	225 ( 3.1)	1 ( 0.5)	... ( ... )	35 ( 3.9)	224 ( 2.4)	5 ( 1.4)	232 ( 6.2)!	29 ( 3.8)	218 ( 2.8)
NORTH CAROLINA	34 ( 4.4)	220 ( 2.3)	6 ( 1.9)	223 ( 4.8)!	34 ( 3.9)	227 ( 2.1)	12 ( 2.3)	231 ( 3.1)	14 ( 2.7)	222 ( 3.9)!
NORTH DAKOTA	34 ( 3.8)	232 ( 1.7)	3 ( 1.2)	... ( ... )	45 ( 3.8)	232 ( 1.8)	5 ( 1.6)	231 ( 3.1)!	12 ( 2.1)	229 ( 2.4)
OREGON	26 ( 4.6)	224 ( 2.4)	0 ( ... )	... ( ... )	38 ( 4.5)	219 ( 2.5)	8 ( 2.1)	233 ( 3.0)!	27 ( 3.7)	229 ( 2.3)
PENNSYLVANIA†	30 ( 3.8)	228 ( 2.3)	3 ( 1.3)	232 ( 7.8)!	29 ( 3.6)	228 ( 2.3)	4 ( 1.4)	234 ( 10.3)!	34 ( 4.4)	221 ( 2.4)
RHODE ISLAND	22 ( 2.5)	214 ( 3.0)	3 ( 1.0)	... ( ... )	45 ( 3.6)	224 ( 2.2)	3 ( 1.0)	226 ( 6.1)!	26 ( 3.3)	220 ( 2.7)
SOUTH CAROLINA†	36 ( 3.7)	212 ( 2.0)	2 ( 0.8)	... ( ... )	30 ( 3.8)	218 ( 2.3)	9 ( 1.8)	205 ( 3.8)!	23 ( 4.0)	214 ( 2.5)
TENNESSEE	32 ( 4.1)	214 ( 2.8)	0 ( ... )	... ( ... )	40 ( 4.3)	224 ( 2.1)	6 ( 1.5)	220 ( 7.9)!	22 ( 4.1)	220 ( 2.5)
TEXAS	37 ( 3.9)	232 ( 2.4)	5 ( 2.0)	232 ( 7.1)!	33 ( 4.1)	229 ( 2.8)	10 ( 3.0)	219 ( 5.9)!	15 ( 2.7)	224 ( 3.7)
UTAH	31 ( 3.8)	224 ( 2.6)	3 ( 1.1)	234 ( 3.7)!	39 ( 4.0)	229 ( 2.1)	6 ( 1.6)	226 ( 3.5)!	20 ( 3.5)	227 ( 2.1)
VERMONT†	18 ( 2.5)	227 ( 2.5)	0 ( 0.1)	... ( ... )	38 ( 2.9)	224 ( 2.2)	11 ( 1.7)	225 ( 4.0)	33 ( 3.6)	227 ( 1.7)
VIRGINIA	38 ( 3.9)	219 ( 2.2)	2 ( ... )	... ( ... )	45 ( 4.1)	225 ( 2.0)	6 ( 1.7)	225 ( 6.2)!	9 ( 2.3)	222 ( 5.0)!
WASHINGTON	27 ( 3.5)	220 ( 2.4)	2 ( 0.9)	... ( ... )	42 ( 4.3)	228 ( 1.8)	7 ( 1.9)	228 ( 3.8)!	22 ( 3.4)	223 ( 2.3)
WEST VIRGINIA	59 ( 3.7)	221 ( 1.6)	4 ( 1.3)	233 ( 3.1)!	22 ( 3.2)	222 ( 2.1)	12 ( 2.7)	222 ( 2.9)!	3 ( 1.5)	220 ( 6.2)!
WISCONSIN	28 ( 3.9)	228 ( 1.8)	2 ( 1.1)	... ( ... )	46 ( 4.1)	233 ( 1.6)	9 ( 2.1)	230 ( 4.8)!	14 ( 3.1)	230 ( 3.5)!
WYOMING	35 ( 3.6)	224 ( 1.8)	5 ( 1.5)	228 ( 3.9)!	38 ( 3.0)	220 ( 2.2)	7 ( 1.9)	226 ( 4.5)!	15 ( 3.1)	223 ( 3.6)!
<b>Other Jurisdictions</b>										
DDESS	35 ( 1.1)	222 ( 1.9)	2 ( 0.4)	... ( ... )	38 ( 1.3)	229 ( 1.7)	6 ( 0.6)	... ( ... )	19 ( 0.8)	226 ( 1.9)
DoDDS	13 ( 1.1)	219 ( 2.3)	1 ( 0.4)	... ( ... )	59 ( 2.4)	224 ( 1.1)	7 ( 1.0)	222 ( 3.0)	19 ( 2.1)	222 ( 2.0)
GUAM	43 ( 1.3)	188 ( 1.7)	4 ( 0.7)	... ( ... )	8 ( 0.5)	199 ( 4.0)	13 ( 0.9)	188 ( 4.0)	31 ( 1.1)	189 ( 3.0)

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).

... Characteristics of the sample do not permit a reliable estimate.

! Interpret with caution — the nature of the sample does not allow accurate determination of the variability of this statistic.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.



**TABLE 6.22**

**1996 Mathematics Assessment**



POPULATION:

1996 Grade 4 Public School Students

REPORTED STATISTICS:

Percentage of Students and Average Mathematics Scale Score

TEACHERS' REPORTS ON:

Frequency of Use of Computers

*How often do the students in this class use a computer?*

**Never or Hardly Ever**

**Once or Twice a Month**

**Once or Twice a Week**

**Almost Every Day**

**JURISDICTIONS**

PCT ( SE)    SS ( SE)    PCT ( SE)    SS ( SE)    PCT ( SE)    SS ( SE)    PCT ( SE)    SS ( SE)

**Nation**

NATION	21 ( 2.4)	221 ( 2.6)	19 ( 1.9)	227 ( 2.1)	46 ( 2.5)	222 ( 1.4)	14 ( 1.8)	225 ( 2.8)
NORTHEAST	18 ( 3.7)	213 ( 4.9)!	17 ( 4.5)	246 ( 4.3)!	46 ( 4.5)	222 ( 2.7)	19 ( 3.1)	231 ( 3.5)!
SOUTHEAST	13 ( 3.6)	215 ( 4.3)!	25 ( 5.3)	221 ( 3.7)!	39 ( 6.2)	214 ( 3.0)	23 ( 5.4)	216 ( 6.7)!
CENTRAL	31 ( 7.3)	228 ( 3.2)!	18 ( 4.0)	230 ( 3.5)!	39 ( 5.0)	231 ( 3.6)	12 ( 3.7)	235 ( 2.2)!
WEST	20 ( 3.5)	218 ( 6.0)	17 ( 2.3)	220 ( 2.5)	56 ( 3.8)	221 ( 2.2)	7 ( 1.8)	221 ( 5.1)!

**States**

ALABAMA	19 ( 3.2)	206 ( 3.4)	13 ( 2.0)	213 ( 3.0)	45 ( 3.7)	216 ( 1.9)	22 ( 2.8)	205 ( 2.8)
ALASKA†	15 ( 2.5)	221 ( 3.7)	17 ( 2.3)	228 ( 3.2)	52 ( 3.5)	224 ( 1.6)	16 ( 2.6)	222 ( 6.5)
ARIZONA	26 ( 4.0)	215 ( 4.3)	20 ( 2.3)	221 ( 2.8)	49 ( 4.3)	219 ( 2.3)	5 ( 1.5)	217 ( 6.0)!
ARKANSAS†	14 ( 3.2)	211 ( 3.3)!	9 ( 2.9)	221 ( 4.5)!	55 ( 5.1)	217 ( 2.2)	22 ( 3.7)	216 ( 3.5)
CALIFORNIA	15 ( 2.5)	213 ( 4.4)	15 ( 2.5)	209 ( 3.3)	62 ( 3.7)	209 ( 2.2)	8 ( 2.2)	206 ( 6.1)!
COLORADO	16 ( 2.5)	226 ( 2.8)	26 ( 2.8)	226 ( 1.8)	51 ( 3.4)	226 ( 1.7)	7 ( 1.5)	225 ( 4.1)!
CONNECTICUT	23 ( 3.0)	228 ( 3.0)	19 ( 2.1)	237 ( 2.1)	37 ( 2.9)	234 ( 1.8)	21 ( 3.5)	229 ( 3.8)
DELAWARE	39 ( 1.2)	216 ( 1.1)	26 ( 1.0)	215 ( 1.7)	28 ( 1.0)	212 ( 1.4)	7 ( 0.3)	222 ( 3.6)
DISTRICT OF COLUMBIA	21 ( 0.7)	182 ( 2.1)	16 ( 0.5)	191 ( 2.2)	50 ( 0.9)	187 ( 1.9)	13 ( 0.6)	188 ( 3.0)
FLORIDA	10 ( 1.6)	210 ( 3.1)	15 ( 2.1)	211 ( 3.1)	43 ( 2.5)	219 ( 1.7)	32 ( 3.0)	216 ( 2.1)
GEORGIA	15 ( 2.3)	219 ( 3.7)	15 ( 2.3)	221 ( 2.8)	38 ( 3.3)	216 ( 2.3)	32 ( 3.9)	212 ( 2.5)
HAWAII	35 ( 2.8)	216 ( 2.0)	26 ( 2.1)	217 ( 3.1)	33 ( 2.5)	215 ( 2.0)	6 ( 1.5)	211 ( 9.2)!
INDIANA	6 ( 2.0)	232 ( 2.7)!	19 ( 3.3)	231 ( 2.8)	56 ( 4.2)	229 ( 1.5)	19 ( 3.6)	227 ( 2.8)
IOWA†	14 ( 3.0)	229 ( 2.8)!	29 ( 3.2)	230 ( 2.0)	42 ( 4.1)	230 ( 1.5)	16 ( 3.6)	226 ( 2.9)!
KENTUCKY	18 ( 3.1)	222 ( 2.1)	15 ( 2.8)	221 ( 3.2)	49 ( 4.2)	217 ( 2.0)	18 ( 3.1)	223 ( 2.9)
LOUISIANA	29 ( 3.0)	208 ( 2.2)	18 ( 2.7)	214 ( 2.5)	39 ( 3.4)	208 ( 1.9)	14 ( 2.5)	208 ( 3.4)
MAINE	23 ( 3.1)	231 ( 1.8)	27 ( 4.3)	232 ( 2.5)	42 ( 3.2)	234 ( 1.3)	7 ( 1.9)	233 ( 4.4)!
MARYLAND	20 ( 3.2)	222 ( 4.3)	15 ( 2.6)	228 ( 5.5)	56 ( 4.1)	223 ( 2.2)	10 ( 2.3)	206 ( 5.1)!
MASSACHUSETTS	23 ( 3.8)	226 ( 3.3)	24 ( 2.3)	230 ( 1.7)	43 ( 4.2)	229 ( 2.3)	10 ( 1.8)	237 ( 3.5)
MICHIGAN†	25 ( 3.8)	222 ( 3.4)	19 ( 2.6)	226 ( 2.5)	45 ( 3.7)	228 ( 1.8)	11 ( 2.5)	227 ( 2.3)!
MINNESOTA	20 ( 2.6)	228 ( 1.9)	30 ( 3.5)	236 ( 2.2)	42 ( 3.9)	232 ( 1.7)	8 ( 2.0)	233 ( 3.0)!
MISSISSIPPI	27 ( 3.7)	208 ( 2.9)	10 ( 2.3)	213 ( 5.1)!	39 ( 3.9)	211 ( 1.8)	23 ( 3.5)	203 ( 2.5)
MISSOURI	28 ( 4.1)	222 ( 2.4)	18 ( 3.5)	227 ( 2.7)!	43 ( 4.0)	225 ( 1.6)	11 ( 2.7)	227 ( 4.7)!
MONTANA†	19 ( 3.5)	232 ( 2.6)	22 ( 2.9)	225 ( 2.7)	43 ( 3.8)	229 ( 1.7)	16 ( 2.8)	225 ( 2.8)
NEBRASKA	9 ( 1.9)	228 ( 3.4)!	26 ( 4.0)	226 ( 2.7)	49 ( 3.7)	229 ( 2.0)	15 ( 3.1)	224 ( 2.4)
NEVADA†	19 ( 2.6)	210 ( 2.7)	18 ( 2.7)	218 ( 2.5)	57 ( 3.0)	221 ( 1.7)	5 ( 1.6)	218 ( 3.2)!
NEW JERSEY†	40 ( 4.4)	225 ( 2.6)	22 ( 2.7)	230 ( 2.2)	32 ( 3.7)	231 ( 3.0)	5 ( 1.3)	217 ( 5.8)!
NEW MEXICO	17 ( 3.0)	211 ( 3.5)	13 ( 2.2)	212 ( 3.9)	54 ( 3.7)	217 ( 2.3)	17 ( 3.0)	213 ( 4.0)
NEW YORK†	26 ( 3.4)	222 ( 2.4)	20 ( 2.4)	225 ( 2.5)	40 ( 3.4)	222 ( 2.5)	14 ( 3.0)	228 ( 3.6)!
NORTH CAROLINA	13 ( 3.0)	221 ( 3.2)!	11 ( 2.3)	229 ( 3.1)!	55 ( 4.0)	224 ( 1.6)	22 ( 3.4)	224 ( 2.9)
NORTH DAKOTA	14 ( 2.5)	231 ( 1.9)	19 ( 2.7)	232 ( 2.6)	52 ( 3.2)	232 ( 1.3)	16 ( 2.8)	230 ( 3.1)
OREGON	22 ( 3.1)	227 ( 2.5)	23 ( 2.6)	225 ( 2.7)	48 ( 3.4)	221 ( 2.0)	7 ( 2.2)	227 ( 3.7)!
PENNSYLVANIA†	29 ( 4.2)	224 ( 2.4)	18 ( 3.0)	228 ( 2.5)	37 ( 4.1)	227 ( 1.9)	16 ( 3.7)	229 ( 4.5)!
RHODE ISLAND	29 ( 3.4)	222 ( 2.1)	22 ( 3.0)	219 ( 3.0)	36 ( 2.9)	220 ( 2.1)	13 ( 2.3)	220 ( 3.0)
SOUTH CAROLINA†	13 ( 3.3)	214 ( 3.2)!	13 ( 2.6)	218 ( 3.4)!	48 ( 4.1)	215 ( 1.6)	26 ( 3.4)	208 ( 2.5)
TENNESSEE	20 ( 3.5)	222 ( 2.0)	11 ( 1.4)	216 ( 2.5)	44 ( 3.4)	219 ( 2.5)	25 ( 3.1)	220 ( 3.5)
TEXAS	13 ( 2.6)	225 ( 4.1)	16 ( 2.6)	230 ( 3.0)	58 ( 4.1)	229 ( 1.9)	13 ( 2.3)	223 ( 2.3)
UTAH	17 ( 3.0)	224 ( 2.1)	15 ( 2.3)	226 ( 3.2)	55 ( 3.4)	228 ( 1.4)	14 ( 2.5)	224 ( 3.3)
VERMONT†	27 ( 3.0)	226 ( 1.9)	20 ( 2.7)	223 ( 2.5)	40 ( 3.4)	224 ( 1.9)	13 ( 2.2)	227 ( 3.0)
VIRGINIA	11 ( 2.7)	223 ( 4.5)!	17 ( 2.5)	218 ( 3.2)	55 ( 4.1)	224 ( 1.8)	17 ( 2.8)	223 ( 3.1)
WASHINGTON	14 ( 2.4)	219 ( 2.1)	18 ( 2.4)	226 ( 2.0)	62 ( 3.2)	225 ( 1.6)	7 ( 1.5)	227 ( 3.9)!
WEST VIRGINIA	4 ( 1.3)	227 ( 4.6)!	6 ( 1.7)	216 ( 4.8)!	39 ( 3.7)	222 ( 1.7)	51 ( 3.8)	225 ( 1.7)
WISCONSIN	17 ( 3.2)	232 ( 2.9)	15 ( 2.5)	236 ( 2.3)	53 ( 3.7)	232 ( 1.2)	15 ( 2.6)	222 ( 2.8)
WYOMING	13 ( 2.6)	224 ( 3.4)!	12 ( 2.2)	225 ( 1.9)	58 ( 2.8)	222 ( 1.7)	17 ( 2.6)	223 ( 2.4)

**Other Jurisdictions**

DDESS	13 ( 0.6)	229 ( 2.4)	17 ( 0.8)	217 ( 3.0)	43 ( 1.1)	226 ( 1.6)	27 ( 1.0)	225 ( 2.1)
DoDDS	16 ( 1.5)	220 ( 2.3)	20 ( 1.4)	225 ( 1.6)	46 ( 1.6)	223 ( 1.0)	18 ( 1.3)	223 ( 1.8)
GUAM	25 ( 1.2)	194 ( 2.9)	9 ( 0.8)	186 ( 4.5)	64 ( 1.5)	188 ( 1.6)	1 ( 0.4)	... ( ... )

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).

... Characteristics of the sample do not permit a reliable estimate.

! Interpret with caution — the nature of the sample does not allow accurate determination of the variability of this statistic.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 6.23**

**1996 Mathematics Assessment**



POPULATION:

1996 Grade 4 Public School Students

REPORTED STATISTICS:

Percentage of Students and Average Mathematics Scale Score

STUDENTS' REPORTS ON:

Frequency of Use of Computers

*When you do mathematics in school, how often do you use a computer?*

**Never or Hardly Ever**

**Once or Twice a Month**

**Once or Twice a Week**

**Almost Every Day**

**JURISDICTIONS**

	PCT ( SE)	SS ( SE)	PCT ( SE)	SS ( SE)	PCT ( SE)	SS ( SE)	PCT ( SE)	SS ( SE)
<b>Nation</b>								
NATION	56 ( 1.0)	223 ( 1.2)	10 ( 0.7)	226 ( 2.4)	20 ( 1.0)	225 ( 1.3)	14 ( 0.8)	218 ( 1.8)
NORTHEAST	54 ( 2.0)	228 ( 2.6)	10 ( 2.0)	228 ( 3.2)!	20 ( 2.0)	225 ( 3.6)	15 ( 1.2)	224 ( 3.5)
SOUTHEAST	53 ( 2.4)	216 ( 2.7)	9 ( 1.4)	221 ( 6.4)	19 ( 1.9)	220 ( 2.9)	19 ( 2.1)	210 ( 3.7)
CENTRAL	60 ( 2.4)	231 ( 2.2)	11 ( 1.5)	234 ( 3.9)	17 ( 2.4)	229 ( 1.9)	12 ( 1.8)	223 ( 3.8)
WEST	56 ( 1.7)	217 ( 2.4)	10 ( 1.1)	220 ( 4.7)	22 ( 1.6)	226 ( 2.6)	11 ( 0.9)	216 ( 2.7)
<b>States</b>								
ALABAMA	65 ( 1.7)	212 ( 1.4)	8 ( 0.7)	221 ( 2.7)	15 ( 1.1)	214 ( 2.0)	13 ( 1.0)	204 ( 2.3)
ALASKA†	59 ( 1.6)	223 ( 1.4)	9 ( 0.6)	229 ( 2.6)	18 ( 1.1)	228 ( 2.5)	14 ( 1.1)	223 ( 2.7)
ARIZONA	65 ( 1.2)	218 ( 1.6)	8 ( 0.6)	228 ( 2.9)	17 ( 0.9)	220 ( 2.5)	10 ( 0.8)	210 ( 3.8)
ARKANSAS†	61 ( 2.1)	216 ( 1.6)	6 ( 0.6)	220 ( 2.8)	17 ( 1.6)	218 ( 2.1)	15 ( 1.6)	213 ( 3.0)
CALIFORNIA	55 ( 1.8)	209 ( 1.8)	12 ( 0.7)	213 ( 3.0)	20 ( 1.2)	215 ( 2.7)	13 ( 1.0)	202 ( 2.5)
COLORADO	58 ( 1.3)	225 ( 1.3)	13 ( 0.7)	233 ( 2.1)	20 ( 0.9)	227 ( 1.5)	10 ( 0.7)	223 ( 2.4)
CONNECTICUT	51 ( 1.8)	231 ( 1.2)	11 ( 0.7)	239 ( 2.2)	19 ( 0.8)	234 ( 1.6)	19 ( 1.4)	229 ( 2.2)
DELAWARE	68 ( 1.1)	217 ( 1.1)	9 ( 0.9)	220 ( 3.7)	12 ( 0.7)	216 ( 2.4)	11 ( 0.8)	205 ( 2.9)
DISTRICT OF COLUMBIA	56 ( 0.8)	189 ( 1.3)	8 ( 0.6)	195 ( 4.4)	19 ( 0.7)	189 ( 1.9)	17 ( 0.7)	182 ( 2.3)
FLORIDA	55 ( 1.3)	216 ( 1.3)	10 ( 0.7)	221 ( 2.4)	17 ( 0.8)	218 ( 2.3)	18 ( 1.5)	213 ( 2.5)
GEORGIA	54 ( 1.8)	217 ( 1.6)	9 ( 0.7)	221 ( 2.4)	18 ( 1.3)	216 ( 2.2)	18 ( 1.5)	209 ( 2.4)
HAWAII	65 ( 1.2)	217 ( 1.5)	9 ( 0.6)	219 ( 2.6)	17 ( 0.9)	214 ( 2.6)	8 ( 0.6)	201 ( 3.9)
INDIANA	55 ( 2.1)	228 ( 1.2)	11 ( 0.8)	236 ( 2.4)	21 ( 1.3)	232 ( 1.5)	13 ( 1.4)	226 ( 2.3)
IOWA†	60 ( 1.8)	229 ( 1.1)	11 ( 0.8)	234 ( 2.3)	18 ( 1.2)	231 ( 2.1)	11 ( 1.0)	227 ( 2.4)
KENTUCKY	54 ( 1.7)	219 ( 1.2)	11 ( 0.7)	227 ( 2.8)	22 ( 1.2)	224 ( 1.5)	13 ( 1.1)	214 ( 2.5)
LOUISIANA	64 ( 1.5)	210 ( 1.1)	8 ( 0.6)	212 ( 3.0)	17 ( 1.1)	210 ( 2.0)	11 ( 0.8)	202 ( 2.1)
MAINE	50 ( 1.4)	232 ( 1.2)	17 ( 1.1)	233 ( 2.2)	21 ( 1.2)	234 ( 1.7)	12 ( 1.0)	232 ( 2.4)
MARYLAND	61 ( 1.6)	221 ( 1.8)	10 ( 0.9)	230 ( 2.5)	20 ( 1.2)	222 ( 2.0)	9 ( 0.8)	209 ( 2.9)
MASSACHUSETTS	53 ( 2.0)	227 ( 1.3)	12 ( 0.8)	237 ( 2.3)	22 ( 1.2)	230 ( 2.0)	13 ( 1.0)	230 ( 2.2)
MICHIGAN†	56 ( 1.8)	225 ( 1.4)	10 ( 0.7)	229 ( 2.4)	21 ( 1.5)	232 ( 2.0)	13 ( 1.0)	222 ( 2.4)
MINNESOTA	60 ( 1.5)	232 ( 1.0)	14 ( 0.7)	235 ( 1.9)	17 ( 1.2)	235 ( 2.2)	9 ( 0.6)	228 ( 2.8)
MISSISSIPPI	60 ( 1.6)	209 ( 1.4)	6 ( 0.5)	214 ( 2.9)	17 ( 1.0)	209 ( 2.0)	17 ( 1.5)	204 ( 1.7)
MISSOURI	64 ( 1.5)	224 ( 1.2)	10 ( 0.6)	229 ( 2.3)	16 ( 1.2)	229 ( 1.9)	10 ( 1.0)	221 ( 3.0)
MONTANA†	63 ( 1.7)	227 ( 1.4)	12 ( 0.9)	233 ( 2.4)	16 ( 1.0)	227 ( 2.0)	9 ( 0.8)	227 ( 2.8)
NEBRASKA	60 ( 1.7)	227 ( 1.5)	11 ( 0.7)	228 ( 2.9)	19 ( 1.4)	231 ( 1.7)	11 ( 0.9)	226 ( 2.7)
NEVADA†	65 ( 1.3)	217 ( 1.3)	8 ( 0.6)	221 ( 3.6)	17 ( 0.8)	221 ( 2.0)	10 ( 0.8)	213 ( 2.3)
NEW JERSEY†	63 ( 1.8)	227 ( 1.4)	10 ( 0.8)	237 ( 2.8)	18 ( 1.3)	227 ( 2.2)	9 ( 0.8)	221 ( 4.3)
NEW MEXICO	68 ( 1.3)	214 ( 1.8)	8 ( 0.7)	218 ( 3.7)	15 ( 1.0)	217 ( 3.7)	9 ( 0.8)	209 ( 2.6)
NEW YORK†	58 ( 1.8)	223 ( 1.2)	11 ( 0.8)	227 ( 2.8)	17 ( 1.1)	225 ( 2.2)	14 ( 1.3)	219 ( 2.7)
NORTH CAROLINA	50 ( 1.5)	223 ( 1.2)	9 ( 0.6)	235 ( 2.3)	24 ( 1.3)	227 ( 1.7)	17 ( 1.2)	220 ( 2.2)
NORTH DAKOTA	64 ( 1.5)	230 ( 1.3)	10 ( 0.6)	234 ( 2.3)	16 ( 1.0)	233 ( 1.8)	10 ( 1.0)	230 ( 2.5)
OREGON	58 ( 1.7)	223 ( 1.4)	11 ( 0.7)	230 ( 2.4)	18 ( 1.2)	226 ( 2.3)	13 ( 1.0)	221 ( 2.2)
PENNSYLVANIA†	59 ( 2.3)	226 ( 1.3)	8 ( 0.8)	231 ( 2.9)	19 ( 1.2)	226 ( 1.8)	14 ( 1.9)	227 ( 2.7)
RHODE ISLAND	55 ( 1.7)	222 ( 1.6)	10 ( 0.9)	226 ( 3.5)	19 ( 1.1)	220 ( 2.2)	15 ( 1.1)	212 ( 2.8)
SOUTH CAROLINA†	59 ( 1.7)	213 ( 1.5)	7 ( 0.6)	216 ( 2.8)	18 ( 1.4)	217 ( 1.9)	16 ( 1.2)	209 ( 2.3)
TENNESSEE	60 ( 1.7)	220 ( 1.4)	11 ( 0.7)	227 ( 2.8)	17 ( 1.2)	217 ( 2.3)	12 ( 0.9)	214 ( 3.0)
TEXAS	58 ( 1.6)	228 ( 1.6)	9 ( 0.8)	237 ( 2.5)	21 ( 1.2)	230 ( 2.1)	12 ( 0.9)	227 ( 2.5)
UTAH	59 ( 1.4)	226 ( 1.2)	9 ( 0.6)	227 ( 3.4)	21 ( 1.1)	231 ( 1.3)	11 ( 1.0)	225 ( 2.2)
VERMONT†	49 ( 1.5)	224 ( 1.5)	12 ( 1.0)	231 ( 2.4)	22 ( 1.2)	226 ( 2.2)	17 ( 1.1)	227 ( 2.5)
VIRGINIA	61 ( 1.7)	222 ( 1.3)	10 ( 0.8)	229 ( 2.7)	17 ( 0.9)	226 ( 2.5)	11 ( 1.1)	220 ( 2.8)
WASHINGTON	58 ( 1.5)	225 ( 1.2)	12 ( 0.7)	231 ( 2.8)	19 ( 0.9)	226 ( 2.1)	11 ( 0.8)	222 ( 2.0)
WEST VIRGINIA	50 ( 1.7)	221 ( 1.1)	9 ( 0.7)	229 ( 2.8)	19 ( 1.4)	227 ( 1.6)	22 ( 1.6)	224 ( 1.7)
WISCONSIN	56 ( 1.6)	231 ( 1.1)	13 ( 0.7)	236 ( 2.0)	20 ( 1.2)	233 ( 1.4)	12 ( 0.9)	225 ( 2.5)
WYOMING	58 ( 1.3)	222 ( 1.6)	10 ( 0.6)	228 ( 1.8)	20 ( 1.0)	225 ( 1.8)	11 ( 0.9)	221 ( 2.4)
<b>Other Jurisdictions</b>								
DDESS	62 ( 1.5)	224 ( 1.3)	9 ( 0.9)	231 ( 3.5)	18 ( 1.2)	223 ( 2.6)	11 ( 0.8)	225 ( 2.7)
DoDDS	58 ( 1.0)	222 ( 0.8)	10 ( 0.7)	230 ( 2.5)	17 ( 0.7)	225 ( 2.2)	15 ( 0.8)	222 ( 1.9)
GUAM	71 ( 1.4)	191 ( 1.7)	4 ( 0.5)	190 ( 7.8)	17 ( 1.0)	191 ( 4.3)	8 ( 0.7)	175 ( 4.1)

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).

! Interpret with caution — the nature of the sample does not allow accurate determination of the variability of this statistic.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 6.24**

**1996 Mathematics Assessment**



POPULATION:

1996 Grade 8 Public School Students

REPORTED STATISTICS:

Percentage of Students and Average Mathematics Scale Score

TEACHERS' REPORTS ON:

Knowledge of the NCTM Standards

*How knowledgeable are you about the National Council of Teachers of Mathematics (NCTM) Curriculum and Evaluation Standards for School Mathematics?*

**I Have Little or No Knowledge**

**Somewhat Knowledgeable**

**Knowledgeable**

**Very Knowledgeable**

**JURISDICTIONS**

	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )
<b>Nation</b>								
NATION	16 ( 2.6)	264 ( 3.6)	34 ( 3.1)	268 ( 2.9)	33 ( 3.9)	275 ( 2.3)	17 ( 2.7)	282 ( 2.3)
NORTHEAST	11 ( 4.6)	... ( ... )	31 ( 7.9)	280 ( 9.1)!	37 (11.1)	277 ( 3.9)!	21 ( 8.9)	285 ( 5.0)!
SOUTHEAST	18 ( 4.4)	253 ( 4.7)!	31 ( 4.2)	264 ( 4.2)	38 ( 3.9)	265 ( 4.9)	13 ( 2.9)	272 ( 6.4)!
CENTRAL	17 ( 5.7)	272 ( 8.6)!	33 ( 8.9)	268 ( 7.3)!	36 (10.5)	283 ( 2.9)!	14 ( 4.8)	289 ( 4.7)!
WEST	17 ( 5.0)	268 ( 5.2)!	38 ( 5.3)	265 ( 4.5)	25 ( 5.5)	273 ( 5.3)!	20 ( 4.9)	280 ( 3.7)!
<b>States</b>								
ALABAMA	20 ( 3.9)	247 ( 4.0)!	32 ( 3.6)	257 ( 3.6)	33 ( 4.3)	258 ( 3.3)	14 ( 2.4)	262 ( 4.6)
ALASKA†	13 ( 2.4)	273 ( 4.7)	29 ( 2.3)	270 ( 4.8)	45 ( 3.1)	282 ( 2.2)	13 ( 0.7)	294 ( 3.4)
ARIZONA	20 ( 2.8)	259 ( 3.7)	27 ( 2.8)	265 ( 2.4)	35 ( 3.5)	275 ( 2.4)	18 ( 2.9)	271 ( 3.2)
ARKANSAS†	15 ( 3.0)	249 ( 4.1)!	32 ( 5.0)	261 ( 2.8)	34 ( 4.2)	266 ( 2.9)	19 ( 5.5)	270 ( 4.1)!
CALIFORNIA	15 ( 2.3)	243 ( 4.3)	25 ( 3.1)	261 ( 3.1)	36 ( 3.6)	269 ( 3.0)	25 ( 3.2)	272 ( 2.9)
COLORADO	11 ( 2.1)	271 ( 3.0)	28 ( 3.8)	273 ( 2.3)	39 ( 3.8)	277 ( 2.3)	22 ( 2.7)	283 ( 2.7)
CONNECTICUT	6 ( 1.7)	275 ( 5.3)!	19 ( 2.8)	275 ( 3.9)	43 ( 4.1)	280 ( 2.3)	31 ( 3.4)	285 ( 3.0)
DELAWARE	6 ( 0.6)	250 ( 3.9)	19 ( 0.9)	265 ( 2.1)	44 ( 1.2)	269 ( 1.6)	31 ( 1.3)	268 ( 1.9)
DISTRICT OF COLUMBIA	7 ( 1.1)	221 ( 7.1)	25 ( 1.2)	232 ( 3.6)	43 ( 1.3)	232 ( 2.2)	25 ( 0.7)	232 ( 2.1)
FLORIDA	14 ( 2.4)	249 ( 5.3)	36 ( 3.9)	264 ( 2.5)	28 ( 3.0)	261 ( 2.6)	22 ( 3.9)	275 ( 3.5)
GEORGIA	10 ( 1.8)	255 ( 4.5)	30 ( 2.6)	263 ( 2.8)	41 ( 2.7)	264 ( 2.3)	19 ( 2.7)	266 ( 3.3)
HAWAII	14 ( 0.9)	250 ( 2.7)	40 ( 1.2)	270 ( 1.5)	35 ( 1.0)	258 ( 1.7)	10 ( 0.7)	268 ( 2.7)
INDIANA	13 ( 2.8)	272 ( 4.3)!	41 ( 4.1)	276 ( 2.1)	32 ( 3.3)	275 ( 2.7)	14 ( 2.5)	278 ( 3.9)
IOWA†	10 ( 2.7)	279 ( 5.2)!	24 ( 3.9)	284 ( 2.2)	50 ( 4.7)	286 ( 1.7)	15 ( 2.8)	282 ( 2.6)
KENTUCKY	6 ( 1.5)	251 ( 4.5)!	27 ( 3.9)	264 ( 2.6)	45 ( 4.1)	269 ( 2.0)	22 ( 3.5)	271 ( 2.6)
LOUISIANA	25 ( 3.6)	250 ( 2.8)	30 ( 3.6)	253 ( 3.2)	33 ( 4.4)	255 ( 3.2)	12 ( 2.6)	256 ( 4.0)!
MAINE	7 ( 1.8)	268 ( 6.6)!	26 ( 3.2)	283 ( 2.7)	42 ( 3.9)	286 ( 1.6)	26 ( 2.7)	285 ( 2.9)
MARYLAND†	6 ( 1.6)	255 (13.5)!	30 ( 3.9)	265 ( 3.4)	38 ( 3.9)	274 ( 3.8)	25 ( 3.5)	274 ( 2.9)
MASSACHUSETTS	4 ( 1.2)	259 (10.6)!	25 ( 3.0)	267 ( 2.7)	37 ( 3.0)	279 ( 2.7)	35 ( 3.8)	286 ( 2.7)
MICHIGAN†	15 ( 3.0)	273 ( 3.2)!	33 ( 3.9)	276 ( 3.1)	35 ( 4.1)	279 ( 3.4)	17 ( 3.3)	287 ( 4.2)!
MINNESOTA	6 ( 1.9)	271 ( 4.8)!	35 ( 3.8)	282 ( 2.4)	45 ( 3.7)	287 ( 2.1)	14 ( 2.5)	287 ( 3.5)
MISSISSIPPI	5 ( 1.4)	248 ( 6.0)!	34 ( 3.8)	250 ( 2.4)	35 ( 3.5)	253 ( 2.0)	26 ( 3.5)	248 ( 4.0)
MISSOURI	12 ( 2.8)	268 ( 5.3)!	28 ( 3.9)	272 ( 2.1)	40 ( 4.1)	278 ( 2.3)	20 ( 3.1)	277 ( 3.9)
MONTANA†	9 ( 2.1)	265 ( 4.5)!	29 ( 3.8)	280 ( 2.6)	37 ( 3.5)	288 ( 1.6)	25 ( 2.4)	286 ( 2.6)
NEBRASKA	6 ( 1.4)	263 ( 4.2)!	34 ( 3.6)	281 ( 2.2)	39 ( 3.2)	287 ( 1.6)	21 ( 3.0)	285 ( 2.4)
NEW MEXICO	19 ( 2.0)	254 ( 3.8)	36 ( 2.9)	267 ( 2.1)	28 ( 2.1)	270 ( 1.6)	18 ( 2.1)	260 ( 3.8)
NEW YORK†	11 ( 2.2)	251 ( 4.5)	34 ( 4.2)	271 ( 3.2)	36 ( 4.6)	281 ( 2.7)	19 ( 3.8)	272 ( 2.9)!
NORTH CAROLINA	12 ( 2.2)	262 ( 5.0)	35 ( 3.1)	267 ( 1.9)	33 ( 3.0)	268 ( 2.4)	20 ( 2.7)	272 ( 2.9)
NORTH DAKOTA	6 ( 1.0)	273 ( 3.3)	49 ( 2.8)	285 ( 1.6)	38 ( 2.7)	287 ( 1.3)	7 ( 1.3)	285 ( 2.8)
OREGON	12 ( 2.3)	264 ( 3.4)!	36 ( 3.6)	275 ( 2.1)	35 ( 3.2)	285 ( 2.7)	17 ( 3.1)	281 ( 4.7)
RHODE ISLAND	5 ( 0.4)	251 ( 4.4)	30 ( 0.8)	270 ( 1.8)	42 ( 0.8)	270 ( 1.5)	24 ( 0.8)	275 ( 1.7)
SOUTH CAROLINA†	9 ( 2.3)	248 ( 3.1)!	27 ( 3.0)	258 ( 3.1)	40 ( 3.7)	261 ( 2.9)	24 ( 2.9)	268 ( 2.5)
TENNESSEE	19 ( 3.1)	259 ( 4.2)	37 ( 4.4)	264 ( 1.8)	31 ( 4.0)	267 ( 4.0)	12 ( 2.5)	273 ( 4.8)!
TEXAS	18 ( 2.7)	269 ( 3.7)	41 ( 4.0)	270 ( 2.1)	32 ( 3.4)	271 ( 2.8)	8 ( 1.8)	276 ( 4.9)!
UTAH	9 ( 1.1)	268 ( 2.5)	31 ( 2.4)	274 ( 1.5)	40 ( 2.5)	280 ( 1.4)	21 ( 1.8)	280 ( 2.5)
VERMONT†	8 ( 1.5)	265 ( 5.4)!	16 ( 1.7)	277 ( 2.8)	41 ( 2.6)	281 ( 1.3)	35 ( 2.5)	283 ( 2.1)
VIRGINIA	5 ( 1.2)	261 ( 4.9)!	30 ( 2.9)	268 ( 2.3)	44 ( 2.9)	273 ( 2.7)	21 ( 2.1)	269 ( 3.4)
WASHINGTON	16 ( 1.9)	266 ( 3.6)	34 ( 3.6)	273 ( 2.8)	30 ( 3.5)	283 ( 2.1)	19 ( 3.0)	282 ( 2.6)
WEST VIRGINIA	15 ( 2.3)	252 ( 2.1)	34 ( 3.7)	266 ( 1.9)	34 ( 3.8)	266 ( 2.0)	18 ( 2.9)	273 ( 2.7)
WISCONSIN†	8 ( 2.4)	279 ( 7.3)!	35 ( 4.0)	283 ( 2.3)	43 ( 4.6)	284 ( 2.5)	13 ( 3.2)	287 ( 4.0)!
WYOMING	9 ( 0.7)	265 ( 3.4)	32 ( 1.1)	274 ( 1.3)	42 ( 1.2)	276 ( 1.5)	17 ( 0.5)	279 ( 1.3)
<b>Other Jurisdictions</b>								
DDESS	13 ( 1.1)	266 ( 5.6)	11 ( 2.0)	... ( ... )	43 ( 1.9)	270 ( 3.6)	32 ( 1.5)	276 ( 5.3)
DoDDS	6 ( 0.3)	273 ( 3.6)	23 ( 0.7)	272 ( 1.5)	41 ( 1.1)	276 ( 1.6)	30 ( 1.1)	276 ( 1.5)
GUAM	69 ( 1.4)	234 ( 1.8)	3 ( 0.7)	... ( ... )	27 ( 1.4)	236 ( 4.1)	0 ( ... )	... ( ... )

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).

... Characteristics of the sample do not permit a reliable estimate.

! Interpret with caution — the nature of the sample does not allow accurate determination of the variability of this statistic.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 6.25**

**1996 Mathematics Assessment**



POPULATION:  
REPORTED STATISTICS:  
TEACHERS' REPORTS ON:

1996 Grade 8 Public School Students  
Percentage of Students and Average Mathematics Scale Score  
Professional Development for Implementing the NCTM Standards

Have you participated in any activities to provide you with strategies for implementing the 1989 NCTM Curriculum and Evaluation Standards for School Mathematics?

Local Workshop	Regional or National NCTM Meeting	Other	No
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JURISDICTIONS	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )
<b>Nation</b>								
NATION	51 ( 2.9)	276 ( 2.0)	25 ( 3.1)	276 ( 2.2)	16 ( 2.4)	274 ( 2.6)	35 ( 3.1)	267 ( 2.3)
NORTHEAST	65 ( 8.9)	281 ( 5.2)	22 ( 9.8)	283 ( 7.0)!	13 ( 5.6)	271 ( 6.1)!	25 ( 7.4)	270 ( 6.6)!
SOUTHEAST	45 ( 5.8)	264 ( 4.1)	20 ( 3.9)	272 ( 4.5)	22 ( 4.9)	269 ( 4.3)!	42 ( 6.1)	264 ( 3.6)
CENTRAL	50 ( 5.3)	282 ( 3.1)	27 ( 5.7)	277 ( 5.0)!	17 ( 4.9)	283 ( 4.6)!	31 ( 7.0)	269 ( 8.5)!
WEST	48 ( 4.4)	278 ( 2.5)	31 ( 4.9)	273 ( 3.1)	13 ( 3.4)	273 ( 5.8)!	38 ( 4.8)	268 ( 3.0)
<b>States</b>								
ALABAMA	45 ( 4.3)	260 ( 3.2)	22 ( 3.9)	265 ( 3.7)	13 ( 2.7)	268 ( 5.7)!	40 ( 4.5)	252 ( 2.8)
ALASKA†	52 ( 2.8)	282 ( 2.9)	16 ( 1.5)	294 ( 4.6)	15 ( 1.7)	277 ( 5.0)	40 ( 3.1)	269 ( 2.9)
ARIZONA	36 ( 3.5)	270 ( 2.4)	29 ( 3.9)	274 ( 2.8)	21 ( 2.8)	274 ( 2.7)	39 ( 3.9)	263 ( 2.5)
ARKANSAS†	44 ( 4.5)	266 ( 2.0)	39 ( 5.3)	267 ( 2.8)	26 ( 4.4)	265 ( 2.9)	32 ( 3.9)	258 ( 3.0)
CALIFORNIA	67 ( 3.2)	266 ( 2.2)	31 ( 3.1)	271 ( 3.6)	21 ( 3.0)	264 ( 2.6)	22 ( 2.9)	255 ( 3.4)
COLORADO	58 ( 3.4)	278 ( 1.5)	37 ( 3.2)	279 ( 2.4)	25 ( 3.0)	276 ( 2.6)	27 ( 2.7)	270 ( 2.3)
CONNECTICUT	67 ( 3.6)	282 ( 1.7)	39 ( 3.9)	285 ( 2.3)	22 ( 2.8)	284 ( 2.7)	16 ( 2.7)	272 ( 3.4)
DELAWARE	81 ( 0.8)	269 ( 1.0)	51 ( 1.0)	268 ( 1.6)	16 ( 1.0)	266 ( 2.3)	7 ( 0.4)	258 ( 3.4)
DISTRICT OF COLUMBIA	80 ( 1.2)	232 ( 1.5)	30 ( 0.7)	231 ( 2.9)	4 ( 0.4)	... ( ... )	20 ( 1.2)	226 ( 3.4)
FLORIDA	57 ( 3.9)	267 ( 1.8)	19 ( 3.3)	274 ( 2.6)	14 ( 2.5)	268 ( 5.7)!	34 ( 4.0)	258 ( 2.6)
GEORGIA	54 ( 3.3)	266 ( 2.2)	24 ( 2.9)	263 ( 3.2)	20 ( 2.4)	271 ( 3.4)	31 ( 2.7)	259 ( 2.5)
HAWAII	61 ( 1.2)	266 ( 1.3)	12 ( 0.6)	265 ( 2.4)	12 ( 0.8)	264 ( 2.6)	31 ( 1.1)	257 ( 2.1)
INDIANA	44 ( 3.8)	279 ( 2.2)	37 ( 4.5)	281 ( 2.1)	15 ( 3.4)	274 ( 3.8)!	33 ( 4.5)	272 ( 2.3)
IOWA†	51 ( 4.9)	286 ( 1.5)	35 ( 4.8)	287 ( 2.4)	25 ( 3.7)	287 ( 1.8)	25 ( 4.0)	279 ( 2.8)
KENTUCKY	58 ( 4.4)	269 ( 1.8)	43 ( 4.5)	269 ( 1.9)	16 ( 2.9)	265 ( 2.9)	24 ( 4.0)	265 ( 2.4)
LOUISIANA	55 ( 4.3)	252 ( 2.5)	27 ( 3.7)	251 ( 2.9)	17 ( 2.8)	256 ( 2.9)	35 ( 3.9)	255 ( 2.5)
MAINE	53 ( 3.2)	287 ( 1.8)	36 ( 3.1)	289 ( 2.1)	19 ( 3.0)	282 ( 2.9)	25 ( 2.8)	277 ( 2.8)
MARYLAND†	72 ( 3.2)	271 ( 2.5)	32 ( 4.2)	274 ( 4.0)	16 ( 3.9)	282 ( 6.9)!	19 ( 2.9)	267 ( 5.1)
MASSACHUSETTS	61 ( 3.8)	279 ( 2.8)	45 ( 4.2)	282 ( 2.9)	22 ( 3.8)	285 ( 3.7)	19 ( 3.4)	270 ( 3.3)
MICHIGAN†	54 ( 4.3)	282 ( 2.3)	28 ( 3.8)	287 ( 3.7)	18 ( 3.3)	280 ( 4.2)	32 ( 3.9)	274 ( 3.1)
MINNESOTA	49 ( 3.4)	289 ( 2.5)	30 ( 3.0)	289 ( 2.5)	26 ( 3.5)	284 ( 2.8)	26 ( 3.3)	279 ( 2.5)
MISSISSIPPI	68 ( 3.6)	251 ( 1.8)	33 ( 4.0)	252 ( 2.1)	19 ( 3.1)	255 ( 3.0)	18 ( 2.9)	250 ( 3.3)
MISSOURI	39 ( 4.0)	279 ( 2.0)	42 ( 3.6)	277 ( 2.2)	28 ( 3.5)	278 ( 2.6)	29 ( 3.3)	268 ( 3.0)
MONTANA†	53 ( 3.7)	285 ( 1.8)	57 ( 4.2)	284 ( 1.5)	23 ( 2.5)	288 ( 2.6)	23 ( 2.3)	275 ( 2.7)
NEBRASKA	39 ( 3.0)	284 ( 1.7)	45 ( 3.7)	287 ( 1.5)	21 ( 2.4)	282 ( 2.6)	28 ( 3.2)	279 ( 3.0)
NEW MEXICO	45 ( 3.0)	264 ( 1.8)	31 ( 2.4)	267 ( 2.5)	16 ( 1.4)	264 ( 3.8)	34 ( 1.9)	262 ( 2.2)
NEW YORK†	45 ( 4.2)	276 ( 2.6)	16 ( 2.9)	282 ( 2.7)	21 ( 3.6)	273 ( 3.2)	39 ( 3.7)	268 ( 2.6)
NORTH CAROLINA	49 ( 3.1)	272 ( 1.8)	34 ( 3.4)	272 ( 2.3)	10 ( 1.8)	273 ( 3.3)	33 ( 3.0)	261 ( 2.8)
NORTH DAKOTA	48 ( 2.5)	286 ( 1.3)	48 ( 2.7)	286 ( 1.3)	16 ( 2.1)	284 ( 2.5)	32 ( 2.4)	283 ( 1.8)
OREGON	52 ( 4.0)	283 ( 2.2)	23 ( 3.1)	282 ( 3.7)	18 ( 3.1)	279 ( 4.3)	33 ( 3.7)	271 ( 2.1)
RHODE ISLAND	59 ( 1.1)	273 ( 1.2)	40 ( 0.8)	272 ( 1.2)	25 ( 0.8)	271 ( 1.7)	21 ( 0.7)	262 ( 1.9)
SOUTH CAROLINA†	59 ( 4.1)	263 ( 2.1)	29 ( 3.2)	264 ( 2.2)	20 ( 3.0)	267 ( 3.0)	24 ( 3.4)	253 ( 2.6)
TENNESSEE	43 ( 4.2)	266 ( 2.8)	24 ( 3.3)	269 ( 3.4)	12 ( 2.5)	265 ( 5.0)!	42 ( 3.9)	263 ( 2.4)
TEXAS	47 ( 3.4)	270 ( 2.1)	26 ( 3.1)	269 ( 3.4)	11 ( 2.4)	268 ( 5.0)!	39 ( 3.3)	272 ( 2.3)
UTAH	61 ( 1.9)	280 ( 1.3)	35 ( 1.7)	282 ( 1.6)	19 ( 1.9)	275 ( 3.1)	24 ( 1.7)	272 ( 1.5)
VERMONT†	56 ( 3.1)	280 ( 1.4)	36 ( 2.4)	281 ( 2.2)	26 ( 2.4)	285 ( 2.0)	26 ( 2.3)	277 ( 2.1)
VIRGINIA	60 ( 2.6)	273 ( 2.0)	29 ( 2.7)	276 ( 2.4)	22 ( 2.5)	270 ( 2.9)	24 ( 2.4)	262 ( 3.5)
WASHINGTON	53 ( 3.5)	279 ( 1.7)	36 ( 3.2)	285 ( 1.9)	16 ( 2.7)	282 ( 2.9)	32 ( 3.1)	269 ( 3.0)
WEST VIRGINIA	63 ( 3.5)	266 ( 1.5)	27 ( 3.1)	270 ( 2.3)	11 ( 1.7)	269 ( 3.8)	26 ( 2.6)	260 ( 2.1)
WISCONSIN†	53 ( 4.4)	286 ( 2.8)	25 ( 3.7)	286 ( 3.1)	25 ( 4.0)	285 ( 2.8)	29 ( 4.1)	280 ( 2.5)
WYOMING	41 ( 0.9)	278 ( 1.2)	44 ( 0.9)	277 ( 1.3)	21 ( 1.2)	271 ( 1.8)	29 ( 1.1)	273 ( 1.9)
<b>Other Jurisdictions</b>								
DDESS	74 ( 2.0)	268 ( 2.3)	50 ( 2.0)	272 ( 3.4)	29 ( 1.7)	261 ( 6.2)	7 ( 1.7)	... ( ... )
DoDDS	65 ( 0.9)	276 ( 1.2)	29 ( 1.0)	272 ( 1.2)	30 ( 0.8)	277 ( 1.3)	26 ( 0.7)	273 ( 1.5)
GUAM	24 ( 1.4)	237 ( 4.6)	0 ( ... )	... ( ... )	11 ( 0.9)	237 ( 6.1)	67 ( 1.7)	234 ( 2.0)

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).  
... Characteristics of the sample do not permit a reliable estimate.  
! Interpret with caution — the nature of the sample does not allow accurate determination of the variability of this statistic.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 6.26**

**1996 Mathematics Assessment**



POPULATION:

1996 Grade 8 Public School Students

REPORTED STATISTICS:

Percentage of Students and Average Mathematics Scale Score

STUDENTS' REPORTS ON:

Their Current Mathematics Class

What kind of mathematics class are you taking this year?

**Eighth-grade Mathematics**

**Prealgebra**

**Algebra**

**JURISDICTIONS**

PCT ( SE )

SS ( SE )

PCT ( SE )

SS ( SE )

PCT ( SE )

SS ( SE )

**Nation**

NATION	44 ( 2.3)	261 ( 1.5)	27 ( 1.9)	269 ( 1.6)	24 ( 1.6)	294 ( 1.8)
NORTHEAST	43 ( 7.0)	264 ( 5.6)	21 ( 5.9)	274 ( 2.2) <sup>!</sup>	27 ( 7.3)	295 ( 4.3) <sup>!</sup>
SOUTHEAST	37 ( 4.7)	251 ( 3.8)	39 ( 4.2)	264 ( 3.6)	20 ( 1.2)	289 ( 3.8)
CENTRAL	48 ( 4.7)	267 ( 2.6)	24 ( 3.8)	270 ( 4.9)	26 ( 2.5)	304 ( 4.7)
WEST	46 ( 2.5)	261 ( 2.3)	25 ( 2.5)	272 ( 3.0)	23 ( 1.2)	289 ( 3.7)

**States**

ALABAMA	54 ( 3.1)	247 ( 2.3)	21 ( 2.4)	266 ( 2.9)	20 ( 2.0)	282 ( 3.4)
ALASKA†	29 ( 1.9)	259 ( 2.3)	39 ( 1.8)	276 ( 1.7)	26 ( 1.5)	308 ( 3.5)
ARIZONA	35 ( 3.2)	255 ( 1.9)	32 ( 3.0)	264 ( 1.6)	26 ( 1.7)	289 ( 2.0)
ARKANSAS†	39 ( 4.0)	254 ( 2.7)	39 ( 3.3)	261 ( 1.6)	18 ( 1.6)	288 ( 3.1)
CALIFORNIA	47 ( 2.7)	252 ( 1.9)	20 ( 2.1)	262 ( 2.5)	27 ( 2.1)	287 ( 3.3)
COLORADO	34 ( 2.6)	265 ( 1.5)	32 ( 2.3)	270 ( 1.7)	28 ( 1.2)	296 ( 1.9)
CONNECTICUT	35 ( 2.1)	260 ( 2.0)	33 ( 1.7)	280 ( 1.5)	28 ( 1.4)	306 ( 1.5)
DELAWARE	23 ( 0.9)	249 ( 2.1)	33 ( 0.9)	256 ( 1.5)	39 ( 1.1)	287 ( 1.4)
DISTRICT OF COLUMBIA	24 ( 1.2)	220 ( 2.4)	16 ( 1.1)	224 ( 3.8)	53 ( 1.2)	239 ( 1.8)
FLORIDA	42 ( 2.2)	251 ( 1.9)	27 ( 2.0)	263 ( 2.2)	27 ( 1.5)	289 ( 2.5)
GEORGIA	25 ( 2.2)	246 ( 1.9)	42 ( 2.2)	257 ( 1.8)	29 ( 1.8)	286 ( 2.6)
HAWAII	42 ( 1.0)	251 ( 1.2)	33 ( 1.0)	267 ( 1.7)	18 ( 0.8)	294 ( 1.9)
INDIANA	51 ( 2.8)	264 ( 2.1)	26 ( 2.4)	277 ( 2.1)	21 ( 1.5)	304 ( 2.3)
IOWA†	49 ( 3.8)	274 ( 1.7)	30 ( 3.4)	285 ( 1.7)	20 ( 1.7)	309 ( 1.9)
KENTUCKY	49 ( 3.1)	258 ( 1.3)	27 ( 2.4)	268 ( 1.7)	20 ( 1.8)	287 ( 3.0)
LOUISIANA	38 ( 4.1)	247 ( 1.9)	46 ( 3.7)	253 ( 2.0)	14 ( 1.3)	271 ( 4.2)
MAINE	40 ( 2.0)	273 ( 1.4)	32 ( 1.9)	280 ( 1.6)	25 ( 1.4)	308 ( 2.3)
MARYLAND†	27 ( 2.4)	245 ( 2.3)	28 ( 1.6)	265 ( 2.3)	41 ( 1.9)	287 ( 2.5)
MASSACHUSETTS	25 ( 2.1)	258 ( 2.7)	32 ( 2.0)	269 ( 1.8)	41 ( 2.3)	298 ( 2.1)
MICHIGAN†	47 ( 3.3)	264 ( 1.9)	19 ( 2.4)	278 ( 3.0)	29 ( 2.4)	298 ( 2.1)
MINNESOTA	32 ( 2.7)	270 ( 1.7)	27 ( 2.6)	274 ( 2.2)	34 ( 1.8)	303 ( 1.9)
MISSISSIPPI	45 ( 2.5)	242 ( 1.5)	35 ( 2.5)	250 ( 2.3)	18 ( 1.2)	276 ( 3.1)
MISSOURI	33 ( 3.0)	261 ( 2.1)	39 ( 2.7)	271 ( 2.1)	27 ( 1.8)	291 ( 2.4)
MONTANA†	49 ( 2.1)	277 ( 2.1)	22 ( 1.7)	281 ( 1.7)	22 ( 1.4)	305 ( 1.8)
NEBRASKA	46 ( 2.9)	272 ( 1.3)	26 ( 2.3)	277 ( 1.4)	25 ( 1.6)	308 ( 1.7)
NEW MEXICO	41 ( 1.4)	254 ( 1.7)	32 ( 1.1)	264 ( 1.5)	22 ( 1.2)	283 ( 1.9)
NEW YORK†	62 ( 2.2)	263 ( 1.8)	9 ( 1.6)	273 ( 3.8)	10 ( 1.4)	277 ( 5.8)
NORTH CAROLINA	23 ( 2.4)	251 ( 2.8)	45 ( 2.4)	259 ( 1.8)	29 ( 1.3)	296 ( 2.0)
NORTH DAKOTA	45 ( 2.1)	279 ( 1.4)	33 ( 1.8)	279 ( 1.7)	20 ( 1.2)	310 ( 1.7)
OREGON	35 ( 2.2)	261 ( 1.6)	27 ( 1.8)	272 ( 2.0)	28 ( 1.6)	303 ( 2.1)
RHODE ISLAND	30 ( 0.9)	254 ( 1.5)	35 ( 1.1)	263 ( 1.4)	32 ( 0.9)	293 ( 1.5)
SOUTH CAROLINA†	30 ( 2.8)	246 ( 1.9)	39 ( 2.8)	255 ( 1.8)	27 ( 1.8)	286 ( 2.6)
TENNESSEE	60 ( 2.6)	255 ( 1.5)	19 ( 2.0)	267 ( 2.9)	18 ( 1.4)	293 ( 2.2)
TEXAS	39 ( 2.7)	257 ( 2.1)	33 ( 2.8)	266 ( 1.9)	25 ( 1.7)	297 ( 1.9)
UTAH	7 ( 0.9)	252 ( 2.9)	43 ( 1.6)	265 ( 1.2)	42 ( 1.8)	291 ( 1.2)
VERMONT†	47 ( 1.9)	269 ( 1.4)	27 ( 1.6)	278 ( 1.6)	22 ( 1.3)	306 ( 1.9)
VIRGINIA	19 ( 1.9)	251 ( 2.6)	48 ( 2.3)	260 ( 2.1)	29 ( 1.2)	297 ( 1.6)
WASHINGTON	32 ( 2.3)	259 ( 2.0)	33 ( 2.2)	274 ( 1.3)	26 ( 1.5)	304 ( 1.7)
WEST VIRGINIA	40 ( 1.6)	247 ( 1.4)	31 ( 1.6)	267 ( 1.6)	26 ( 1.3)	291 ( 1.8)
WISCONSIN†	52 ( 3.0)	275 ( 1.2)	19 ( 2.6)	283 ( 2.3)	25 ( 2.0)	303 ( 4.2)
WYOMING	36 ( 1.0)	263 ( 1.5)	36 ( 0.9)	275 ( 1.3)	23 ( 0.8)	300 ( 1.2)

**Other Jurisdictions**

DDESS	30 ( 1.8)	259 ( 3.6)	39 ( 2.0)	259 ( 2.4)	26 ( 1.7)	301 ( 3.7)
DoDDS	21 ( 0.6)	263 ( 1.9)	43 ( 1.1)	262 ( 1.5)	34 ( 1.1)	298 ( 1.2)
GUAM	32 ( 1.6)	221 ( 3.3)	42 ( 1.6)	245 ( 2.1)	21 ( 1.5)	264 ( 3.8)

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).

! Interpret with caution — the nature of the sample does not allow accurate determination of the variability of this statistic.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 6.26** (continued) **1996 Mathematics Assessment**



POPULATION: **1996 Grade 8 Public School Students**  
 REPORTED STATISTICS: **Percentage of Students and Average Mathematics Scale Score**  
 STUDENTS' REPORTS ON: **Their Current Mathematics Class**

What kind of mathematics class are you taking this year?	Integrated or Sequential Mathematics		Applied Mathematics (Technical Preparation)		Other Mathematics Class	
	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )
<b>JURISDICTIONS</b>						
<b>Nation</b>						
NATION	1 ( 0.3 )	280 ( 8.8)!	0 ( 0.0 )	... ( ... )	3 ( 0.5 )	264 ( 5.8 )
NORTHEAST	4 ( 1.2 )	... ( ... )	0 ( 0.2 )	... ( ... )	4 ( 1.2 )	... ( ... )
SOUTHEAST	1 ( 0.4 )	... ( ... )	0 ( ... )	... ( ... )	3 ( 1.3 )	... ( ... )
CENTRAL	0 ( ... )	... ( ... )	0 ( 0.1 )	... ( ... )	1 ( 0.5 )	... ( ... )
WEST	1 ( 0.2 )	... ( ... )	0 ( 0.1 )	... ( ... )	4 ( 0.9 )	253 ( 7.9)!
<b>States</b>						
ALABAMA	0 ( 0.1 )	... ( ... )	0 ( 0.2 )	... ( ... )	3 ( 0.7 )	... ( ... )
ALASKA†	1 ( 0.3 )	... ( ... )	0 ( 0.2 )	... ( ... )	4 ( 0.6 )	... ( ... )
ARIZONA	3 ( 0.8 )	279 ( 5.9)!	0 ( ... )	... ( ... )	4 ( 0.6 )	... ( ... )
ARKANSAS†	0 ( ... )	... ( ... )	2 ( 0.6 )	... ( ... )	2 ( 0.5 )	... ( ... )
CALIFORNIA	1 ( 0.1 )	... ( ... )	0 ( 0.1 )	... ( ... )	4 ( 0.9 )	250 ( 7.5)!
COLORADO	1 ( 0.5 )	... ( ... )	0 ( 0.1 )	... ( ... )	4 ( 0.5 )	279 ( 5.5 )
CONNECTICUT	2 ( 0.3 )	... ( ... )	0 ( 0.1 )	... ( ... )	2 ( 0.4 )	... ( ... )
DELAWARE	0 ( 0.1 )	... ( ... )	0 ( 0.2 )	... ( ... )	4 ( 0.4 )	272 ( 8.9 )
DISTRICT OF COLUMBIA	0 ( 0.1 )	... ( ... )	0 ( 0.1 )	... ( ... )	6 ( 0.7 )	268 ( 7.5 )
FLORIDA	1 ( 0.3 )	... ( ... )	0 ( 0.1 )	... ( ... )	4 ( 0.6 )	244 ( 11.6 )
GEORGIA	1 ( 0.2 )	... ( ... )	0 ( 0.1 )	... ( ... )	2 ( 0.5 )	... ( ... )
HAWAII	0 ( 0.2 )	... ( ... )	1 ( 0.2 )	... ( ... )	5 ( 0.6 )	226 ( 6.9 )
INDIANA	0 ( ... )	... ( ... )	0 ( 0.1 )	... ( ... )	2 ( 0.4 )	... ( ... )
IOWA†	1 ( 0.3 )	... ( ... )	0 ( ... )	... ( ... )	1 ( 0.3 )	... ( ... )
KENTUCKY	2 ( 0.5 )	... ( ... )	0 ( 0.1 )	... ( ... )	2 ( 0.4 )	... ( ... )
LOUISIANA	0 ( 0.1 )	... ( ... )	0 ( 0.2 )	... ( ... )	1 ( 0.3 )	... ( ... )
MAINE	0 ( 0.1 )	... ( ... )	0 ( 0.1 )	... ( ... )	2 ( 0.4 )	... ( ... )
MARYLAND†	1 ( 0.2 )	... ( ... )	0 ( ... )	... ( ... )	4 ( 0.7 )	303 ( 8.4 )
MASSACHUSETTS	1 ( 0.2 )	... ( ... )	0 ( 0.1 )	... ( ... )	2 ( 0.3 )	... ( ... )
MICHIGAN†	2 ( 0.6 )	... ( ... )	1 ( 0.2 )	... ( ... )	3 ( 0.5 )	281 ( 10.3 )
MINNESOTA	1 ( 0.3 )	... ( ... )	0 ( 0.1 )	... ( ... )	5 ( 1.1 )	307 ( 6.5)!
MISSISSIPPI	0 ( 0.1 )	... ( ... )	0 ( 0.1 )	... ( ... )	1 ( 0.3 )	... ( ... )
MISSOURI	0 ( 0.1 )	... ( ... )	0 ( ... )	... ( ... )	1 ( 0.3 )	... ( ... )
MONTANA†	2 ( 0.5 )	... ( ... )	0 ( 0.1 )	... ( ... )	4 ( 0.6 )	251 ( 7.4 )
NEBRASKA	0 ( 0.1 )	... ( ... )	0 ( ... )	... ( ... )	2 ( 0.3 )	... ( ... )
NEW MEXICO	0 ( 0.1 )	... ( ... )	0 ( 0.1 )	... ( ... )	4 ( 0.5 )	232 ( 6.7 )
NEW YORK†	16 ( 1.6 )	302 ( 2.5 )	0 ( 0.2 )	... ( ... )	3 ( 0.5 )	... ( ... )
NORTH CAROLINA	1 ( 0.4 )	... ( ... )	0 ( 0.1 )	... ( ... )	2 ( 0.4 )	... ( ... )
NORTH DAKOTA	0 ( 0.1 )	... ( ... )	0 ( 0.1 )	... ( ... )	1 ( 0.3 )	... ( ... )
OREGON	2 ( 0.7 )	... ( ... )	0 ( 0.1 )	... ( ... )	7 ( 0.8 )	277 ( 6.4 )
RHODE ISLAND	0 ( ... )	... ( ... )	0 ( 0.1 )	... ( ... )	3 ( 0.3 )	... ( ... )
SOUTH CAROLINA†	0 ( 0.2 )	... ( ... )	1 ( 0.4 )	... ( ... )	2 ( 0.4 )	... ( ... )
TENNESSEE	0 ( 0.1 )	... ( ... )	0 ( 0.1 )	... ( ... )	3 ( 0.6 )	... ( ... )
TEXAS	0 ( 0.1 )	... ( ... )	0 ( 0.1 )	... ( ... )	2 ( 0.4 )	... ( ... )
UTAH	1 ( 0.2 )	... ( ... )	0 ( 0.1 )	... ( ... )	7 ( 0.5 )	292 ( 3.8 )
VERMONT†	1 ( 0.3 )	... ( ... )	0 ( 0.2 )	... ( ... )	3 ( 0.5 )	... ( ... )
VIRGINIA	0 ( 0.1 )	... ( ... )	0 ( 0.1 )	... ( ... )	3 ( 0.7 )	292 ( 7.2)!
WASHINGTON	4 ( 1.2 )	298 ( 3.6)!	1 ( 0.3 )	... ( ... )	5 ( 0.7 )	259 ( 6.6 )
WEST VIRGINIA	0 ( 0.1 )	... ( ... )	0 ( 0.1 )	... ( ... )	2 ( 0.5 )	... ( ... )
WISCONSIN†	0 ( 0.1 )	... ( ... )	1 ( 0.2 )	... ( ... )	3 ( 0.4 )	... ( ... )
WYOMING	1 ( 0.1 )	... ( ... )	0 ( 0.1 )	... ( ... )	4 ( 0.5 )	253 ( 6.6 )
<b>Other Jurisdictions</b>						
DDESS	1 ( 0.2 )	... ( ... )	1 ( 0.3 )	... ( ... )	3 ( 0.9 )	... ( ... )
DoDDS	1 ( ... )	... ( ... )	0 ( ... )	... ( ... )	1 ( 0.2 )	... ( ... )
GUAM	0 ( 0.2 )	... ( ... )	1 ( 0.3 )	... ( ... )	4 ( 0.6 )	... ( ... )

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).

... Characteristics of the sample do not permit a reliable estimate.

! Interpret with caution — the nature of the sample does not allow accurate determination of the variability of this statistic.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 6.27**

**1996 Mathematics Assessment**



POPULATION:

1996 Grade 8 Public School Students

REPORTED STATISTICS:

Percentage of Students and Average Mathematics Scale Score

STUDENTS' REPORTS ON:

Their Expected Ninth-grade Mathematics Class

*What kind of mathematics class do you expect to take in ninth grade?*

**I Do Not Expect to Take Mathematics in Ninth Grade**

**Basic, General, Business, or Consumer Mathematics**

**Applied Mathematics (Technical Preparation)**

JURISDICTIONS	PCT ( SE )		SS ( SE )		PCT ( SE )		SS ( SE )		PCT ( SE )		SS ( SE )	
<b>Nation</b>												
NATION	1 ( 0.2)	...	...	( ... )	8 ( 0.7)	250 ( 2.3)	2 ( 0.3)	256 ( 3.9)				
NORTHEAST	0 ( 0.2)	...	...	( ... )	9 ( 1.8)	253 ( 5.2)	4 ( 1.1)	...	...	...	...	
SOUTHEAST	1 ( 0.4)	...	...	( ... )	6 ( 0.9)	238 ( 6.8)	2 ( 0.4)	...	...	...	...	
CENTRAL	1 ( 0.3)	...	...	( ... )	8 ( 1.4)	257 ( 4.1)	2 ( 0.4)	...	...	...	...	
WEST	1 ( 0.3)	...	...	( ... )	9 ( 1.2)	249 ( 3.2)	2 ( 0.4)	...	...	...	...	
<b>States</b>												
ALABAMA	1 ( 0.3)	...	...	( ... )	11 ( 0.8)	235 ( 2.6)	2 ( 0.3)	...	...	...	...	
ALASKA†	1 ( 0.3)	...	...	( ... )	6 ( 0.7)	257 ( 3.8)	1 ( 0.2)	...	...	...	...	
ARIZONA	2 ( 0.3)	...	...	( ... )	8 ( 0.9)	253 ( 2.8)	1 ( 0.2)	...	...	...	...	
ARKANSAS†	1 ( 0.3)	...	...	( ... )	5 ( 0.7)	241 ( 4.4)	7 ( 0.9)	246 ( 4.3)				
CALIFORNIA	2 ( 0.3)	...	...	( ... )	10 ( 0.9)	241 ( 2.4)	1 ( 0.2)	...	...	...	...	
COLORADO	1 ( 0.3)	...	...	( ... )	7 ( 0.8)	252 ( 3.1)	2 ( 0.4)	...	...	...	...	
CONNECTICUT	1 ( 0.2)	...	...	( ... )	9 ( 0.7)	249 ( 2.6)	2 ( 0.3)	...	...	...	...	
DELAWARE	1 ( 0.2)	...	...	( ... )	7 ( 0.5)	238 ( 3.5)	3 ( 0.4)	...	...	...	...	
DISTRICT OF COLUMBIA	1 ( 0.2)	...	...	( ... )	9 ( 0.8)	224 ( 4.0)	2 ( 0.3)	...	...	...	...	
FLORIDA	1 ( 0.3)	...	...	( ... )	8 ( 0.7)	244 ( 2.4)	2 ( 0.4)	...	...	...	...	
GEORGIA	1 ( 0.2)	...	...	( ... )	5 ( 0.8)	236 ( 3.4)	1 ( 0.2)	...	...	...	...	
HAWAII	2 ( 0.4)	...	...	( ... )	8 ( 0.6)	239 ( 3.0)	2 ( 0.2)	...	...	...	...	
INDIANA	1 ( 0.2)	...	...	( ... )	9 ( 1.0)	256 ( 2.4)	2 ( 0.4)	...	...	...	...	
IOWA†	1 ( 0.2)	...	...	( ... )	9 ( 0.9)	260 ( 3.1)	2 ( 0.4)	...	...	...	...	
KENTUCKY	2 ( 0.4)	...	...	( ... )	9 ( 0.9)	250 ( 1.9)	1 ( 0.3)	...	...	...	...	
LOUISIANA	1 ( 0.3)	...	...	( ... )	9 ( 0.9)	239 ( 2.6)	2 ( 0.4)	...	...	...	...	
MAINE	1 ( 0.3)	...	...	( ... )	8 ( 0.7)	257 ( 2.8)	3 ( 0.5)	...	...	...	...	
MARYLAND†	1 ( 0.2)	...	...	( ... )	6 ( 0.6)	233 ( 3.6)	2 ( 0.3)	...	...	...	...	
MASSACHUSETTS	1 ( 0.2)	...	...	( ... )	6 ( 0.7)	251 ( 3.6)	2 ( 0.3)	...	...	...	...	
MICHIGAN†	1 ( 0.2)	...	...	( ... )	9 ( 0.8)	254 ( 2.4)	2 ( 0.4)	...	...	...	...	
MINNESOTA	1 ( 0.2)	...	...	( ... )	6 ( 0.7)	256 ( 3.3)	1 ( 0.3)	...	...	...	...	
MISSISSIPPI	1 ( 0.2)	...	...	( ... )	4 ( 0.4)	228 ( 3.8)	1 ( 0.2)	...	...	...	...	
MISSOURI	2 ( 0.4)	...	...	( ... )	7 ( 0.7)	250 ( 2.9)	2 ( 0.3)	...	...	...	...	
MONTANA†	1 ( 0.2)	...	...	( ... )	7 ( 0.8)	261 ( 3.9)	2 ( 0.4)	...	...	...	...	
NEBRASKA	1 ( 0.2)	...	...	( ... )	6 ( 0.5)	251 ( 2.3)	2 ( 0.3)	...	...	...	...	
NEW MEXICO	2 ( 0.3)	...	...	( ... )	10 ( 0.9)	244 ( 3.1)	1 ( 0.2)	...	...	...	...	
NEW YORK†	1 ( 0.2)	...	...	( ... )	16 ( 1.4)	253 ( 3.4)	2 ( 0.4)	...	...	...	...	
NORTH CAROLINA	1 ( 0.3)	...	...	( ... )	5 ( 0.6)	242 ( 2.9)	1 ( 0.2)	...	...	...	...	
NORTH DAKOTA	1 ( 0.2)	...	...	( ... )	5 ( 0.6)	263 ( 3.5)	1 ( 0.4)	...	...	...	...	
OREGON	2 ( 0.3)	...	...	( ... )	9 ( 0.8)	250 ( 2.7)	2 ( 0.3)	...	...	...	...	
RHODE ISLAND	1 ( 0.3)	...	...	( ... )	8 ( 0.6)	239 ( 3.6)	1 ( 0.3)	...	...	...	...	
SOUTH CAROLINA†	1 ( 0.3)	...	...	( ... )	7 ( 0.7)	237 ( 3.4)	2 ( 0.4)	...	...	...	...	
TENNESSEE	2 ( 0.4)	...	...	( ... )	8 ( 0.6)	242 ( 3.0)	2 ( 0.2)	...	...	...	...	
TEXAS	1 ( 0.2)	...	...	( ... )	5 ( 0.6)	250 ( 3.4)	1 ( 0.2)	...	...	...	...	
UTAH	1 ( 0.2)	...	...	( ... )	2 ( 0.3)	...	1 ( 0.2)	...	...	...	...	
VERMONT†	1 ( 0.3)	...	...	( ... )	9 ( 1.0)	260 ( 3.2)	3 ( 0.5)	...	...	...	...	
VIRGINIA	1 ( 0.2)	...	...	( ... )	4 ( 0.5)	240 ( 3.0)	1 ( 0.2)	...	...	...	...	
WASHINGTON	1 ( 0.3)	...	...	( ... )	9 ( 0.8)	249 ( 2.4)	1 ( 0.2)	...	...	...	...	
WEST VIRGINIA	1 ( 0.2)	...	...	( ... )	9 ( 0.8)	244 ( 2.5)	4 ( 0.7)	249 ( 3.4)				
WISCONSIN†	1 ( 0.2)	...	...	( ... )	8 ( 0.9)	263 ( 2.4)	4 ( 0.7)	261 ( 3.2)				
WYOMING	1 ( 0.2)	...	...	( ... )	5 ( 0.4)	249 ( 5.4)	2 ( 0.3)	...	...	...	...	
<b>Other Jurisdictions</b>												
DDESS	1 ( 0.4)	...	...	( ... )	5 ( 0.8)	...	1 ( 0.4)	...	...	...	...	
DoDDS	1 ( 0.1)	...	...	( ... )	2 ( 0.3)	...	1 ( 0.2)	...	...	...	...	
GUAM	3 ( 0.5)	...	...	( ... )	7 ( 0.7)	215 ( 5.7)	1 ( 0.3)	...	...	...	...	

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).  
 ... Characteristics of the sample do not permit a reliable estimate.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 6.27** (continued) **1996 Mathematics Assessment**



POPULATION: **1996 Grade 8 Public School Students**  
 REPORTED STATISTICS: **Percentage of Students and Average Mathematics Scale Score**  
 STUDENTS' REPORTS ON: **Their Expected Ninth-grade Mathematics Class**

What kind of mathematics class do you expect to take in ninth grade?

	Prealgebra		Algebra I or Elementary Algebra		Geometry	
JURISDICTIONS	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )
<b>Nation</b>						
NATION	11 ( 1.0)	257 ( 2.1)	32 ( 1.4)	275 ( 1.3)	20 ( 1.4)	293 ( 2.3)
NORTHEAST	6 ( 1.5)	265 ( 6.2)!	24 ( 4.3)	274 ( 3.3)	19 ( 6.4)	297 ( 8.4)!
SOUTHEAST	13 ( 2.2)	249 ( 5.5)!	40 ( 1.9)	270 ( 2.7)	16 ( 1.2)	286 ( 4.5)
CENTRAL	14 ( 2.8)	260 ( 3.8)	32 ( 2.9)	282 ( 2.8)	23 ( 2.5)	301 ( 4.4)
WEST	10 ( 1.2)	258 ( 3.0)	29 ( 2.4)	276 ( 3.3)	22 ( 1.1)	287 ( 3.9)
<b>States</b>						
ALABAMA	12 ( 1.2)	248 ( 3.0)	33 ( 1.6)	267 ( 2.3)	16 ( 1.3)	280 ( 3.3)
ALASKA†	9 ( 0.9)	259 ( 3.3)	35 ( 1.4)	278 ( 1.9)	21 ( 1.2)	307 ( 3.4)
ARIZONA	10 ( 1.1)	256 ( 2.2)	32 ( 1.3)	270 ( 1.3)	18 ( 1.5)	292 ( 2.3)
ARKANSAS†	7 ( 0.7)	245 ( 3.0)	40 ( 1.4)	266 ( 1.4)	16 ( 1.3)	283 ( 3.5)
CALIFORNIA	8 ( 0.7)	251 ( 3.3)	26 ( 1.6)	269 ( 2.1)	24 ( 1.4)	285 ( 3.0)
COLORADO	9 ( 0.8)	264 ( 2.8)	30 ( 1.4)	279 ( 1.6)	26 ( 1.5)	295 ( 1.9)
CONNECTICUT	8 ( 0.7)	260 ( 2.4)	35 ( 1.3)	283 ( 1.3)	23 ( 1.2)	305 ( 1.7)
DELAWARE	6 ( 0.6)	246 ( 3.7)	30 ( 0.9)	264 ( 1.8)	26 ( 1.1)	290 ( 1.3)
DISTRICT OF COLUMBIA	2 ( 0.3)	... ( ... )	12 ( 0.7)	232 ( 3.2)	43 ( 1.2)	237 ( 2.0)
FLORIDA	13 ( 1.2)	252 ( 1.9)	29 ( 1.6)	269 ( 2.1)	22 ( 1.4)	288 ( 2.8)
GEORGIA	11 ( 1.2)	243 ( 2.1)	35 ( 1.4)	265 ( 1.6)	24 ( 1.3)	279 ( 2.9)
HAWAII	18 ( 0.9)	257 ( 2.4)	28 ( 0.9)	276 ( 1.7)	15 ( 0.7)	295 ( 2.5)
INDIANA	17 ( 1.1)	261 ( 2.0)	36 ( 2.0)	281 ( 1.6)	16 ( 1.0)	304 ( 2.6)
IOWA†	11 ( 1.1)	267 ( 2.3)	42 ( 1.6)	288 ( 1.3)	15 ( 1.6)	310 ( 1.7)
KENTUCKY	14 ( 1.1)	258 ( 1.7)	33 ( 1.5)	273 ( 1.4)	16 ( 1.6)	284 ( 2.8)
LOUISIANA	6 ( 0.9)	238 ( 3.0)	40 ( 1.8)	257 ( 1.6)	15 ( 0.9)	265 ( 3.2)
MAINE	9 ( 0.8)	273 ( 2.1)	38 ( 1.5)	286 ( 1.4)	19 ( 1.1)	307 ( 2.4)
MARYLAND†	8 ( 1.0)	252 ( 2.8)	30 ( 1.4)	268 ( 1.9)	31 ( 1.5)	290 ( 2.9)
MASSACHUSETTS	6 ( 0.7)	258 ( 2.8)	32 ( 1.6)	275 ( 1.3)	25 ( 1.8)	300 ( 2.6)
MICHIGAN†	9 ( 0.9)	266 ( 2.7)	26 ( 1.3)	277 ( 1.8)	24 ( 1.7)	296 ( 2.3)
MINNESOTA	7 ( 0.7)	263 ( 2.9)	37 ( 1.8)	279 ( 1.3)	28 ( 1.5)	305 ( 1.6)
MISSISSIPPI	25 ( 1.5)	243 ( 1.8)	36 ( 1.6)	253 ( 1.7)	17 ( 1.0)	273 ( 2.7)
MISSOURI	10 ( 0.9)	259 ( 2.2)	40 ( 1.7)	277 ( 1.6)	20 ( 1.5)	292 ( 2.2)
MONTANA†	10 ( 1.1)	269 ( 3.0)	35 ( 1.4)	286 ( 1.4)	16 ( 1.3)	305 ( 2.3)
NEBRASKA	10 ( 0.9)	272 ( 2.2)	39 ( 1.5)	281 ( 1.1)	23 ( 1.4)	307 ( 1.7)
NEW MEXICO	11 ( 0.9)	254 ( 2.0)	31 ( 1.1)	270 ( 1.6)	15 ( 1.1)	284 ( 2.3)
NEW YORK†	2 ( 0.4)	... ( ... )	8 ( 1.0)	274 ( 3.6)	6 ( 0.7)	270 ( 4.5)
NORTH CAROLINA	8 ( 0.8)	248 ( 3.0)	38 ( 1.4)	266 ( 1.7)	28 ( 1.2)	289 ( 2.3)
NORTH DAKOTA	8 ( 0.7)	266 ( 3.3)	51 ( 1.3)	285 ( 1.1)	15 ( 1.0)	311 ( 1.9)
OREGON	12 ( 0.9)	264 ( 2.0)	28 ( 1.2)	276 ( 1.7)	22 ( 1.3)	304 ( 2.0)
RHODE ISLAND	7 ( 0.6)	254 ( 2.9)	35 ( 1.2)	271 ( 1.2)	18 ( 0.9)	291 ( 1.9)
SOUTH CAROLINA†	12 ( 1.0)	243 ( 2.6)	35 ( 1.6)	261 ( 1.8)	23 ( 1.3)	281 ( 2.8)
TENNESSEE	19 ( 1.3)	254 ( 2.0)	32 ( 1.3)	273 ( 1.6)	15 ( 1.3)	288 ( 3.0)
TEXAS	7 ( 0.7)	256 ( 4.0)	34 ( 1.9)	272 ( 1.8)	23 ( 1.5)	293 ( 2.2)
UTAH	6 ( 0.6)	246 ( 2.8)	37 ( 1.2)	270 ( 1.0)	35 ( 1.3)	292 ( 1.2)
VERMONT†	12 ( 0.8)	270 ( 2.2)	34 ( 1.2)	281 ( 1.5)	18 ( 1.0)	304 ( 2.4)
VIRGINIA	6 ( 0.8)	245 ( 2.7)	44 ( 1.6)	267 ( 1.5)	26 ( 1.1)	295 ( 1.6)
WASHINGTON	9 ( 0.8)	261 ( 2.5)	29 ( 1.6)	277 ( 1.2)	22 ( 1.3)	300 ( 1.9)
WEST VIRGINIA	14 ( 0.9)	249 ( 2.0)	33 ( 1.0)	268 ( 1.4)	23 ( 1.2)	291 ( 1.9)
WISCONSIN†	9 ( 1.0)	269 ( 2.3)	39 ( 2.0)	285 ( 1.3)	21 ( 1.8)	307 ( 3.2)
WYOMING	9 ( 0.7)	263 ( 1.8)	41 ( 1.0)	277 ( 1.3)	16 ( 0.8)	295 ( 1.5)
<b>Other Jurisdictions</b>						
DDESS	9 ( 1.1)	... ( ... )	38 ( 2.2)	266 ( 3.9)	21 ( 1.7)	290 ( 5.5)
DoDDS	7 ( 0.5)	254 ( 4.9)	41 ( 1.1)	267 ( 0.9)	32 ( 1.0)	294 ( 1.6)
GUAM	11 ( 1.1)	231 ( 6.7)	24 ( 1.3)	251 ( 3.0)	18 ( 1.5)	263 ( 3.8)

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).

... Characteristics of the sample do not permit a reliable estimate.

! Interpret with caution — the nature of the sample does not allow accurate determination of the variability of this statistic.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.



**TABLE 6.27** (continued) **1996 Mathematics Assessment**



POPULATION: **1996 Grade 8 Public School Students**  
 REPORTED STATISTICS: **Percentage of Students and Average Mathematics Scale Score**  
 STUDENTS' REPORTS ON: **Their Expected Ninth-grade Mathematics Class**

What kind of mathematics class do you expect to take in ninth grade?

**Integrated or Sequential Mathematics**

**Other Mathematics Class**

**I Don't Know**

**JURISDICTIONS**

PCT ( SE )

SS ( SE )

PCT ( SE )

SS ( SE )

PCT ( SE )

SS ( SE )

**Nation**

NATION	2 ( 0.4)	275 ( 7.2)!	3 ( 0.5)	292 ( 3.9)	22 ( 1.4)	261 ( 1.8)
NORTHEAST	6 ( 1.6)	...	5 ( 1.8)	...	26 ( 4.1)	271 ( 4.3)
SOUTHEAST	1 ( 0.4)	...	2 ( 0.8)	...	18 ( 1.8)	254 ( 3.7)
CENTRAL	0 ( ... )	...	2 ( 0.4)	...	19 ( 3.1)	261 ( 5.7)
WEST	1 ( 0.3)	...	2 ( 0.5)	...	24 ( 2.0)	259 ( 1.9)

**States**

ALABAMA	0 ( 0.1)	...	1 ( 0.2)	...	23 ( 1.3)	243 ( 2.4)
ALASKA†	1 ( 0.3)	...	2 ( 0.3)	...	25 ( 1.5)	267 ( 2.5)
ARIZONA	2 ( 0.5)	...	3 ( 0.8)	295 ( 5.0)!	22 ( 1.6)	257 ( 2.3)
ARKANSAS†	0 ( ... )	...	2 ( 0.5)	...	22 ( 1.9)	255 ( 2.8)
CALIFORNIA	1 ( 0.4)	...	2 ( 0.3)	...	24 ( 1.3)	250 ( 2.5)
COLORADO	1 ( 0.4)	...	3 ( 0.3)	304 ( 6.2)	20 ( 0.9)	261 ( 1.7)
CONNECTICUT	2 ( 0.6)	...	2 ( 0.4)	...	19 ( 1.0)	267 ( 1.6)
DELAWARE	1 ( 0.2)	...	3 ( 0.3)	294 ( 7.0)	22 ( 1.0)	257 ( 2.2)
DISTRICT OF COLUMBIA	2 ( 0.4)	...	4 ( 0.5)	284 ( 7.5)	25 ( 1.2)	227 ( 1.9)
FLORIDA	1 ( 0.3)	...	2 ( 0.3)	...	22 ( 1.3)	249 ( 3.2)
GEORGIA	0 ( 0.1)	...	2 ( 0.4)	...	20 ( 0.9)	257 ( 2.7)
HAWAII	1 ( 0.2)	...	2 ( 0.3)	...	23 ( 1.1)	244 ( 2.4)
INDIANA	1 ( 0.2)	...	3 ( 0.6)	295 ( 8.8)!	16 ( 1.2)	266 ( 2.4)
IOWA†	1 ( 0.6)	...	2 ( 0.5)	...	16 ( 1.3)	277 ( 2.5)
KENTUCKY	1 ( 0.3)	...	2 ( 0.5)	...	21 ( 1.4)	259 ( 1.9)
LOUISIANA	1 ( 0.2)	...	1 ( 0.2)	...	25 ( 1.3)	249 ( 1.9)
MAINE	1 ( 0.2)	...	2 ( 0.3)	...	19 ( 1.2)	277 ( 2.6)
MARYLAND†	2 ( 0.6)	...	4 ( 0.7)	307 ( 5.8)	17 ( 1.1)	256 ( 2.5)
MASSACHUSETTS	1 ( 0.2)	...	3 ( 1.0)	308 ( 4.2)!	25 ( 1.6)	271 ( 2.7)
MICHIGAN†	4 ( 1.4)	294 ( 5.3)!	3 ( 0.6)	...	22 ( 1.4)	268 ( 2.6)
MINNESOTA	1 ( 0.3)	...	6 ( 1.2)	307 ( 8.0)!	14 ( 1.2)	275 ( 2.4)
MISSISSIPPI	0 ( 0.1)	...	1 ( 0.2)	...	15 ( 1.1)	239 ( 2.7)
MISSOURI	0 ( 0.1)	...	2 ( 0.4)	...	17 ( 1.2)	263 ( 2.1)
MONTANA†	3 ( 0.4)	...	3 ( 0.5)	...	21 ( 1.7)	277 ( 2.7)
NEBRASKA	0 ( 0.1)	...	2 ( 0.4)	...	18 ( 1.0)	273 ( 2.1)
NEW MEXICO	1 ( 0.2)	...	2 ( 0.2)	...	27 ( 1.2)	254 ( 1.8)
NEW YORK†	24 ( 2.6)	289 ( 2.6)	4 ( 0.6)	284 ( 4.5)	37 ( 1.9)	267 ( 2.4)
NORTH CAROLINA	0 ( 0.2)	...	2 ( 0.3)	...	17 ( 1.0)	255 ( 2.0)
NORTH DAKOTA	0 ( 0.1)	...	2 ( 0.3)	...	17 ( 1.0)	278 ( 2.4)
OREGON	2 ( 0.6)	...	3 ( 0.4)	311 ( 7.3)	20 ( 1.2)	265 ( 2.5)
RHODE ISLAND	1 ( 0.3)	...	5 ( 0.5)	301 ( 4.2)	24 ( 1.1)	262 ( 1.8)
SOUTH CAROLINA†	0 ( 0.1)	...	3 ( 0.5)	...	18 ( 1.1)	254 ( 2.3)
TENNESSEE	0 ( 0.1)	...	1 ( 0.3)	...	20 ( 1.2)	252 ( 2.0)
TEXAS	1 ( 0.2)	...	2 ( 0.4)	...	25 ( 1.5)	258 ( 1.6)
UTAH	1 ( 0.2)	...	5 ( 0.5)	313 ( 2.6)	12 ( 0.7)	263 ( 2.0)
VERMONT†	1 ( 0.4)	...	3 ( 0.3)	...	19 ( 0.9)	272 ( 2.2)
VIRGINIA	1 ( 0.2)	...	3 ( 0.6)	304 ( 5.1)!	15 ( 1.3)	252 ( 2.9)
WASHINGTON	5 ( 1.4)	286 ( 7.7)!	2 ( 0.4)	...	23 ( 1.1)	267 ( 2.5)
WEST VIRGINIA	0 ( 0.1)	...	2 ( 0.4)	...	15 ( 0.8)	252 ( 1.7)
WISCONSIN†	2 ( 0.8)	...	3 ( 0.6)	...	14 ( 1.3)	265 ( 2.7)
WYOMING	1 ( 0.1)	...	4 ( 0.3)	304 ( 3.7)	22 ( 0.8)	266 ( 1.7)

**Other Jurisdictions**

DDESS	2 ( 0.4)	...	1 ( 0.3)	...	23 ( 1.8)	265 ( 5.5)
DoDDS	1 ( 0.2)	...	1 ( 0.3)	...	15 ( 0.8)	268 ( 2.1)
GUAM	1 ( 0.2)	...	2 ( 0.4)	...	35 ( 1.7)	230 ( 2.6)

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).

... Characteristics of the sample do not permit a reliable estimate.

! Interpret with caution — the nature of the sample does not allow accurate determination of the variability of this statistic.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 6.28**

**1992 Mathematics Assessment**



POPULATION: **1992 Grade 8 Public School Students**  
 REPORTED STATISTICS: **Percentage of Students and Average Mathematics Scale Score**  
 TEACHERS' REPORTS ON: **Time Spent on Mathematics Instruction**

*How much time do you spend each week on mathematics instruction with this class?*

**Two and a Half Hours or Less**

**More than Two and a Half Hours but Less than Four Hours**

**Four Hours or More**

**JURISDICTIONS**

PCT ( SE )

SS ( SE )

PCT ( SE )

SS ( SE )

PCT ( SE )

SS ( SE )

**Nation**

NATION	13 ( 2.2)	270 ( 3.9)	55 ( 2.7)	269 ( 1.5)	32 ( 3.1)	267 ( 2.2)
NORTHEAST	7 ( 3.6)	... ( ... )	58 ( 5.3)	267 ( 3.3)	35 ( 7.9)	272 ( 5.0)!
SOUTHEAST	10 ( 3.1)	263 ( 4.4)!	52 ( 5.5)	266 ( 1.7)	37 ( 4.1)	257 ( 2.8)
CENTRAL	14 ( 3.7)	273 ( 5.2)!	62 ( 8.6)	276 ( 2.9)	24 ( 7.6)	277 ( 5.2)!
WEST	19 ( 5.6)	272 ( 6.7)!	51 ( 1.9)	267 ( 3.3)	30 ( 5.4)	267 ( 3.2)

**States**

ALABAMA	6 ( 2.1)	245 (19.2)!	34 ( 3.7)	248 ( 2.2)	60 ( 3.6)	256 ( 1.9)
ALASKA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
ARIZONA	13 ( 2.2)	259 ( 3.0)	53 ( 3.7)	267 ( 1.6)	34 ( 3.3)	265 ( 2.5)
ARKANSAS	13 ( 2.7)	258 ( 4.8)!	45 ( 3.9)	258 ( 1.5)	42 ( 4.1)	255 ( 2.0)
CALIFORNIA	12 ( 2.1)	253 ( 3.7)	46 ( 3.4)	261 ( 2.3)	43 ( 3.2)	265 ( 2.5)
COLORADO	18 ( 2.3)	273 ( 2.6)	55 ( 3.4)	273 ( 1.5)	27 ( 2.8)	270 ( 2.3)
CONNECTICUT	6 ( 1.5)	266 ( 6.8)!	74 ( 3.0)	273 ( 1.4)	21 ( 2.9)	279 ( 3.8)
DELAWARE	4 ( 0.4)	255 ( 5.0)	66 ( 0.9)	265 ( 1.2)	30 ( 0.9)	259 ( 1.8)
DISTRICT OF COLUMBIA	9 ( 0.8)	242 ( 3.5)	39 ( 1.1)	230 ( 1.7)	52 ( 1.1)	238 ( 1.3)
FLORIDA	10 ( 1.7)	254 ( 4.5)	50 ( 3.2)	260 ( 1.6)	40 ( 3.2)	262 ( 2.3)
GEORGIA	7 ( 1.3)	253 ( 3.5)	37 ( 3.4)	257 ( 1.9)	56 ( 3.7)	261 ( 1.8)
HAWAII	10 ( 0.6)	248 ( 2.5)	56 ( 1.0)	258 ( 1.1)	34 ( 1.0)	262 ( 1.5)
INDIANA	12 ( 3.5)	269 ( 3.4)!	56 ( 4.2)	270 ( 1.7)	32 ( 3.4)	271 ( 1.7)
IOWA	21 ( 4.2)	281 ( 2.4)!	59 ( 4.8)	284 ( 1.3)	20 ( 3.3)	286 ( 2.6)
KENTUCKY	9 ( 1.8)	267 ( 5.0)!	44 ( 3.8)	260 ( 1.8)	47 ( 3.8)	265 ( 1.5)
LOUISIANA	10 ( 2.0)	252 ( 6.0)!	37 ( 4.0)	250 ( 2.5)	54 ( 4.3)	251 ( 2.3)
MAINE	17 ( 2.8)	281 ( 3.2)	71 ( 3.7)	279 ( 1.3)	12 ( 2.8)	276 ( 4.6)!
MARYLAND	10 ( 2.1)	259 ( 5.9)!	44 ( 3.8)	267 ( 2.3)	45 ( 3.7)	267 ( 2.2)
MASSACHUSETTS	11 ( 2.1)	271 ( 4.0)	61 ( 3.1)	273 ( 1.6)	28 ( 3.0)	274 ( 2.9)
MICHIGAN	14 ( 2.3)	267 ( 4.8)	48 ( 3.7)	271 ( 2.5)	39 ( 3.6)	264 ( 2.5)
MINNESOTA	18 ( 3.0)	277 ( 2.3)	41 ( 3.9)	282 ( 2.0)	41 ( 3.5)	284 ( 1.7)
MISSISSIPPI	6 ( 2.3)	254 ( 5.5)!	34 ( 4.1)	247 ( 2.1)	60 ( 4.2)	246 ( 1.8)
MISSOURI	14 ( 2.6)	267 ( 2.6)	42 ( 3.8)	272 ( 1.7)	44 ( 4.2)	272 ( 1.4)
MONTANA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
NEBRASKA	11 ( 2.6)	280 ( 4.1)!	64 ( 4.2)	276 ( 1.3)	25 ( 3.5)	282 ( 2.5)
NEW MEXICO	20 ( 2.6)	255 ( 2.5)	55 ( 3.0)	261 ( 1.4)	26 ( 2.9)	262 ( 1.5)
NEW YORK	8 ( 1.7)	259 ( 8.1)!	71 ( 3.7)	272 ( 2.1)	20 ( 3.1)	251 ( 5.6)
NORTH CAROLINA	5 ( 1.3)	253 ( 4.3)!	42 ( 3.7)	258 ( 2.1)	52 ( 3.5)	259 ( 1.8)
NORTH DAKOTA	19 ( 3.1)	286 ( 1.9)	37 ( 4.0)	283 ( 2.0)	44 ( 4.9)	283 ( 1.6)
OREGON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
RHODE ISLAND	8 ( 0.4)	247 ( 2.6)	49 ( 1.0)	267 ( 1.0)	43 ( 0.9)	268 ( 1.5)
SOUTH CAROLINA	8 ( 1.7)	254 ( 5.3)!	33 ( 2.8)	261 ( 2.4)	59 ( 2.9)	262 ( 1.6)
TENNESSEE	8 ( 1.9)	249 ( 5.1)!	32 ( 3.6)	261 ( 2.4)	60 ( 3.8)	259 ( 1.9)
TEXAS	10 ( 2.2)	266 ( 3.4)!	52 ( 3.6)	264 ( 1.9)	38 ( 3.4)	267 ( 2.5)
UTAH	19 ( 2.0)	272 ( 2.4)	53 ( 2.2)	275 ( 1.3)	28 ( 1.9)	273 ( 1.3)
VERMONT	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
VIRGINIA	12 ( 2.3)	263 ( 3.6)	50 ( 3.1)	270 ( 1.5)	38 ( 2.9)	268 ( 1.7)
WASHINGTON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
WEST VIRGINIA	10 ( 2.4)	259 ( 3.1)!	50 ( 4.2)	258 ( 1.4)	40 ( 3.8)	262 ( 1.6)
WISCONSIN	10 ( 2.5)	280 ( 5.6)!	59 ( 5.1)	279 ( 2.4)	32 ( 4.6)	278 ( 1.8)
WYOMING	17 ( 2.5)	277 ( 1.7)	59 ( 3.4)	277 ( 1.2)	24 ( 3.2)	270 ( 1.8)

**Other Jurisdictions**

DDESS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
DoDDS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
GUAM	4 ( 0.3)	... ( ... )	68 ( 0.9)	233 ( 1.5)	28 ( 0.9)	237 ( 1.7)

— State or other jurisdiction did not participate in the NAEP assessment year presented in this table.  
 ... Characteristics of the sample do not permit a reliable estimate.  
 ! Interpret with caution — the nature of the sample does not allow accurate determination of the variability of this statistic.  
 SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 6.28** (continued) **1996 Mathematics Assessment**



POPULATION: **1996 Grade 8 Public School Students**  
 REPORTED STATISTICS: **Percentage of Students and Average Mathematics Scale Score**  
 TEACHERS' REPORTS ON: **Time Spent on Mathematics Instruction**

*How much time do you spend each week on mathematics instruction with this class?*

**Two and a Half Hours or Less**

**More than Two and a Half Hours but Less than Four Hours**

**Four Hours or More**

**JURISDICTIONS**

PCT ( SE )

SS ( SE )

PCT ( SE )

SS ( SE )

PCT ( SE )

SS ( SE )

**Nation**

NATION	20 ( 3.2)	268 ( 3.2)	46 ( 3.5)	274 ( 1.8)	34 ( 3.5)	273 ( 3.2)
NORTHEAST	23 ( 9.7)	278 ( 4.7)!	52 (10.9)	277 ( 4.7)	25 ( 8.6)	... ( ... )
SOUTHEAST	16 ( 4.2)	250 ( 7.7)!	38 ( 5.8)	272 ( 2.9)	47 ( 4.7)	264 ( 3.8)
CENTRAL	17 ( 6.6)	270 ( 8.4)!	58 ( 6.6)	277 ( 3.7)	25 ( 7.3)	285 ( 3.9)!
WEST	24 ( 5.0)	270 ( 2.7)!	40 ( 4.7)	269 ( 3.6)	36 ( 6.6)	274 ( 3.9)!

**States**

ALABAMA	13 ( 2.7)	252 ( 5.6)!	41 ( 3.9)	258 ( 2.7)>	46 ( 3.8)<	257 ( 3.2)
ALASKA†	22 ( 2.4)	276 ( 3.5)	43 ( 2.5)	280 ( 3.4)	34 ( 2.1)	276 ( 4.0)
ARIZONA	24 ( 3.7)>	265 ( 3.1)	43 ( 3.5)	271 ( 2.5)	33 ( 3.7)	268 ( 2.7)
ARKANSAS†	16 ( 3.3)	260 ( 4.3)!	52 ( 4.8)	265 ( 2.0)>	32 ( 4.1)	260 ( 2.4)
CALIFORNIA	25 ( 3.6)>	262 ( 4.4)	37 ( 4.0)	267 ( 2.6)	38 ( 3.7)	264 ( 2.5)
COLORADO	27 ( 3.2)	274 ( 2.3)	48 ( 3.6)	277 ( 1.9)	26 ( 2.6)	275 ( 2.5)
CONNECTICUT	6 ( 1.3)	279 ( 6.4)!	74 ( 3.1)	282 ( 1.4)>	20 ( 3.2)	280 ( 4.2)
DELAWARE	22 ( 0.9)>	266 ( 2.1)	55 ( 1.2)<	269 ( 1.7)	23 ( 1.1)<	262 ( 2.2)
DISTRICT OF COLUMBIA	27 ( 0.9)>	222 ( 3.5)<	42 ( 1.2)	230 ( 2.1)	31 ( 1.1)<	242 ( 2.0)
FLORIDA	17 ( 2.8)	256 ( 3.7)	45 ( 3.3)	264 ( 2.6)	38 ( 3.2)	266 ( 2.9)
GEORGIA	11 ( 2.0)	259 ( 5.0)	35 ( 3.4)	261 ( 2.8)	54 ( 3.6)	266 ( 2.1)
HAWAII	29 ( 1.0)>	264 ( 1.9)>	53 ( 1.0)	262 ( 1.5)	17 ( 1.0)<	258 ( 2.2)
INDIANA	26 ( 3.8)	278 ( 3.1)	55 ( 4.7)	275 ( 2.0)	20 ( 3.9)	273 ( 4.6)
IOWA†	34 ( 4.7)	281 ( 2.5)	46 ( 5.2)	286 ( 1.9)	19 ( 3.8)	287 ( 2.7)!
KENTUCKY	18 ( 2.5)>	273 ( 3.4)	41 ( 3.9)	269 ( 2.0)>	41 ( 3.9)	264 ( 2.1)
LOUISIANA	14 ( 3.3)	251 ( 5.2)!	42 ( 3.9)	254 ( 2.6)	44 ( 4.1)	254 ( 2.5)
MAINE	19 ( 3.0)	281 ( 2.6)	64 ( 3.4)	284 ( 1.7)	17 ( 2.6)	282 ( 2.4)
MARYLAND†	16 ( 3.1)	265 ( 6.6)	40 ( 3.8)	273 ( 3.2)	44 ( 4.0)	272 ( 2.7)
MASSACHUSETTS	14 ( 2.7)	275 ( 3.7)!	60 ( 4.1)	281 ( 2.3)>	26 ( 3.1)	273 ( 3.9)
MICHIGAN†	24 ( 3.0)>	284 ( 3.2)>	36 ( 3.8)	277 ( 2.8)	40 ( 4.2)	281 ( 3.2)>
MINNESOTA	26 ( 2.8)	287 ( 2.4)>	51 ( 4.1)	284 ( 2.1)	23 ( 3.6)<	283 ( 3.7)
MISSISSIPPI	17 ( 2.6)>	248 ( 2.6)	34 ( 3.5)	253 ( 2.1)	49 ( 3.8)	251 ( 2.2)
MISSOURI	21 ( 3.0)	279 ( 2.9)>	45 ( 4.5)	274 ( 2.0)	34 ( 4.5)	272 ( 2.8)
MONTANA†	27 ( 3.2)	282 ( 2.7)	49 ( 3.3)	283 ( 2.2)	24 ( 3.0)	286 ( 2.9)
NEBRASKA	21 ( 2.4)>	277 ( 2.6)	53 ( 3.0)	284 ( 1.6)>	26 ( 3.1)	283 ( 1.9)
NEW MEXICO	25 ( 2.4)	260 ( 2.6)	47 ( 1.6)	266 ( 1.6)	28 ( 2.6)	267 ( 2.6)
NEW YORK†	19 ( 4.5)	273 ( 4.1)!	66 ( 4.4)	276 ( 2.1)	15 ( 2.2)	261 ( 4.7)
NORTH CAROLINA	8 ( 1.6)	267 ( 5.6)	43 ( 3.5)	262 ( 1.5)	49 ( 3.5)	274 ( 2.5)>
NORTH DAKOTA	20 ( 1.7)	285 ( 2.2)	51 ( 3.0)>	286 ( 1.4)	29 ( 2.8)<	281 ( 2.2)
OREGON	24 ( 3.3)	278 ( 3.4)	53 ( 3.3)	279 ( 2.0)	23 ( 3.9)	274 ( 3.2)
RHODE ISLAND	14 ( 0.8)>	265 ( 3.0)>	56 ( 1.2)>	271 ( 1.4)	30 ( 0.8)<	274 ( 2.0)
SOUTH CAROLINA†	11 ( 2.2)	259 ( 5.0)	46 ( 3.9)>	263 ( 2.7)	43 ( 3.7)<	258 ( 2.2)
TENNESSEE	7 ( 2.0)	254 ( 6.0)!	41 ( 4.3)	264 ( 2.6)	51 ( 4.3)	268 ( 2.4)>
TEXAS	15 ( 2.3)	273 ( 3.5)	51 ( 3.6)	270 ( 2.2)	34 ( 3.4)	272 ( 2.8)
UTAH	27 ( 1.6)>	275 ( 1.8)	52 ( 2.0)	278 ( 1.6)	21 ( 1.5)<	280 ( 2.0)>
VERMONT†	26 ( 2.2)	278 ( 2.7)	53 ( 2.4)	282 ( 1.6)	21 ( 2.1)	276 ( 2.2)
VIRGINIA	15 ( 2.1)	272 ( 3.6)	51 ( 3.2)	273 ( 1.8)	34 ( 3.6)	264 ( 3.8)
WASHINGTON	31 ( 3.2)	276 ( 3.3)	37 ( 3.4)	277 ( 2.4)	32 ( 3.0)	279 ( 2.4)
WEST VIRGINIA	20 ( 2.7)>	266 ( 2.9)	54 ( 3.3)	267 ( 1.3)>	25 ( 3.1)<	261 ( 2.5)
WISCONSIN†	19 ( 3.2)	283 ( 2.9)	49 ( 3.7)	284 ( 2.3)	32 ( 4.0)	282 ( 2.9)
WYOMING	26 ( 1.1)>	271 ( 1.9)	56 ( 1.3)	277 ( 1.2)	19 ( 1.1)	277 ( 2.4)

**Other Jurisdictions**

DDESS	23 ( 1.4)	257 ( 5.1)	31 ( 1.5)	271 ( 4.3)	46 ( 1.8)	273 ( 3.1)
DoDDS	25 ( 1.0)	270 ( 1.8)	51 ( 1.1)	276 ( 1.2)	23 ( 0.8)	279 ( 1.8)
GUAM	26 ( 1.5)>	228 ( 3.6)	6 ( 0.8)<	... ( ... )	68 ( 1.5)>	234 ( 2.0)

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).  
 ... Characteristics of the sample do not permit a reliable estimate.  
 > (<) The value for the students was significantly higher (lower) than in the 1992 assessment at about the 95% confidence level using appropriate multiple comparison procedures.  
 ! Interpret with caution — the nature of the sample does not allow accurate determination of the variability of this statistic.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 6.29**

**1996 Mathematics Assessment**



POPULATION:

1996 Grade 8 Public School Students

REPORTED STATISTICS:

Percentage of Students and Average Mathematics Scale Score

TEACHERS' REPORTS ON:

Mathematics Facts and Concepts Addressed

*In this mathematics class, how often do you address learning mathematics facts and concepts?*

	A Little or None		Some		A Lot	
JURISDICTIONS	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )
<b>Nation</b>						
NATION	5 ( 1.7)	276 ( 5.4)!	16 ( 2.4)	269 ( 2.7)	79 ( 3.0)	273 ( 1.6)
NORTHEAST	2 ( 1.4)	... ( ... )	3 ( 1.4)	... ( ... )	95 ( 2.6)	277 ( 3.9)
SOUTHEAST	2 ( 0.9)	... ( ... )	18 ( 4.0)	272 ( 5.4)!	80 ( 4.2)	263 ( 3.2)
CENTRAL	8 ( ... )	... ( ... )	17 ( 4.9)	276 ( 4.9)!	75 ( 7.2)	278 ( 4.7)
WEST	8 ( 2.1)	271 (11.2)!	23 ( 5.9)	263 ( 3.7)!	69 ( 6.9)	274 ( 2.2)
<b>States</b>						
ALABAMA	7 ( 2.6)	267 ( 2.8)!	10 ( 2.4)	268 ( 6.7)!	84 ( 3.3)	255 ( 2.5)
ALASKA†	6 ( 0.9)	290 ( 3.5)	13 ( 2.1)	273 ( 6.3)	81 ( 2.2)	278 ( 2.6)
ARIZONA	11 ( 1.9)	285 ( 5.3)	21 ( 2.8)	265 ( 3.0)	68 ( 2.8)	267 ( 1.6)
ARKANSAS†	4 ( 1.2)	... ( ... )	22 ( 3.0)	261 ( 3.1)	74 ( 3.3)	263 ( 1.5)
CALIFORNIA	9 ( 2.0)	270 ( 6.1)!	22 ( 2.8)	265 ( 4.4)	69 ( 3.1)	263 ( 2.2)
COLORADO	6 ( 1.3)	286 ( 7.9)!	20 ( 3.0)	275 ( 3.4)	74 ( 3.2)	275 ( 1.4)
CONNECTICUT	7 ( 1.5)	292 ( 5.5)!	22 ( 2.6)	279 ( 4.4)	71 ( 3.0)	280 ( 1.3)
DELAWARE	10 ( 0.8)	269 ( 3.0)	21 ( 1.4)	266 ( 2.3)	69 ( 1.3)	267 ( 1.4)
DISTRICT OF COLUMBIA	6 ( 0.4)	256 ( 4.1)	23 ( 0.9)	224 ( 3.2)	71 ( 1.1)	231 ( 1.6)
FLORIDA	4 ( 1.2)	250 (17.0)!	19 ( 2.6)	259 ( 3.8)	77 ( 2.9)	265 ( 1.9)
GEORGIA	5 ( 1.3)	276 ( 6.5)!	16 ( 2.1)	259 ( 3.6)	79 ( 2.1)	264 ( 2.0)
HAWAII	3 ( 0.6)	... ( ... )	18 ( 0.8)	265 ( 2.5)	79 ( 0.9)	260 ( 1.3)
INDIANA	7 ( 2.0)	285 ( 4.5)!	19 ( 3.1)	280 ( 3.9)	74 ( 3.1)	273 ( 1.8)
IOWA†	12 ( 3.9)	288 ( 2.5)!	25 ( 4.0)	284 ( 2.4)	63 ( 4.8)	283 ( 1.9)
KENTUCKY	3 ( 1.2)	... ( ... )	20 ( 2.8)	268 ( 3.0)	77 ( 3.0)	268 ( 1.4)
LOUISIANA	1 ( 0.7)	... ( ... )	13 ( 2.3)	256 ( 3.8)	86 ( 2.3)	253 ( 1.9)
MAINE	6 ( 1.6)	280 ( 3.9)!	30 ( 2.7)	287 ( 2.2)	64 ( 2.8)	282 ( 1.7)
MARYLAND†	9 ( 2.0)	293 ( 4.2)!	20 ( 2.7)	271 ( 4.5)	71 ( 3.2)	269 ( 2.9)
MASSACHUSETTS	6 ( 1.5)	284 ( 7.9)!	19 ( 2.5)	278 ( 3.6)	75 ( 3.1)	277 ( 2.3)
MICHIGAN†	7 ( 1.8)	287 ( 6.6)!	22 ( 3.2)	288 ( 3.5)	72 ( 3.6)	277 ( 2.2)
MINNESOTA	5 ( 1.2)	293 ( 5.5)!	25 ( 2.8)	284 ( 2.7)	70 ( 3.0)	284 ( 1.7)
MISSISSIPPI	5 ( 1.5)	261 ( 6.4)!	12 ( 2.2)	250 ( 3.3)	83 ( 2.4)	250 ( 1.5)
MISSOURI	6 ( 1.9)	283 ( 4.1)!	18 ( 3.3)	272 ( 3.3)	75 ( 3.7)	274 ( 1.8)
MONTANA†	4 ( 1.2)	295 ( 4.2)!	20 ( 2.4)	285 ( 1.9)	76 ( 2.6)	282 ( 1.7)
NEBRASKA	8 ( 1.7)	293 ( 4.3)!	15 ( 2.1)	284 ( 2.3)	77 ( 2.7)	281 ( 1.3)
NEW MEXICO	4 ( 0.7)	269 ( 5.4)	12 ( 1.4)	262 ( 3.5)	84 ( 1.9)	265 ( 1.3)
NEW YORK†	6 ( 2.3)	275 ( 5.0)!	17 ( 3.1)	269 ( 3.6)	77 ( 3.6)	274 ( 2.1)
NORTH CAROLINA	6 ( 1.2)	276 ( 4.4)!	15 ( 2.0)	273 ( 3.0)	79 ( 2.2)	267 ( 1.8)
NORTH DAKOTA	5 ( 1.1)	292 ( 4.1)!	20 ( 2.2)	287 ( 1.8)	75 ( 2.4)	283 ( 1.2)
OREGON	9 ( 2.0)	284 ( 7.1)!	22 ( 3.1)	280 ( 3.5)	69 ( 3.5)	275 ( 1.9)
RHODE ISLAND	11 ( 0.6)	272 ( 3.3)	24 ( 0.9)	271 ( 2.1)	65 ( 1.0)	271 ( 1.2)
SOUTH CAROLINA†	4 ( 1.3)	268 ( 4.3)!	21 ( 3.4)	253 ( 3.9)	75 ( 3.8)	262 ( 1.8)
TENNESSEE	2 ( 0.6)	... ( ... )	14 ( 2.4)	266 ( 3.7)	84 ( 2.6)	264 ( 1.8)
TEXAS	4 ( 1.1)	274 ( 6.1)!	20 ( 3.0)	269 ( 3.2)	76 ( 3.0)	272 ( 1.7)
UTAH	5 ( 0.9)	281 ( 4.3)	14 ( 1.3)	274 ( 3.4)	81 ( 1.6)	278 ( 1.1)
VERMONT†	10 ( 2.3)	278 ( 6.7)!	31 ( 2.7)	279 ( 1.9)	59 ( 3.1)	279 ( 1.3)
VIRGINIA	6 ( 1.4)	285 ( 6.5)!	15 ( 2.2)	278 ( 3.5)	79 ( 2.4)	268 ( 2.0)
WASHINGTON	7 ( 1.8)	290 ( 4.2)!	23 ( 2.8)	274 ( 3.9)	69 ( 3.0)	277 ( 1.6)
WEST VIRGINIA	4 ( 1.4)	276 ( 4.0)!	17 ( 2.0)	271 ( 3.2)	80 ( 2.4)	263 ( 1.3)
WISCONSIN†	9 ( 2.5)	286 ( 5.3)!	18 ( 2.7)	288 ( 4.7)	73 ( 3.6)	282 ( 1.8)
WYOMING	5 ( 0.3)	278 ( 5.2)	23 ( 1.0)	276 ( 1.9)	72 ( 1.0)	275 ( 1.1)
<b>Other Jurisdictions</b>						
DDESS	3 ( 0.9)	... ( ... )	22 ( 1.6)	273 ( 6.7)	75 ( 1.7)	267 ( 2.2)
DoDDS	12 ( 0.6)	270 ( 3.5)	29 ( 0.8)	268 ( 1.3)	59 ( 0.9)	280 ( 1.0)
GUAM	0 ( ... )	... ( ... )	7 ( 0.9)	... ( ... )	93 ( 0.9)	234 ( 2.1)

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).

... Characteristics of the sample do not permit a reliable estimate.

! Interpret with caution — the nature of the sample does not allow accurate determination of the variability of this statistic.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 6.30**

**1996 Mathematics Assessment**



POPULATION:

1996 Grade 8 Public School Students

REPORTED STATISTICS:

Percentage of Students and Average Mathematics Scale Score

TEACHERS' REPORTS ON:

Mathematics Learning Skills/Problem Solving Procedures Addressed

*In this mathematics class, how often do you address learning skills and procedures needed to solve routine problems?*

A Little or None	Some	A Lot
------------------	------	-------

JURISDICTIONS	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )
<b>Nation</b>						
NATION	3 ( 0.9 )	278 ( 7.5)!	18 ( 2.6 )	273 ( 2.9 )	79 ( 2.7 )	272 ( 1.5 )
NORTHEAST	0 ( 0.1 )	... ( ... )	5 ( 2.0 )	... ( ... )	95 ( 2.0 )	277 ( 4.0 )
SOUTHEAST	2 ( ... )	... ( ... )	16 ( 5.2 )	274 ( 6.5)!	81 ( 4.7 )	263 ( 3.1 )
CENTRAL	5 ( 2.8 )	... ( ... )	14 ( 5.0 )	275 ( 5.2)!	81 ( 5.9 )	278 ( 3.9 )
WEST	3 ( 1.3 )	... ( ... )	32 ( 5.9 )	270 ( 4.2 )	65 ( 6.0 )	272 ( 1.7 )
<b>States</b>						
ALABAMA	3 ( 1.1 )	... ( ... )	17 ( 3.2 )	262 ( 4.8 )	80 ( 3.5 )	255 ( 2.3 )
ALASKA†	5 ( 0.7 )	287 ( 3.6 )	21 ( 2.8 )	276 ( 5.4 )	74 ( 2.9 )	278 ( 2.6 )
ARIZONA	5 ( 1.2 )	274 ( 6.9)!	23 ( 3.5 )	273 ( 3.0 )	73 ( 3.3 )	267 ( 1.8 )
ARKANSAS†	1 ( 0.4 )	... ( ... )	20 ( 2.5 )	255 ( 3.1 )	79 ( 2.7 )	264 ( 1.7 )
CALIFORNIA	6 ( 1.5 )	272 ( 6.2)!	27 ( 3.1 )	264 ( 2.9 )	67 ( 3.3 )	264 ( 2.5 )
COLORADO	3 ( 0.7 )	301 ( 5.8)!	20 ( 2.9 )	273 ( 3.3 )	77 ( 2.9 )	275 ( 1.4 )
CONNECTICUT	5 ( 1.4 )	289 ( 8.0)!	21 ( 2.5 )	282 ( 2.8 )	75 ( 2.9 )	280 ( 1.5 )
DELAWARE	3 ( 0.5 )	... ( ... )	25 ( 1.1 )	268 ( 2.4 )	71 ( 1.2 )	267 ( 1.5 )
DISTRICT OF COLUMBIA	1 ( 0.1 )	... ( ... )	23 ( 1.0 )	224 ( 3.3 )	76 ( 1.0 )	234 ( 1.5 )
FLORIDA	4 ( 1.1 )	249 ( 18.9)!	20 ( 2.3 )	264 ( 3.8 )	77 ( 2.8 )	264 ( 2.0 )
GEORGIA	4 ( 0.9 )	282 ( 6.5)!	16 ( 2.1 )	259 ( 3.6 )	80 ( 2.2 )	264 ( 1.8 )
HAWAII	2 ( 0.5 )	... ( ... )	18 ( 0.9 )	262 ( 2.2 )	79 ( 1.0 )	261 ( 1.3 )
INDIANA	3 ( 1.4 )	292 ( 9.0)!	17 ( 2.4 )	273 ( 3.4 )	79 ( 2.9 )	275 ( 1.9 )
IOWA†	8 ( 3.2 )	290 ( 3.1)!	23 ( 4.2 )	288 ( 2.6 )	69 ( 4.9 )	282 ( 1.6 )
KENTUCKY	5 ( 2.0 )	278 ( 2.7)!	15 ( 3.0 )	267 ( 3.0 )	80 ( 3.6 )	267 ( 1.5 )
LOUISIANA	2 ( 1.1 )	... ( ... )	12 ( 2.5 )	252 ( 3.6)!	85 ( 2.7 )	254 ( 2.0 )
MAINE	5 ( 1.8 )	286 ( 6.0)!	27 ( 3.3 )	282 ( 2.7 )	68 ( 2.9 )	283 ( 1.5 )
MARYLAND†	4 ( 1.0 )	283 ( 8.3)!	23 ( 3.0 )	277 ( 4.5 )	73 ( 3.4 )	269 ( 2.6 )
MASSACHUSETTS	4 ( 1.2 )	301 ( 5.3)!	15 ( 2.6 )	278 ( 4.8 )	81 ( 2.9 )	277 ( 2.2 )
MICHIGAN†	5 ( 1.8 )	291 ( 9.0)!	16 ( 2.8 )	279 ( 4.8 )	79 ( 3.3 )	279 ( 2.1 )
MINNESOTA	3 ( 0.8 )	295 ( 6.6)!	24 ( 2.4 )	284 ( 3.2 )	73 ( 2.5 )	284 ( 1.9 )
MISSISSIPPI	2 ( 1.2 )	... ( ... )	15 ( 3.2 )	246 ( 3.5)!	83 ( 3.1 )	252 ( 1.6 )
MISSOURI	2 ( 1.1 )	... ( ... )	23 ( 3.5 )	273 ( 2.2 )	75 ( 3.9 )	274 ( 1.8 )
MONTANA†	3 ( 0.7 )	... ( ... )	28 ( 3.2 )	285 ( 2.1 )	68 ( 3.1 )	282 ( 1.8 )
NEBRASKA	5 ( 1.5 )	297 ( 4.2)!	15 ( 2.3 )	278 ( 2.8 )	81 ( 2.9 )	282 ( 1.4 )
NEW MEXICO	2 ( 0.2 )	... ( ... )	14 ( 1.8 )	259 ( 3.1 )	84 ( 1.8 )	265 ( 1.3 )
NEW YORK†	3 ( 1.0 )	... ( ... )	20 ( 3.1 )	278 ( 3.6 )	77 ( 3.3 )	272 ( 2.0 )
NORTH CAROLINA	2 ( 0.7 )	... ( ... )	17 ( 2.1 )	268 ( 3.7 )	81 ( 2.3 )	268 ( 1.5 )
NORTH DAKOTA	3 ( 0.6 )	304 ( 4.5 )	17 ( 1.9 )	289 ( 2.0 )	80 ( 2.1 )	283 ( 1.2 )
OREGON	3 ( 1.3 )	276 ( 9.7)!	22 ( 3.0 )	280 ( 2.8 )	75 ( 3.1 )	277 ( 1.9 )
RHODE ISLAND	2 ( 0.3 )	... ( ... )	26 ( 0.9 )	271 ( 2.0 )	72 ( 0.9 )	271 ( 1.2 )
SOUTH CAROLINA†	1 ( 0.7 )	... ( ... )	17 ( 3.0 )	255 ( 3.6 )	81 ( 3.1 )	261 ( 2.0 )
TENNESSEE	2 ( 1.1 )	... ( ... )	15 ( 2.3 )	270 ( 3.4 )	83 ( 2.4 )	264 ( 1.7 )
TEXAS	3 ( 1.2 )	... ( ... )	11 ( 2.1 )	273 ( 4.9 )	86 ( 2.7 )	271 ( 1.7 )
UTAH	2 ( 0.8 )	... ( ... )	16 ( 1.4 )	278 ( 2.7 )	82 ( 1.5 )	277 ( 1.1 )
VERMONT†	7 ( 2.0 )	268 ( 8.0)!	29 ( 2.6 )	278 ( 2.2 )	64 ( 2.8 )	281 ( 1.2 )
VIRGINIA	4 ( 0.9 )	277 ( 8.7)!	17 ( 1.8 )	269 ( 3.5 )	79 ( 2.1 )	270 ( 1.7 )
WASHINGTON	4 ( 1.0 )	284 ( 8.3)!	24 ( 3.0 )	282 ( 3.9 )	72 ( 3.1 )	275 ( 1.6 )
WEST VIRGINIA	5 ( 1.3 )	271 ( 4.3)!	20 ( 2.8 )	265 ( 3.0 )	76 ( 3.0 )	264 ( 1.4 )
WISCONSIN†	6 ( 2.2 )	287 ( 6.7)!	19 ( 3.3 )	281 ( 3.4 )	75 ( 3.1 )	284 ( 2.0 )
WYOMING	3 ( 0.2 )	281 ( 6.3 )	15 ( 0.7 )	271 ( 2.4 )	81 ( 0.8 )	276 ( 1.1 )
<b>Other Jurisdictions</b>						
DDESS	4 ( 1.0 )	... ( ... )	8 ( 0.9 )	... ( ... )	88 ( 1.4 )	268 ( 2.0 )
DoDDS	6 ( 0.6 )	264 ( 4.0 )	24 ( 0.8 )	270 ( 1.6 )	70 ( 0.8 )	278 ( 1.0 )
GUAM	2 ( 0.6 )	... ( ... )	18 ( 1.2 )	238 ( 2.7 )	80 ( 1.6 )	232 ( 2.5 )

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).

... Characteristics of the sample do not permit a reliable estimate.

! Interpret with caution — the nature of the sample does not allow accurate determination of the variability of this statistic.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 6.31**

**1996 Mathematics Assessment**



POPULATION:

1996 Grade 8 Public School Students

REPORTED STATISTICS:

Percentage of Students and Average Mathematics Scale Score

TEACHERS' REPORTS ON:

Mathematics Reasoning Development/Analytical Abilities Addressed

*In this mathematics class, how often do you address developing reasoning and analytical ability to solve unique problems?*

	A Little or None		Some		A Lot	
JURISDICTIONS	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )
<b>Nation</b>						
NATION	8 ( 1.6)	251 ( 5.7)!	40 ( 3.4)	266 ( 2.0)	52 ( 3.3)	281 ( 1.5)
NORTHEAST	6 ( 3.2)	... ( ... )	29 ( 9.6)	272 ( 7.9)!	65 ( 9.9)	282 ( 3.8)
SOUTHEAST	9 ( 3.5)	247 ( 5.3)!	51 ( 6.1)	258 ( 4.3)	40 ( 6.3)	278 ( 2.0)
CENTRAL	7 ( 4.6)	... ( ... )	44 ( 7.8)	271 ( 5.6)	49 ( 6.8)	285 ( 3.2)
WEST	9 ( 1.6)	246 ( 7.8)!	37 ( 2.5)	265 ( 2.9)	54 ( 2.6)	280 ( 3.0)
<b>States</b>						
ALABAMA	16 ( 3.0)	245 ( 6.6)	45 ( 3.5)	256 ( 2.6)	39 ( 3.6)	262 ( 3.5)
ALASKA†	15 ( 1.8)	273 ( 3.5)	44 ( 3.2)	276 ( 3.8)	41 ( 3.1)	282 ( 2.7)
ARIZONA	11 ( 2.6)	261 ( 4.5)!	40 ( 3.2)	262 ( 2.5)	48 ( 2.8)	276 ( 1.9)
ARKANSAS†	14 ( 2.6)	252 ( 4.7)	47 ( 4.5)	260 ( 2.1)	39 ( 4.0)	268 ( 3.2)
CALIFORNIA	9 ( 1.8)	244 ( 3.8)!	36 ( 3.1)	256 ( 2.3)	55 ( 3.1)	273 ( 2.6)
COLORADO	8 ( 1.5)	263 ( 3.6)	47 ( 3.0)	271 ( 1.9)	45 ( 3.0)	283 ( 1.8)
CONNECTICUT	10 ( 2.2)	265 ( 4.5)!	31 ( 3.1)	280 ( 2.3)	59 ( 3.7)	284 ( 2.0)
DELAWARE	8 ( 0.6)	246 ( 3.9)	40 ( 1.5)	265 ( 1.8)	51 ( 1.5)	272 ( 1.8)
DISTRICT OF COLUMBIA	3 ( 0.5)	... ( ... )	33 ( 0.9)	230 ( 2.6)	64 ( 1.0)	234 ( 1.9)
FLORIDA	16 ( 2.8)	248 ( 7.2)	31 ( 2.8)	262 ( 1.9)	53 ( 3.2)	269 ( 2.3)
GEORGIA	8 ( 1.4)	249 ( 3.8)	36 ( 2.8)	262 ( 2.4)	56 ( 2.8)	267 ( 2.3)
HAWAII	16 ( 1.0)	249 ( 2.3)	41 ( 1.2)	257 ( 2.0)	43 ( 1.2)	271 ( 1.6)
INDIANA	15 ( 2.8)	268 ( 3.2)	42 ( 3.2)	267 ( 2.6)	43 ( 2.7)	286 ( 2.2)
IOWA†	10 ( 1.9)	276 ( 4.2)!	46 ( 4.4)	282 ( 2.2)	44 ( 4.2)	288 ( 1.8)
KENTUCKY	8 ( 2.1)	258 ( 4.7)!	43 ( 4.0)	267 ( 1.9)	49 ( 4.3)	270 ( 2.0)
LOUISIANA	15 ( 2.9)	251 ( 2.8)	41 ( 3.7)	251 ( 2.7)	44 ( 3.9)	257 ( 2.8)
MAINE	11 ( 2.4)	268 ( 5.8)!	41 ( 4.0)	281 ( 2.0)	48 ( 3.5)	289 ( 1.8)
MARYLAND†	12 ( 2.6)	255 ( 6.5)!	42 ( 3.1)	266 ( 2.2)	46 ( 3.5)	281 ( 3.7)
MASSACHUSETTS	10 ( 1.8)	259 ( 5.5)	31 ( 3.3)	272 ( 2.6)	60 ( 3.4)	284 ( 2.3)
MICHIGAN†	13 ( 2.6)	268 ( 4.7)!	40 ( 3.8)	277 ( 2.7)	48 ( 3.8)	286 ( 2.5)
MINNESOTA	9 ( 2.2)	278 ( 4.2)!	44 ( 3.8)	280 ( 1.8)	47 ( 3.6)	290 ( 2.7)
MISSISSIPPI	11 ( 2.3)	244 ( 3.2)!	40 ( 3.5)	246 ( 2.3)	49 ( 3.5)	256 ( 2.2)
MISSOURI	15 ( 2.7)	264 ( 3.7)	39 ( 3.7)	270 ( 1.9)	46 ( 3.6)	280 ( 2.2)
MONTANA†	10 ( 2.2)	266 ( 3.4)!	38 ( 3.0)	282 ( 1.6)	51 ( 3.2)	288 ( 1.8)
NEBRASKA	12 ( 1.8)	267 ( 2.7)	43 ( 3.0)	280 ( 1.5)	45 ( 2.9)	289 ( 1.5)
NEW MEXICO	11 ( 1.2)	256 ( 2.2)	44 ( 2.3)	262 ( 1.9)	45 ( 2.4)	269 ( 1.7)
NEW YORK†	8 ( 2.1)	268 ( 5.7)!	41 ( 3.6)	271 ( 2.5)	51 ( 4.6)	275 ( 2.3)
NORTH CAROLINA	7 ( 1.9)	254 ( 4.4)!	42 ( 3.3)	260 ( 2.1)	50 ( 3.3)	277 ( 1.9)
NORTH DAKOTA	13 ( 1.4)	288 ( 2.2)	41 ( 2.8)	280 ( 1.5)	46 ( 2.6)	287 ( 1.4)
OREGON	13 ( 2.4)	269 ( 3.0)	44 ( 3.5)	273 ( 2.1)	42 ( 3.6)	284 ( 3.1)
RHODE ISLAND	14 ( 0.7)	252 ( 2.6)	39 ( 1.1)	270 ( 1.6)	47 ( 1.2)	278 ( 1.6)
SOUTH CAROLINA†	9 ( 1.9)	245 ( 3.3)!	40 ( 3.7)	254 ( 2.5)	50 ( 3.7)	269 ( 2.3)
TENNESSEE	16 ( 2.6)	259 ( 3.1)	43 ( 3.9)	263 ( 2.2)	41 ( 4.0)	269 ( 3.2)
TEXAS	6 ( 1.5)	274 ( 4.8)!	35 ( 2.9)	268 ( 1.9)	59 ( 2.9)	273 ( 2.1)
UTAH	12 ( 1.1)	269 ( 1.9)	44 ( 1.7)	276 ( 1.4)	44 ( 2.0)	282 ( 1.4)
VERMONT†	5 ( 1.4)	262 ( 7.4)!	38 ( 2.5)	273 ( 2.4)	57 ( 2.8)	285 ( 1.6)
VIRGINIA	14 ( 2.1)	253 ( 2.9)	38 ( 3.0)	266 ( 3.5)	48 ( 2.9)	279 ( 2.2)
WASHINGTON	13 ( 2.1)	257 ( 4.7)	46 ( 3.9)	277 ( 2.3)	40 ( 3.4)	283 ( 1.9)
WEST VIRGINIA	16 ( 2.3)	250 ( 2.7)	41 ( 3.2)	263 ( 1.7)	42 ( 3.3)	273 ( 1.9)
WISCONSIN†	11 ( 3.1)	281 ( 3.6)!	42 ( 3.4)	278 ( 2.7)	47 ( 4.1)	289 ( 2.8)
WYOMING	11 ( 0.7)	262 ( 3.0)	39 ( 1.2)	270 ( 1.7)	50 ( 1.2)	283 ( 1.2)
<b>Other Jurisdictions</b>						
DDESS	13 ( 1.4)	263 ( 6.4)	31 ( 1.7)	266 ( 3.8)	56 ( 1.8)	272 ( 2.8)
DoDDS	4 ( 0.3)	257 ( 3.3)	29 ( 0.8)	273 ( 1.9)	68 ( 0.9)	277 ( 1.0)
GUAM	2 ( 0.7)	... ( ... )	44 ( 1.4)	233 ( 2.1)	55 ( 1.3)	237 ( 2.9)

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).

... Characteristics of the sample do not permit a reliable estimate.

! Interpret with caution — the nature of the sample does not allow accurate determination of the variability of this statistic.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 6.32**

**1996 Mathematics Assessment**



POPULATION:

1996 Grade 8 Public School Students

REPORTED STATISTICS:

Percentage of Students and Average Mathematics Scale Score

TEACHERS' REPORTS ON:

Mathematics Communication Skills Addressed

*In this mathematics class, how often do you address learning how to communicate ideas in mathematics effectively?*

A Little or None	Some	A Lot
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JURISDICTIONS	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )
<b>Nation</b>						
NATION	16 ( 2.0)	263 ( 3.8)	42 ( 3.2)	271 ( 2.3)	42 ( 3.2)	278 ( 2.0)
NORTHEAST	12 ( 5.0)	264 ( 7.9)!	23 ( 4.7)	277 ( 8.4)!	65 ( 6.7)	280 ( 4.3)
SOUTHEAST	22 ( 5.1)	257 ( 3.2)!	38 ( 5.7)	260 ( 6.0)!	40 ( 6.6)	275 ( 2.2)
CENTRAL	18 ( 5.2)	273 ( 7.6)!	50 (10.2)	275 ( 5.5)	31 ( 7.8)	284 ( 4.2)!
WEST	12 ( 1.9)	257 (10.3)!	51 ( 4.4)	272 ( 3.4)	37 ( 4.4)	275 ( 3.3)
<b>States</b>						
ALABAMA	23 ( 3.0)	254 ( 4.0)	39 ( 3.3)	255 ( 2.8)	38 ( 3.8)	261 ( 3.5)
ALASKA†	19 ( 3.3)	273 ( 5.1)	40 ( 3.4)	268 ( 3.7)	40 ( 2.4)	289 ( 2.0)
ARIZONA	16 ( 3.2)	266 ( 4.0)!	43 ( 3.5)	267 ( 2.3)	41 ( 3.7)	272 ( 2.1)
ARKANSAS†	24 ( 3.9)	255 ( 3.5)	49 ( 5.9)	265 ( 2.0)	27 ( 4.4)	265 ( 3.9)
CALIFORNIA	18 ( 2.1)	257 ( 4.5)	29 ( 3.1)	260 ( 2.4)	53 ( 3.2)	270 ( 2.5)
COLORADO	18 ( 2.5)	269 ( 2.8)	44 ( 3.8)	273 ( 2.1)	38 ( 3.7)	283 ( 2.3)
CONNECTICUT	10 ( 2.0)	269 ( 5.3)!	34 ( 2.5)	282 ( 2.5)	56 ( 3.1)	283 ( 1.9)
DELAWARE	16 ( 0.6)	265 ( 2.6)	34 ( 1.5)	263 ( 2.3)	50 ( 1.4)	270 ( 1.5)
DISTRICT OF COLUMBIA	2 ( 0.2)	... ( ... )	35 ( 1.0)	229 ( 2.3)	63 ( 1.0)	234 ( 1.7)
FLORIDA	20 ( 2.9)	259 ( 6.8)	35 ( 2.5)	261 ( 2.2)	46 ( 2.9)	267 ( 2.3)
GEORGIA	11 ( 1.6)	256 ( 4.0)	36 ( 2.3)	262 ( 2.5)	53 ( 3.0)	266 ( 2.2)
HAWAII	23 ( 1.3)	257 ( 1.9)	44 ( 1.2)	257 ( 2.0)	33 ( 1.3)	270 ( 1.7)
INDIANA	28 ( 3.3)	273 ( 3.0)	43 ( 4.0)	275 ( 2.3)	29 ( 3.5)	278 ( 3.3)
IOWA†	19 ( 2.7)	278 ( 2.7)	46 ( 3.9)	286 ( 2.0)	35 ( 4.1)	286 ( 2.2)
KENTUCKY	6 ( 2.1)	265 ( 5.6)!	32 ( 4.0)	267 ( 2.1)	62 ( 4.3)	269 ( 1.8)
LOUISIANA	20 ( 3.3)	251 ( 2.4)	38 ( 4.5)	251 ( 3.0)	42 ( 4.7)	257 ( 2.3)
MAINE	22 ( 3.1)	279 ( 2.8)	43 ( 3.4)	281 ( 1.6)	36 ( 3.7)	288 ( 2.1)
MARYLAND†	11 ( 1.9)	269 ( 4.5)	36 ( 3.0)	271 ( 3.7)	53 ( 3.5)	272 ( 3.3)
MASSACHUSETTS	13 ( 2.2)	262 ( 4.5)	34 ( 2.6)	276 ( 2.4)	53 ( 3.1)	282 ( 2.6)
MICHIGAN†	18 ( 3.3)	267 ( 4.1)	38 ( 4.0)	278 ( 2.8)	44 ( 4.7)	287 ( 2.6)
MINNESOTA	27 ( 3.5)	279 ( 2.5)	44 ( 3.6)	283 ( 2.5)	29 ( 3.6)	291 ( 3.0)
MISSISSIPPI	16 ( 2.8)	248 ( 3.7)	38 ( 3.7)	248 ( 2.1)	46 ( 4.1)	254 ( 2.6)
MISSOURI	23 ( 3.3)	271 ( 2.9)	40 ( 4.0)	275 ( 1.9)	37 ( 4.0)	275 ( 2.6)
MONTANA†	21 ( 2.9)	273 ( 2.7)	40 ( 3.3)	284 ( 1.8)	40 ( 2.9)	288 ( 2.0)
NEBRASKA	16 ( 2.2)	276 ( 2.5)	46 ( 2.9)	283 ( 1.6)	38 ( 2.9)	285 ( 2.0)
NEW MEXICO	20 ( 2.5)	262 ( 2.8)	46 ( 2.7)	263 ( 1.7)	34 ( 2.7)	268 ( 1.6)
NEW YORK†	22 ( 4.0)	269 ( 3.7)!	36 ( 3.6)	275 ( 2.1)	42 ( 4.7)	274 ( 3.3)
NORTH CAROLINA	14 ( 2.5)	261 ( 3.2)	37 ( 3.2)	266 ( 2.2)	50 ( 3.2)	272 ( 2.3)
NORTH DAKOTA	17 ( 2.2)	285 ( 2.1)	52 ( 2.9)	282 ( 1.4)	31 ( 2.5)	289 ( 1.8)
OREGON	20 ( 2.8)	268 ( 3.2)	46 ( 4.0)	277 ( 2.1)	34 ( 3.7)	282 ( 3.3)
RHODE ISLAND	14 ( 0.9)	258 ( 2.6)	44 ( 1.3)	267 ( 1.7)	42 ( 1.0)	279 ( 1.4)
SOUTH CAROLINA†	14 ( 2.3)	252 ( 4.1)	37 ( 3.1)	262 ( 2.6)	49 ( 3.2)	261 ( 2.8)
TENNESSEE	24 ( 3.7)	263 ( 2.4)	37 ( 3.7)	264 ( 2.5)	39 ( 3.7)	267 ( 3.4)
TEXAS	20 ( 2.8)	267 ( 3.7)	38 ( 3.4)	268 ( 2.3)	42 ( 3.6)	276 ( 2.8)
UTAH	22 ( 1.6)	274 ( 1.8)	41 ( 2.1)	277 ( 1.4)	36 ( 2.2)	281 ( 2.0)
VERMONT†	7 ( 1.7)	269 ( 8.2)!	45 ( 2.4)	275 ( 2.0)	48 ( 2.6)	285 ( 1.9)
VIRGINIA	14 ( 2.2)	260 ( 3.3)	41 ( 3.1)	272 ( 2.4)	45 ( 2.8)	272 ( 2.5)
WASHINGTON	34 ( 3.0)	272 ( 3.0)	41 ( 3.1)	277 ( 2.2)	25 ( 3.0)	284 ( 2.5)
WEST VIRGINIA	23 ( 3.0)	257 ( 1.8)	36 ( 2.9)	265 ( 1.6)	41 ( 3.1)	269 ( 2.2)
WISCONSIN†	21 ( 3.9)	284 ( 3.5)!	46 ( 2.9)	281 ( 2.6)	33 ( 3.5)	286 ( 3.3)
WYOMING	20 ( 1.0)	261 ( 2.2)	42 ( 1.3)	275 ( 1.9)	38 ( 1.1)	284 ( 1.1)
<b>Other Jurisdictions</b>						
DDESS	3 ( 1.8)	... ( ... )	29 ( 2.0)	265 ( 4.9)	68 ( 2.3)	270 ( 2.3)
DoDDS	11 ( 0.6)	276 ( 3.4)	32 ( 1.3)	280 ( 1.6)	57 ( 1.4)	273 ( 1.1)
GUAM	14 ( 1.1)	217 ( 4.0)	28 ( 1.4)	236 ( 2.5)	58 ( 1.3)	236 ( 2.9)

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).

... Characteristics of the sample do not permit a reliable estimate.

! Interpret with caution — the nature of the sample does not allow accurate determination of the variability of this statistic.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 6.33**

**1996 Mathematics Assessment**



POPULATION:

1996 Grade 8 Public School Students

REPORTED STATISTICS:

Percentage of Students and Average Mathematics Scale Score

TEACHERS' REPORTS ON:

Writing About Mathematics Problems

*In this mathematics class, how often do the students in this class write a few sentences about how to solve a mathematics problem?*

Never or Hardly Ever

Once or Twice a Month

Once or Twice a Week

Almost Every Day

**JURISDICTIONS**

**Nation**

	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )
NATION	31 ( 3.3)	271 ( 2.8)	38 ( 3.0)	273 ( 2.3)	27 ( 3.1)	274 ( 2.9)	5 ( 1.1)	270 ( 4.4)!
NORTHEAST	22 ( 8.4)	270 ( 6.4)!	42 ( 9.1)	284 ( 6.8)!	33 ( 8.6)	279 ( 2.9)!	3 ( 1.7)	... ( ... )
SOUTHEAST	44 ( 6.4)	261 ( 4.6)!	30 ( 5.0)	265 ( 5.1)	21 ( 5.0)	269 ( 3.7)!	5 ( 2.2)	... ( ... )
CENTRAL	30 ( 7.3)	282 ( 4.7)!	41 ( 7.0)	280 ( 2.9)	25 ( 6.3)	270 ( 11.4)!	5 ( 2.4)	... ( ... )
WEST	27 ( 4.3)	274 ( 5.0)!	38 ( 4.4)	265 ( 3.8)	30 ( 4.8)	275 ( 2.6)!	5 ( 2.2)	270 ( 6.4)!

**States**

ALABAMA	51 ( 4.3)	254 ( 3.3)	35 ( 4.3)	257 ( 2.8)	12 ( 2.5)	260 ( 5.4)!	2 ( 1.4)	... ( ... )
ALASKA†	39 ( 2.7)	273 ( 2.9)	40 ( 2.7)	278 ( 4.3)	18 ( 1.6)	285 ( 2.5)	3 ( 1.7)	... ( ... )
ARIZONA	26 ( 3.1)	267 ( 3.0)	35 ( 3.8)	270 ( 2.6)	27 ( 3.7)	268 ( 2.8)	12 ( 2.4)	272 ( 5.1)!
ARKANSAS†	52 ( 4.3)	262 ( 2.4)	36 ( 5.2)	263 ( 2.0)	10 ( 2.9)	266 ( 5.3)!	2 ( 0.7)	... ( ... )
CALIFORNIA	14 ( 2.2)	266 ( 5.0)	33 ( 3.1)	263 ( 2.9)	36 ( 3.6)	261 ( 2.6)	17 ( 2.9)	272 ( 4.9)
COLORADO	31 ( 3.1)	273 ( 2.1)	46 ( 3.7)	274 ( 1.9)	19 ( 2.8)	282 ( 3.4)	5 ( 1.5)	281 ( 6.0)!
CONNECTICUT	16 ( 2.6)	279 ( 3.9)	42 ( 3.6)	281 ( 2.1)	37 ( 3.4)	283 ( 2.5)	5 ( 1.5)	293 ( 5.5)!
DELAWARE	26 ( 1.3)	264 ( 1.9)	34 ( 0.9)	265 ( 1.6)	31 ( 1.4)	269 ( 2.2)	10 ( 0.6)	273 ( 3.6)
DISTRICT OF COLUMBIA	19 ( 0.7)	224 ( 3.3)	36 ( 0.9)	227 ( 2.3)	34 ( 0.8)	242 ( 3.0)	11 ( 0.9)	228 ( 4.2)
FLORIDA	32 ( 3.3)	263 ( 3.5)	39 ( 3.5)	264 ( 2.4)	24 ( 2.4)	264 ( 2.7)	4 ( 1.2)	261 ( 5.3)!
GEORGIA	27 ( 2.6)	262 ( 2.2)	35 ( 3.5)	264 ( 2.4)	31 ( 3.0)	263 ( 3.4)	7 ( 1.4)	266 ( 7.4)
HAWAII	34 ( 1.2)	257 ( 1.8)	34 ( 1.2)	265 ( 1.9)	23 ( 0.9)	263 ( 2.1)	9 ( 0.6)	259 ( 3.0)
INDIANA	50 ( 4.6)	274 ( 2.1)	27 ( 4.2)	276 ( 3.5)	22 ( 3.3)	280 ( 3.0)	2 ( 0.8)	... ( ... )
IOWA†	40 ( 4.6)	282 ( 1.9)	29 ( 4.0)	285 ( 2.2)	28 ( 4.6)	286 ( 2.5)	3 ( 1.8)	... ( ... )
KENTUCKY	5 ( 1.5)	274 ( 5.4)!	40 ( 4.7)	268 ( 2.7)	40 ( 4.8)	266 ( 2.4)	15 ( 3.6)	272 ( 4.3)!
LOUISIANA	45 ( 4.2)	254 ( 2.6)	30 ( 4.0)	254 ( 3.0)	22 ( 4.4)	251 ( 4.2)!	3 ( 1.2)	251 ( 4.4)!
MAINE	21 ( 2.2)	279 ( 2.6)	51 ( 3.4)	286 ( 1.9)	19 ( 2.6)	284 ( 2.8)	9 ( 2.5)	279 ( 5.7)!
MARYLAND†	14 ( 2.0)	269 ( 4.4)	42 ( 4.1)	276 ( 3.3)	39 ( 3.6)	267 ( 3.0)	5 ( 1.7)	266 ( 11.3)!
MASSACHUSETTS	28 ( 3.7)	271 ( 3.9)	39 ( 3.1)	280 ( 2.6)	27 ( 3.1)	282 ( 3.9)	6 ( 2.0)	277 ( 4.2)!
MICHIGAN†	27 ( 4.0)	275 ( 3.1)	34 ( 4.0)	278 ( 3.5)	30 ( 3.5)	285 ( 3.2)	9 ( 2.7)	286 ( 4.3)!
MINNESOTA	52 ( 4.4)	282 ( 1.9)	31 ( 3.9)	286 ( 3.0)	13 ( 2.1)	287 ( 4.2)	4 ( 1.2)	292 ( 4.0)!
MISSISSIPPI	26 ( 4.0)	251 ( 2.8)	45 ( 3.9)	249 ( 2.2)	23 ( 3.6)	250 ( 3.9)	6 ( 2.0)	263 ( 5.5)!
MISSOURI	46 ( 4.1)	275 ( 2.1)	32 ( 3.5)	274 ( 2.6)	19 ( 3.0)	270 ( 3.5)	3 ( 1.0)	289 ( 7.0)!
MONTANA†	29 ( 3.2)	281 ( 3.2)	41 ( 3.4)	284 ( 2.1)	22 ( 2.4)	282 ( 2.4)	9 ( 1.5)	292 ( 3.9)
NEBRASKA	38 ( 3.2)	282 ( 1.6)	35 ( 2.6)	282 ( 2.2)	23 ( 2.3)	283 ( 2.2)	4 ( 1.2)	291 ( 8.1)!
NEW MEXICO	42 ( 2.4)	266 ( 1.9)	31 ( 2.2)	263 ( 2.5)	22 ( 2.4)	263 ( 2.0)	5 ( 0.7)	273 ( 5.5)
NEW YORK†	44 ( 4.0)	275 ( 3.1)	35 ( 4.5)	276 ( 2.6)	15 ( 2.7)	267 ( 4.0)!	6 ( 1.7)	265 ( 10.7)!
NORTH CAROLINA	27 ( 2.5)	266 ( 2.3)	41 ( 2.9)	268 ( 2.5)	25 ( 2.7)	269 ( 2.9)	7 ( 1.8)	277 ( 7.1)!
NORTH DAKOTA	51 ( 3.2)	281 ( 1.3)	41 ( 3.1)	287 ( 1.6)	8 ( 1.4)	290 ( 3.8)	0 ( ... )	... ( ... )
OREGON	30 ( 4.3)	272 ( 3.2)	41 ( 4.0)	281 ( 2.2)	20 ( 3.4)	283 ( 3.2)	8 ( 2.5)	266 ( 6.7)!
RHODE ISLAND	47 ( 1.0)	269 ( 1.6)	31 ( 1.1)	274 ( 2.2)	20 ( 0.7)	269 ( 1.8)	1 ( 0.3)	... ( ... )
SOUTH CAROLINA†	24 ( 3.7)	261 ( 3.1)	40 ( 4.1)	258 ( 2.5)	31 ( 3.7)	264 ( 2.7)	5 ( 1.5)	252 ( 4.6)!
TENNESSEE	45 ( 3.5)	264 ( 2.2)	33 ( 3.6)	267 ( 3.0)	17 ( 2.7)	266 ( 4.4)	6 ( 2.5)	263 ( 6.1)!
TEXAS	42 ( 3.6)	270 ( 2.1)	35 ( 3.3)	271 ( 2.6)	18 ( 2.4)	274 ( 3.8)	4 ( 1.2)	266 ( 7.5)!
UTAH	36 ( 1.7)	276 ( 1.6)	37 ( 1.8)	278 ( 1.6)	22 ( 1.6)	279 ( 3.2)	6 ( 1.2)	283 ( 2.8)
VERMONT†	6 ( 0.9)	285 ( 5.9)	43 ( 2.2)	279 ( 1.8)	43 ( 2.4)	280 ( 1.8)	8 ( 2.0)	279 ( 5.9)!
VIRGINIA	38 ( 3.4)	268 ( 2.8)	40 ( 3.3)	273 ( 1.8)	18 ( 2.0)	269 ( 3.8)	3 ( 1.0)	263 ( 10.9)!
WASHINGTON	41 ( 3.5)	272 ( 2.5)	35 ( 3.3)	282 ( 2.5)	18 ( 2.7)	279 ( 2.9)	6 ( 1.3)	275 ( 6.3)!
WEST VIRGINIA	41 ( 3.4)	261 ( 1.7)	36 ( 2.6)	269 ( 2.1)	21 ( 2.8)	266 ( 3.2)	2 ( 0.9)	270 ( 13.1)!
WISCONSIN†	28 ( 4.1)	287 ( 2.6)	46 ( 4.1)	280 ( 3.0)	22 ( 3.1)	287 ( 2.8)	4 ( 1.6)	280 ( 8.0)!
WYOMING	40 ( 1.0)	273 ( 1.4)	39 ( 0.8)	276 ( 1.9)	16 ( 0.9)	275 ( 2.1)	4 ( 0.2)	294 ( 2.1)

**Other Jurisdictions**

DDESS	17 ( 1.7)	261 ( 5.4)	39 ( 1.9)	278 ( 3.1)	42 ( 2.0)	263 ( 3.4)	2 ( 0.4)	... ( ... )
DoDDS	20 ( 0.8)	289 ( 2.2)	25 ( 1.0)	278 ( 1.4)	36 ( 1.1)	269 ( 1.2)	19 ( 1.1)	269 ( 2.2)
GUAM	22 ( 1.5)	232 ( 3.9)	30 ( 1.3)	227 ( 4.1)	45 ( 1.4)	238 ( 3.7)	3 ( 0.6)	... ( ... )

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).

... Characteristics of the sample do not permit a reliable estimate.

! Interpret with caution — the nature of the sample does not allow accurate determination of the variability of this statistic.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.



**TABLE 6.34**

**1996 Mathematics Assessment**



POPULATION:

1996 Grade 8 Public School Students

REPORTED STATISTICS:

Percentage of Students and Average Mathematics Scale Score

STUDENTS' REPORTS ON:

Writing About Mathematics Problems

*In this mathematics class, how often do you write a few sentences about how to solve mathematics problems?*

Never or Hardly Ever

Once or Twice a Month

Once or Twice a Week

Almost Every Day

**JURISDICTIONS**

PCT ( SE)    SS ( SE)    PCT ( SE)    SS ( SE)    PCT ( SE)    SS ( SE)    PCT ( SE)    SS ( SE)

**Nation**

NATION	47 ( 1.8)	275 ( 1.6)	19 ( 1.0)	274 ( 1.7)	21 ( 0.9)	267 ( 1.7)	14 ( 0.9)	261 ( 2.3)
NORTHEAST	47 ( 4.0)	282 ( 5.3)	20 ( 2.6)	283 ( 3.5)	18 ( 1.8)	266 ( 3.0)	14 ( 1.8)	258 ( 4.9)
SOUTHEAST	52 ( 3.0)	266 ( 2.6)	19 ( 2.1)	266 ( 3.4)	18 ( 1.3)	260 ( 4.8)	11 ( 1.2)	256 ( 6.2)
CENTRAL	51 ( 3.5)	281 ( 3.4)	17 ( 1.4)	279 ( 3.1)	21 ( 1.9)	269 ( 6.0)	11 ( 1.6)	266 ( 6.2)
WEST	39 ( 3.8)	271 ( 2.7)	19 ( 1.5)	271 ( 3.2)	24 ( 1.9)	269 ( 2.5)	18 ( 1.9)	263 ( 3.5)

**States**

ALABAMA	59 ( 1.3)	260 ( 2.3)	16 ( 0.9)	260 ( 3.0)	15 ( 0.9)	251 ( 3.4)	10 ( 0.7)	241 ( 3.3)
ALASKA†	53 ( 1.5)	279 ( 2.3)	19 ( 1.0)	282 ( 3.1)	20 ( 1.4)	275 ( 3.9)	9 ( 0.6)	273 ( 4.3)
ARIZONA	44 ( 1.4)	269 ( 1.5)	22 ( 1.0)	271 ( 2.5)	21 ( 0.9)	266 ( 2.3)	13 ( 1.0)	265 ( 2.8)
ARKANSAS†	59 ( 1.7)	264 ( 1.4)	19 ( 1.0)	265 ( 2.3)	14 ( 1.1)	257 ( 2.7)	8 ( 0.9)	249 ( 5.0)
CALIFORNIA	29 ( 1.9)	265 ( 2.5)	21 ( 1.2)	268 ( 2.6)	32 ( 1.5)	261 ( 2.3)	18 ( 1.4)	261 ( 3.6)
COLORADO	45 ( 1.9)	277 ( 1.6)	22 ( 1.0)	278 ( 1.6)	23 ( 1.1)	275 ( 1.9)	10 ( 1.0)	268 ( 2.6)
CONNECTICUT	39 ( 1.8)	280 ( 1.6)	27 ( 1.1)	283 ( 1.7)	24 ( 1.4)	279 ( 2.0)	10 ( 0.9)	274 ( 2.6)
DELAWARE	42 ( 1.3)	271 ( 1.5)	22 ( 1.0)	268 ( 1.9)	22 ( 1.4)	265 ( 2.5)	14 ( 1.0)	255 ( 2.9)
DISTRICT OF COLUMBIA	40 ( 1.0)	235 ( 1.7)	19 ( 0.9)	240 ( 3.2)	24 ( 0.9)	231 ( 2.3)	18 ( 1.1)	228 ( 2.6)
FLORIDA	53 ( 1.5)	268 ( 1.7)	20 ( 1.2)	267 ( 3.7)	17 ( 0.9)	257 ( 3.0)	9 ( 0.8)	251 ( 3.3)
GEORGIA	48 ( 1.5)	265 ( 2.0)	21 ( 1.0)	268 ( 2.5)	19 ( 1.0)	259 ( 2.0)	11 ( 0.8)	247 ( 3.8)
HAWAII	43 ( 1.0)	267 ( 1.4)	19 ( 1.0)	266 ( 2.5)	24 ( 0.9)	258 ( 2.0)	13 ( 0.7)	252 ( 2.5)
INDIANA	56 ( 1.9)	278 ( 2.0)	22 ( 0.9)	277 ( 1.7)	17 ( 1.2)	274 ( 1.8)	6 ( 0.6)	259 ( 3.6)
IOWA†	51 ( 1.9)	285 ( 1.7)	21 ( 1.2)	285 ( 1.8)	19 ( 1.4)	284 ( 1.8)	9 ( 1.1)	277 ( 2.5)
KENTUCKY	14 ( 1.1)	269 ( 2.1)	28 ( 1.4)	271 ( 1.8)	35 ( 1.4)	267 ( 1.3)	23 ( 1.6)	260 ( 2.1)
LOUISIANA	59 ( 1.6)	255 ( 1.7)	15 ( 1.0)	259 ( 2.4)	16 ( 1.1)	248 ( 2.6)	10 ( 0.9)	241 ( 2.9)
MAINE	41 ( 1.9)	281 ( 1.7)	25 ( 0.9)	290 ( 1.7)	24 ( 1.4)	285 ( 2.0)	10 ( 0.9)	282 ( 2.4)
MARYLAND†	40 ( 1.7)	272 ( 2.3)	24 ( 1.1)	277 ( 3.1)	25 ( 1.2)	266 ( 2.9)	11 ( 0.9)	260 ( 3.2)
MASSACHUSETTS	45 ( 2.2)	278 ( 2.1)	23 ( 1.2)	283 ( 2.4)	22 ( 1.4)	277 ( 2.3)	10 ( 0.8)	270 ( 4.1)
MICHIGAN†	41 ( 2.1)	278 ( 1.8)	20 ( 1.1)	278 ( 2.7)	24 ( 1.3)	276 ( 2.6)	15 ( 1.5)	274 ( 3.7)
MINNESOTA	52 ( 1.5)	285 ( 1.6)	21 ( 1.0)	287 ( 1.9)	18 ( 1.1)	281 ( 2.4)	9 ( 0.7)	278 ( 3.0)
MISSISSIPPI	47 ( 1.9)	254 ( 1.6)	19 ( 1.0)	255 ( 1.7)	21 ( 1.2)	246 ( 1.7)	13 ( 0.9)	239 ( 2.3)
MISSOURI	55 ( 1.7)	276 ( 1.6)	20 ( 1.1)	274 ( 2.4)	16 ( 1.0)	271 ( 2.1)	9 ( 0.7)	263 ( 2.9)
MONTANA†	46 ( 2.0)	283 ( 1.5)	19 ( 1.2)	287 ( 2.3)	21 ( 1.4)	285 ( 1.9)	14 ( 1.4)	276 ( 3.8)
NEBRASKA	54 ( 1.2)	284 ( 1.2)	21 ( 0.9)	284 ( 1.8)	16 ( 1.0)	282 ( 2.1)	9 ( 0.7)	274 ( 3.4)
NEW MEXICO	57 ( 1.5)	264 ( 1.5)	17 ( 0.9)	264 ( 2.2)	17 ( 0.9)	261 ( 2.4)	9 ( 0.7)	250 ( 3.0)
NEW YORK†	50 ( 1.7)	277 ( 1.7)	18 ( 1.0)	277 ( 2.0)	18 ( 0.9)	260 ( 2.9)	14 ( 1.1)	252 ( 2.6)
NORTH CAROLINA	42 ( 1.6)	271 ( 1.8)	21 ( 1.0)	273 ( 2.1)	24 ( 1.1)	264 ( 1.8)	13 ( 1.0)	256 ( 2.5)
NORTH DAKOTA	58 ( 1.4)	286 ( 1.0)	18 ( 0.9)	284 ( 2.1)	16 ( 0.9)	283 ( 2.3)	9 ( 0.8)	275 ( 2.4)
OREGON	41 ( 1.9)	276 ( 1.8)	25 ( 1.4)	280 ( 1.9)	21 ( 1.3)	281 ( 2.4)	12 ( 1.8)	270 ( 3.3)
RHODE ISLAND	57 ( 1.3)	273 ( 1.3)	18 ( 0.9)	270 ( 2.1)	17 ( 0.8)	262 ( 2.8)	8 ( 0.6)	254 ( 3.6)
SOUTH CAROLINA†	47 ( 1.5)	268 ( 1.9)	17 ( 0.8)	259 ( 2.1)	22 ( 0.9)	253 ( 2.6)	14 ( 1.1)	250 ( 2.3)
TENNESSEE	54 ( 1.5)	267 ( 1.5)	21 ( 0.9)	267 ( 2.3)	17 ( 1.0)	256 ( 2.6)	8 ( 0.8)	248 ( 3.0)
TEXAS	52 ( 1.8)	276 ( 1.5)	19 ( 1.1)	273 ( 2.2)	19 ( 1.1)	263 ( 2.2)	10 ( 0.8)	253 ( 2.5)
UTAH	57 ( 1.5)	279 ( 1.1)	19 ( 1.0)	279 ( 1.8)	15 ( 0.7)	271 ( 1.9)	8 ( 0.7)	271 ( 2.7)
VERMONT†	22 ( 1.4)	277 ( 1.9)	33 ( 1.5)	285 ( 1.6)	33 ( 1.5)	278 ( 1.4)	12 ( 1.3)	272 ( 2.5)
VIRGINIA	53 ( 1.5)	270 ( 1.8)	21 ( 0.9)	274 ( 2.7)	18 ( 1.1)	269 ( 2.5)	8 ( 0.7)	264 ( 3.7)
WASHINGTON	54 ( 2.0)	277 ( 1.5)	20 ( 1.1)	279 ( 2.5)	17 ( 1.1)	278 ( 2.1)	8 ( 0.9)	266 ( 4.2)
WEST VIRGINIA	54 ( 1.2)	266 ( 1.3)	23 ( 0.9)	265 ( 1.6)	17 ( 1.0)	264 ( 2.1)	6 ( 0.5)	257 ( 3.1)
WISCONSIN†	46 ( 2.0)	286 ( 1.7)	25 ( 1.0)	284 ( 1.9)	20 ( 1.4)	280 ( 2.4)	10 ( 1.0)	275 ( 3.5)
WYOMING	59 ( 1.1)	275 ( 1.3)	18 ( 0.8)	276 ( 2.1)	15 ( 0.6)	274 ( 2.3)	8 ( 0.5)	271 ( 3.7)

**Other Jurisdictions**

DDESS	40 ( 2.0)	271 ( 3.0)	24 ( 2.1)	270 ( 3.8)	22 ( 2.1)	264 ( 5.6)	14 ( 1.3)	267 ( 4.3)
DoDDS	33 ( 1.0)	285 ( 1.6)	18 ( 0.9)	279 ( 2.0)	28 ( 1.1)	267 ( 1.9)	22 ( 0.8)	265 ( 1.3)
GUAM	51 ( 1.4)	245 ( 2.8)	16 ( 1.2)	240 ( 3.6)	20 ( 1.2)	232 ( 3.3)	14 ( 1.2)	226 ( 5.1)

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 6.35**

**1996 Mathematics Assessment**



POPULATION:

1996 Grade 8 Public School Students

REPORTED STATISTICS:

Percentage of Students and Average Mathematics Scale Score

TEACHERS' REPORTS ON:

Discussing Mathematics Problems

JURISDICTIONS	Never or Hardly Ever		Once or Twice a Month		Once or Twice a Week		Almost Every Day	
	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )
<b>Nation</b>								
NATION	2 ( 0.8)	261 ( 5.7)!	12 ( 2.0)	264 ( 4.7)	38 ( 3.3)	270 ( 2.4)	48 ( 3.6)	276 ( 1.4)
NORTHEAST	0 ( ... )	... ( ... )	9 ( 4.2)	279 ( 9.3)!	33 ( 8.4)	271 ( 7.2)!	59 ( 8.8)	281 ( 3.1)
SOUTHEAST	2 ( 0.9)	... ( ... )	16 ( 4.0)	257 ( 6.1)!	45 ( 5.7)	265 ( 3.8)	38 ( 5.8)	268 ( 5.0)
CENTRAL	0 ( 0.2)	... ( ... )	10 ( 4.8)	258 ( 15.9)!	41 ( 7.3)	276 ( 4.7)	49 ( 9.2)	283 ( 3.3)!
WEST	5 ( 2.7)	... ( ... )	11 ( 3.7)	269 ( 5.9)!	35 ( 6.0)	270 ( 5.3)!	49 ( 7.1)	273 ( 1.8)
<b>States</b>								
ALABAMA	7 ( 1.7)	249 ( 3.9)!	19 ( 3.2)	251 ( 5.4)	33 ( 4.0)	254 ( 4.3)	41 ( 4.1)	263 ( 2.7)
ALASKA†	3 ( 0.7)	... ( ... )	8 ( 1.9)	258 ( 6.5)!	37 ( 2.8)	273 ( 4.0)	53 ( 2.5)	284 ( 2.2)
ARIZONA	4 ( 1.0)	264 ( 7.4)!	14 ( 2.0)	270 ( 2.8)	36 ( 3.4)	268 ( 2.6)	45 ( 4.0)	271 ( 2.4)
ARKANSAS†	9 ( 2.4)	250 ( 4.2)!	15 ( 2.5)	259 ( 4.1)	39 ( 6.1)	262 ( 2.5)	37 ( 5.4)	268 ( 2.5)
CALIFORNIA	4 ( 1.2)	252 ( 7.0)!	15 ( 2.5)	253 ( 3.9)	27 ( 3.1)	263 ( 3.3)	53 ( 3.7)	269 ( 2.4)
COLORADO	3 ( 0.7)	... ( ... )	22 ( 3.5)	271 ( 2.4)	28 ( 3.0)	278 ( 2.2)	48 ( 3.4)	278 ( 2.2)
CONNECTICUT	5 ( 1.5)	277 ( 4.2)!	15 ( 2.7)	272 ( 4.0)	36 ( 3.2)	280 ( 2.4)	44 ( 3.6)	286 ( 2.5)
DELAWARE	2 ( 0.2)	... ( ... )	16 ( 1.2)	262 ( 2.6)	34 ( 1.2)	267 ( 2.0)	48 ( 1.4)	270 ( 1.7)
DISTRICT OF COLUMBIA	1 ( 0.2)	... ( ... )	11 ( 1.1)	222 ( 4.5)	32 ( 1.1)	238 ( 3.5)	55 ( 0.9)	230 ( 2.4)
FLORIDA	4 ( 1.3)	248 ( 9.9)!	15 ( 2.4)	261 ( 5.0)	31 ( 2.9)	262 ( 3.1)	50 ( 3.0)	267 ( 1.9)
GEORGIA	2 ( 0.7)	... ( ... )	15 ( 2.0)	254 ( 3.2)	34 ( 2.8)	263 ( 2.5)	49 ( 3.2)	267 ( 2.4)
HAWAII	7 ( 0.4)	258 ( 3.8)	13 ( 0.7)	248 ( 3.3)	34 ( 1.1)	264 ( 2.0)	46 ( 1.0)	265 ( 1.6)
INDIANA	10 ( 2.1)	268 ( 3.6)!	23 ( 3.9)	274 ( 3.0)	29 ( 4.0)	276 ( 2.9)	38 ( 4.1)	278 ( 2.9)
IOWA†	10 ( 3.6)	284 ( 4.2)!	16 ( 3.0)	283 ( 2.9)	37 ( 4.1)	282 ( 2.4)	37 ( 3.8)	288 ( 2.0)
KENTUCKY	4 ( 1.5)	258 ( 6.9)!	16 ( 3.1)	264 ( 3.5)!	39 ( 3.8)	268 ( 2.2)	41 ( 4.0)	270 ( 2.6)
LOUISIANA	6 ( 1.7)	250 ( 5.5)!	14 ( 2.4)	252 ( 5.4)	37 ( 4.2)	254 ( 1.6)	44 ( 4.0)	254 ( 2.8)
MAINE	6 ( 2.1)	280 ( 6.4)!	14 ( 2.0)	278 ( 3.4)	29 ( 3.2)	283 ( 2.1)	50 ( 3.2)	285 ( 1.8)
MARYLAND†	3 ( 1.7)	... ( ... )	14 ( 3.2)	268 ( 4.9)!	38 ( 4.2)	268 ( 3.4)	45 ( 4.3)	275 ( 4.2)
MASSACHUSETTS	8 ( 2.2)	256 ( 5.2)!	18 ( 2.9)	271 ( 3.6)	28 ( 3.1)	281 ( 3.7)	46 ( 4.0)	283 ( 2.5)
MICHIGAN†	3 ( 1.2)	262 ( 7.1)!	14 ( 2.8)	275 ( 3.7)!	35 ( 4.0)	279 ( 3.1)	48 ( 5.0)	284 ( 2.7)
MINNESOTA	5 ( 1.4)	277 ( 6.3)!	19 ( 3.1)	278 ( 3.9)	34 ( 2.9)	285 ( 2.5)	41 ( 3.7)	288 ( 2.8)
MISSISSIPPI	2 ( 0.9)	... ( ... )	18 ( 3.1)	251 ( 3.3)	30 ( 3.9)	247 ( 2.5)	50 ( 4.3)	254 ( 2.1)
MISSOURI	5 ( 1.9)	262 ( 3.5)!	16 ( 2.8)	275 ( 2.4)	35 ( 3.6)	272 ( 2.5)	43 ( 4.2)	276 ( 2.4)
MONTANA†	1 ( ... )	... ( ... )	11 ( 1.9)	282 ( 4.1)	26 ( 3.0)	286 ( 2.0)	62 ( 3.2)	282 ( 1.8)
NEBRASKA	1 ( 0.3)	... ( ... )	17 ( 2.6)	281 ( 3.6)	34 ( 2.8)	283 ( 1.8)	48 ( 3.5)	283 ( 1.4)
NEW MEXICO	5 ( 0.9)	257 ( 2.9)	13 ( 1.6)	256 ( 2.5)	30 ( 2.1)	265 ( 2.1)	52 ( 2.6)	267 ( 1.8)
NEW YORK†	6 ( 1.6)	271 ( 6.2)!	24 ( 4.3)	271 ( 2.7)!	30 ( 3.6)	276 ( 2.9)	40 ( 3.9)	273 ( 3.3)
NORTH CAROLINA	3 ( 1.1)	258 ( 3.7)!	13 ( 2.3)	258 ( 3.9)	39 ( 3.2)	270 ( 1.9)	45 ( 3.7)	270 ( 2.4)
NORTH DAKOTA	7 ( 1.4)	285 ( 4.1)!	21 ( 2.8)	283 ( 2.2)	38 ( 2.8)	284 ( 1.5)	34 ( 2.2)	285 ( 2.0)
OREGON	5 ( 1.4)	259 ( 5.6)!	15 ( 2.6)	272 ( 2.9)	32 ( 3.3)	275 ( 2.7)	48 ( 4.1)	282 ( 2.8)
RHODE ISLAND	5 ( 0.6)	256 ( 3.6)	23 ( 0.9)	266 ( 2.0)	41 ( 1.1)	269 ( 1.7)	30 ( 1.1)	280 ( 1.6)
SOUTH CAROLINA†	5 ( 1.3)	247 ( 6.3)!	12 ( 2.3)	252 ( 4.2)	44 ( 3.7)	260 ( 2.5)	39 ( 4.0)	265 ( 2.4)
TENNESSEE	7 ( 1.8)	252 ( 5.9)!	14 ( 3.0)	261 ( 2.9)!	39 ( 4.0)	265 ( 2.6)	40 ( 4.3)	269 ( 3.1)
TEXAS	8 ( 2.0)	258 ( 4.9)!	16 ( 2.6)	262 ( 3.7)	29 ( 2.8)	269 ( 2.3)	48 ( 3.0)	278 ( 2.4)
UTAH	5 ( 0.8)	275 ( 3.6)	16 ( 1.5)	273 ( 2.3)	28 ( 1.6)	276 ( 2.1)	52 ( 1.8)	280 ( 1.3)
VERMONT†	0 ( ... )	... ( ... )	22 ( 2.6)	278 ( 2.3)	31 ( 2.5)	276 ( 2.3)	47 ( 2.8)	283 ( 2.0)
VIRGINIA	4 ( 1.5)	251 ( 5.2)!	17 ( 2.8)	268 ( 3.3)	34 ( 3.3)	268 ( 3.0)	44 ( 3.6)	275 ( 2.4)
WASHINGTON	7 ( 1.9)	258 ( 5.9)!	12 ( 2.2)	267 ( 4.9)	30 ( 3.0)	274 ( 2.3)	50 ( 3.2)	284 ( 1.8)
WEST VIRGINIA	4 ( 1.3)	248 ( 4.8)!	21 ( 3.0)	262 ( 2.5)	33 ( 3.1)	267 ( 1.9)	42 ( 3.6)	266 ( 1.9)
WISCONSIN†	6 ( 2.3)	280 ( 7.5)!	22 ( 3.2)	280 ( 3.8)	37 ( 4.1)	282 ( 2.9)	35 ( 3.5)	288 ( 2.5)
WYOMING	4 ( 0.2)	261 ( 5.7)	14 ( 0.6)	268 ( 3.3)	38 ( 1.4)	275 ( 1.6)	44 ( 1.4)	279 ( 1.1)
<b>Other Jurisdictions</b>								
DDESS	2 ( 0.8)	... ( ... )	28 ( 1.6)	269 ( 3.4)	22 ( 1.4)	266 ( 5.6)	47 ( 1.8)	271 ( 2.7)
DoDDS	5 ( 0.2)	266 ( 4.1)	4 ( 0.3)	276 ( 3.6)	35 ( 1.0)	277 ( 1.3)	56 ( 0.9)	275 ( 1.5)
GUAM	0 ( ... )	... ( ... )	12 ( 1.3)	... ( ... )	6 ( 1.0)	... ( ... )	83 ( 1.4)	237 ( 2.4)

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).

... Characteristics of the sample do not permit a reliable estimate.

! Interpret with caution — the nature of the sample does not allow accurate determination of the variability of this statistic.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 6.36**

**1996 Mathematics Assessment**



POPULATION:

1996 Grade 8 Public School Students

REPORTED STATISTICS:

Percentage of Students and Average Mathematics Scale Score

STUDENTS' REPORTS ON:

Discussing Mathematics Problems

*In this mathematics class, how often do you discuss solutions to mathematics problems with other students?*

Never or Hardly Ever

Once or Twice a Month

Once or Twice a Week

Almost Every Day

**JURISDICTIONS**

PCT ( SE)    SS ( SE)    PCT ( SE)    SS ( SE)    PCT ( SE)    SS ( SE)    PCT ( SE)    SS ( SE)

**Nation**

NATION	20 ( 0.8)	266 ( 1.5)	14 ( 0.5)	273 ( 2.0)	29 ( 0.8)	270 ( 1.5)	36 ( 1.2)	274 ( 1.4)
NORTHEAST	22 ( 1.9)	274 ( 3.9)	17 ( 1.3)	273 ( 4.8)	30 ( 1.3)	275 ( 4.1)	32 ( 3.8)	280 ( 3.7)
SOUTHEAST	21 ( 1.7)	262 ( 3.1)	13 ( 0.6)	267 ( 4.1)	29 ( 1.6)	263 ( 3.4)	37 ( 2.1)	265 ( 3.3)
CENTRAL	20 ( 1.9)	269 ( 3.6)	16 ( 1.4)	277 ( 3.8)	29 ( 2.1)	277 ( 3.9)	35 ( 2.3)	280 ( 4.4)
WEST	18 ( 1.4)	262 ( 2.6)	13 ( 0.8)	273 ( 4.4)	30 ( 1.2)	266 ( 2.9)	39 ( 1.6)	273 ( 2.1)

**States**

ALABAMA	25 ( 1.3)	253 ( 2.3)	13 ( 0.6)	257 ( 3.2)	26 ( 1.1)	258 ( 2.8)	36 ( 1.3)	258 ( 2.4)
ALASKA†	21 ( 1.1)	271 ( 3.4)	14 ( 1.1)	277 ( 4.7)	28 ( 1.3)	280 ( 3.0)	37 ( 1.3)	282 ( 1.9)
ARIZONA	19 ( 1.2)	264 ( 1.7)	14 ( 0.6)	268 ( 2.6)	28 ( 1.2)	269 ( 2.1)	39 ( 1.3)	270 ( 1.9)
ARKANSAS†	25 ( 1.3)	257 ( 2.0)	17 ( 1.1)	260 ( 2.4)	27 ( 1.2)	264 ( 1.8)	32 ( 1.2)	266 ( 2.1)
CALIFORNIA	17 ( 0.8)	255 ( 2.5)	15 ( 0.7)	265 ( 2.4)	29 ( 0.8)	260 ( 2.2)	39 ( 1.3)	269 ( 2.6)
COLORADO	17 ( 0.9)	266 ( 1.9)	15 ( 0.7)	274 ( 2.1)	29 ( 1.0)	278 ( 1.6)	40 ( 1.1)	279 ( 1.5)
CONNECTICUT	22 ( 1.2)	272 ( 2.0)	14 ( 0.7)	280 ( 2.3)	29 ( 1.1)	281 ( 1.6)	35 ( 1.4)	283 ( 1.9)
DELAWARE	21 ( 0.8)	264 ( 2.5)	15 ( 0.8)	268 ( 2.2)	30 ( 1.1)	264 ( 1.6)	34 ( 1.1)	270 ( 1.5)
DISTRICT OF COLUMBIA	14 ( 0.9)	224 ( 3.1)	10 ( 0.8)	238 ( 4.4)	31 ( 1.4)	233 ( 2.4)	45 ( 1.3)	236 ( 1.4)
FLORIDA	22 ( 0.9)	259 ( 2.4)	15 ( 0.9)	266 ( 2.7)	30 ( 1.2)	263 ( 3.1)	33 ( 1.1)	268 ( 1.9)
GEORGIA	20 ( 1.2)	255 ( 1.9)	14 ( 0.7)	265 ( 2.7)	27 ( 1.0)	264 ( 2.2)	39 ( 1.4)	264 ( 2.2)
HAWAII	20 ( 1.0)	257 ( 2.3)	14 ( 0.9)	257 ( 2.6)	30 ( 1.1)	264 ( 1.5)	36 ( 1.2)	266 ( 1.4)
INDIANA	24 ( 1.1)	269 ( 2.0)	15 ( 0.8)	274 ( 2.5)	27 ( 1.1)	278 ( 1.9)	34 ( 1.4)	279 ( 1.7)
IOWA†	19 ( 1.1)	278 ( 2.0)	21 ( 1.1)	281 ( 2.0)	29 ( 1.0)	286 ( 1.7)	31 ( 1.5)	288 ( 1.5)
KENTUCKY	19 ( 1.1)	265 ( 1.5)	20 ( 0.9)	265 ( 1.8)	31 ( 1.0)	267 ( 1.5)	29 ( 1.4)	270 ( 2.1)
LOUISIANA	23 ( 1.0)	249 ( 2.0)	13 ( 0.7)	258 ( 2.2)	29 ( 1.2)	254 ( 2.3)	35 ( 1.3)	252 ( 1.9)
MAINE	17 ( 0.8)	273 ( 1.9)	16 ( 1.0)	283 ( 1.8)	29 ( 1.1)	285 ( 1.8)	37 ( 1.3)	289 ( 1.7)
MARYLAND†	17 ( 1.0)	263 ( 2.2)	17 ( 1.0)	268 ( 3.0)	31 ( 1.0)	269 ( 2.4)	34 ( 1.4)	276 ( 2.9)
MASSACHUSETTS	22 ( 1.7)	267 ( 1.9)	15 ( 0.8)	275 ( 2.5)	29 ( 1.2)	278 ( 2.3)	35 ( 1.7)	285 ( 2.6)
MICHIGAN†	18 ( 1.2)	267 ( 2.8)	13 ( 0.8)	278 ( 2.7)	27 ( 1.3)	279 ( 2.4)	42 ( 1.8)	280 ( 2.0)
MINNESOTA	19 ( 1.2)	276 ( 2.2)	18 ( 1.0)	285 ( 1.9)	30 ( 1.0)	287 ( 1.8)	33 ( 1.3)	286 ( 1.8)
MISSISSIPPI	23 ( 1.2)	248 ( 1.8)	13 ( 0.6)	255 ( 2.0)	27 ( 0.8)	249 ( 1.7)	38 ( 1.3)	251 ( 1.7)
MISSOURI	21 ( 1.4)	266 ( 1.6)	16 ( 0.9)	274 ( 2.3)	30 ( 1.1)	275 ( 1.7)	32 ( 1.5)	276 ( 2.2)
MONTANA†	18 ( 1.0)	273 ( 2.3)	14 ( 1.1)	285 ( 2.5)	28 ( 1.6)	284 ( 1.8)	39 ( 1.7)	286 ( 1.9)
NEBRASKA	17 ( 0.8)	276 ( 1.6)	14 ( 0.8)	281 ( 2.3)	32 ( 1.0)	280 ( 1.5)	38 ( 1.2)	289 ( 1.4)
NEW MEXICO	24 ( 1.1)	257 ( 1.9)	12 ( 0.6)	265 ( 2.2)	27 ( 0.9)	261 ( 1.7)	37 ( 1.3)	266 ( 1.9)
NEW YORK†	24 ( 1.2)	264 ( 2.4)	17 ( 1.1)	277 ( 2.4)	28 ( 1.1)	270 ( 2.5)	32 ( 1.4)	272 ( 2.2)
NORTH CAROLINA	19 ( 1.2)	260 ( 2.2)	13 ( 0.7)	269 ( 2.2)	27 ( 0.9)	269 ( 1.9)	40 ( 1.5)	271 ( 1.9)
NORTH DAKOTA	20 ( 1.2)	275 ( 2.0)	15 ( 0.7)	284 ( 2.0)	28 ( 1.1)	286 ( 1.5)	37 ( 1.3)	288 ( 1.2)
OREGON	18 ( 1.2)	267 ( 2.1)	16 ( 0.9)	275 ( 2.1)	27 ( 1.1)	279 ( 2.1)	39 ( 1.6)	281 ( 2.0)
RHODE ISLAND	26 ( 1.0)	264 ( 1.8)	17 ( 0.9)	270 ( 2.1)	27 ( 1.0)	269 ( 1.7)	29 ( 0.8)	274 ( 1.7)
SOUTH CAROLINA†	20 ( 1.4)	258 ( 2.1)	13 ( 0.7)	267 ( 2.3)	30 ( 1.3)	265 ( 2.1)	36 ( 1.5)	257 ( 2.2)
TENNESSEE	22 ( 1.3)	257 ( 2.4)	17 ( 0.9)	262 ( 2.6)	28 ( 1.1)	264 ( 1.9)	33 ( 1.6)	267 ( 2.0)
TEXAS	21 ( 1.3)	262 ( 2.4)	15 ( 0.9)	273 ( 2.5)	28 ( 1.0)	272 ( 2.1)	37 ( 1.4)	273 ( 1.7)
UTAH	21 ( 0.9)	270 ( 1.7)	14 ( 0.7)	277 ( 2.1)	28 ( 1.0)	279 ( 1.5)	37 ( 1.1)	280 ( 1.3)
VERMONT†	17 ( 1.0)	273 ( 2.2)	16 ( 0.8)	279 ( 2.4)	32 ( 1.4)	280 ( 1.6)	35 ( 1.4)	282 ( 1.4)
VIRGINIA	23 ( 1.2)	264 ( 2.3)	16 ( 0.8)	272 ( 2.6)	28 ( 1.0)	271 ( 2.0)	34 ( 1.2)	272 ( 1.9)
WASHINGTON	19 ( 1.2)	266 ( 2.1)	14 ( 0.9)	277 ( 2.3)	27 ( 0.9)	276 ( 1.8)	40 ( 1.5)	281 ( 1.5)
WEST VIRGINIA	23 ( 1.0)	259 ( 1.4)	18 ( 0.8)	264 ( 1.5)	28 ( 0.9)	265 ( 1.6)	32 ( 1.2)	269 ( 1.6)
WISCONSIN†	21 ( 1.0)	279 ( 1.9)	18 ( 0.8)	281 ( 1.9)	30 ( 1.0)	284 ( 2.2)	30 ( 1.1)	286 ( 2.1)
WYOMING	20 ( 0.9)	270 ( 1.8)	15 ( 0.7)	271 ( 2.0)	30 ( 0.8)	273 ( 2.0)	35 ( 1.1)	281 ( 1.2)

**Other Jurisdictions**

DDESS	20 ( 1.5)	257 ( 4.3)	16 ( 1.3)	271 ( 7.0)	26 ( 2.0)	274 ( 4.1)	38 ( 1.8)	272 ( 3.4)
DoDDS	13 ( 0.7)	273 ( 2.8)	12 ( 0.7)	278 ( 2.2)	31 ( 0.7)	275 ( 1.9)	43 ( 0.8)	275 ( 1.3)
GUAM	19 ( 1.1)	228 ( 4.8)	9 ( 0.9)	235 ( 5.5)	29 ( 1.5)	236 ( 3.4)	42 ( 1.6)	247 ( 2.5)

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 6.37**

**1996 Mathematics Assessment**



POPULATION:

1996 Grade 8 Public School Students

REPORTED STATISTICS:

Percentage of Students and Average Mathematics Scale Score

TEACHERS' REPORTS ON:

Solving Mathematics Problems in Small Groups or with a Partner

*In this mathematics class, how often do the students solve mathematics problems in small groups or with a partner?*

Never or Hardly Ever

Once or Twice a Month

Once or Twice a Week

Almost Every Day

**JURISDICTIONS**

PCT ( SE) SS ( SE) PCT ( SE) SS ( SE) PCT ( SE) SS ( SE) PCT ( SE) SS ( SE)

**Nation**

NATION	7 ( 1.5)	272 ( 5.8)!	27 ( 3.7)	272 ( 3.2)	40 ( 3.4)	271 ( 2.1)	27 ( 3.3)	275 ( 2.2)
NORTHEAST	8 ( 4.5)	290 (10.8)!	13 ( 3.1)	279 ( 8.0)!	55 ( 7.8)	275 ( 4.4)	23 ( 4.8)	278 ( 6.2)!
SOUTHEAST	11 ( 2.6)	266 (10.7)!	26 ( 5.1)	257 ( 5.8)	40 ( 5.2)	267 ( 4.3)	23 ( 6.1)	269 ( 4.0)!
CENTRAL	6 ( 3.1)	... ( ... )	40 (11.2)	280 ( 6.6)!	25 ( 7.8)	276 ( 6.0)!	29 ( 6.7)	279 ( 4.9)!
WEST	3 ( 1.0)	... ( ... )	25 ( 5.9)	274 ( 5.5)!	41 ( 6.1)	268 ( 3.0)	31 ( 7.4)	273 ( 3.0)!

**States**

ALABAMA	17 ( 3.2)	256 ( 3.3)	33 ( 3.9)	253 ( 3.7)	35 ( 4.0)	259 ( 3.6)	15 ( 2.8)	260 ( 3.6)
ALASKA†	10 ( 1.2)	278 ( 6.2)	23 ( 2.7)	283 ( 4.9)	41 ( 2.4)	283 ( 2.7)	26 ( 2.8)	264 ( 4.9)
ARIZONA	7 ( 1.6)	267 (10.2)!	19 ( 3.0)	271 ( 3.2)	40 ( 3.3)	267 ( 2.0)	35 ( 3.6)	269 ( 3.4)
ARKANSAS†	19 ( 3.4)	253 ( 3.4)	34 ( 4.0)	265 ( 2.5)	37 ( 3.6)	264 ( 2.4)	10 ( 2.4)	272 ( 3.5)!
CALIFORNIA	7 ( 1.4)	257 ( 5.4)!	14 ( 2.3)	259 ( 4.8)	37 ( 3.1)	263 ( 2.6)	42 ( 3.5)	269 ( 3.0)
COLORADO	10 ( 2.0)	265 ( 4.0)	15 ( 2.1)	274 ( 3.9)	44 ( 3.3)	278 ( 2.0)	31 ( 3.6)	277 ( 2.8)
CONNECTICUT	10 ( 2.2)	278 ( 4.2)!	28 ( 3.1)	280 ( 2.2)	40 ( 2.8)	281 ( 2.0)	23 ( 3.4)	284 ( 4.8)
DELAWARE	5 ( 0.5)	247 ( 5.9)	25 ( 1.2)	266 ( 2.3)	45 ( 1.2)	266 ( 1.6)	25 ( 1.0)	273 ( 2.8)
DISTRICT OF COLUMBIA	1 ( 0.2)	... ( ... )	8 ( 0.3)	222 ( 4.1)	55 ( 0.9)	239 ( 2.1)	36 ( 0.9)	221 ( 2.9)
FLORIDA	7 ( 1.5)	256 ( 3.8)!	26 ( 3.0)	270 ( 3.8)	43 ( 3.2)	262 ( 2.5)	24 ( 2.6)	261 ( 3.5)
GEORGIA	8 ( 1.6)	261 ( 4.4)!	26 ( 2.7)	262 ( 2.6)	43 ( 2.7)	264 ( 2.3)	23 ( 3.1)	265 ( 4.3)
HAWAII	11 ( 0.7)	276 ( 3.7)	19 ( 0.8)	261 ( 2.4)	38 ( 1.0)	261 ( 1.7)	32 ( 1.1)	258 ( 1.6)
INDIANA	10 ( 2.8)	271 ( 5.0)!	28 ( 3.5)	275 ( 2.4)	43 ( 4.1)	275 ( 2.5)	19 ( 3.1)	280 ( 4.5)
IOWA†	10 ( 2.5)	284 ( 4.4)!	31 ( 4.1)	285 ( 2.3)	40 ( 4.1)	284 ( 2.2)	20 ( 3.9)	284 ( 3.1)!
KENTUCKY	4 ( 1.5)	273 ( 8.6)!	35 ( 4.2)	268 ( 2.4)	40 ( 4.2)	267 ( 2.0)	21 ( 3.5)	268 ( 3.8)
LOUISIANA	10 ( 2.6)	257 ( 4.0)!	29 ( 4.1)	253 ( 3.5)	39 ( 5.0)	253 ( 2.1)	22 ( 3.3)	254 ( 4.5)
MAINE	5 ( 1.7)	287 ( 3.8)!	27 ( 3.0)	282 ( 1.9)	45 ( 3.2)	283 ( 2.0)	24 ( 2.3)	284 ( 3.1)
MARYLAND†	8 ( 2.7)	274 ( 6.4)!	22 ( 3.4)	270 ( 3.3)	46 ( 3.8)	270 ( 2.8)	24 ( 3.2)	275 ( 5.2)
MASSACHUSETTS	12 ( 2.2)	268 ( 4.3)	24 ( 3.3)	278 ( 3.1)	40 ( 3.4)	276 ( 3.0)	24 ( 4.1)	285 ( 4.3)
MICHIGAN†	7 ( 2.3)	269 ( 6.2)!	18 ( 2.7)	278 ( 3.5)	43 ( 3.7)	277 ( 2.9)	32 ( 3.9)	288 ( 2.8)
MINNESOTA	10 ( 1.9)	280 ( 4.7)	22 ( 3.2)	283 ( 3.7)	39 ( 4.4)	283 ( 2.7)	29 ( 3.9)	288 ( 2.8)
MISSISSIPPI	7 ( 1.7)	245 ( 5.3)!	35 ( 3.9)	253 ( 2.4)	43 ( 3.5)	247 ( 2.5)	15 ( 2.7)	259 ( 3.8)
MISSOURI	6 ( 1.8)	269 ( 6.5)!	34 ( 3.9)	273 ( 1.5)	38 ( 4.2)	275 ( 2.5)	22 ( 3.5)	277 ( 3.9)
MONTANA†	7 ( 1.5)	283 ( 4.6)!	21 ( 2.5)	283 ( 3.1)	43 ( 3.2)	281 ( 1.8)	29 ( 2.7)	288 ( 2.9)
NEBRASKA	11 ( 2.8)	279 ( 3.7)!	27 ( 2.8)	285 ( 2.3)	38 ( 3.2)	280 ( 1.7)	24 ( 2.7)	285 ( 2.3)
NEW MEXICO	9 ( 1.1)	258 ( 4.0)	24 ( 2.0)	265 ( 2.6)	37 ( 1.9)	265 ( 1.5)	30 ( 2.6)	265 ( 2.7)
NEW YORK†	16 ( 2.3)	273 ( 3.6)	30 ( 3.7)	273 ( 2.5)	40 ( 3.9)	274 ( 2.8)	14 ( 2.0)	272 ( 4.8)
NORTH CAROLINA	4 ( 1.2)	272 ( 5.3)!	22 ( 2.6)	268 ( 2.8)	50 ( 3.1)	269 ( 1.8)	24 ( 2.9)	266 ( 3.7)
NORTH DAKOTA	14 ( 2.0)	285 ( 3.0)	41 ( 2.9)	286 ( 1.5)	34 ( 2.7)	282 ( 1.6)	11 ( 1.6)	286 ( 3.8)
OREGON	7 ( 1.9)	269 ( 5.1)!	16 ( 2.3)	278 ( 3.6)	42 ( 3.3)	278 ( 2.2)	35 ( 3.5)	278 ( 3.0)
RHODE ISLAND	18 ( 0.7)	264 ( 2.2)	25 ( 0.7)	272 ( 2.4)	44 ( 0.9)	273 ( 1.3)	13 ( 0.7)	274 ( 2.9)
SOUTH CAROLINA†	8 ( 1.9)	267 ( 6.8)!	26 ( 3.7)	262 ( 3.5)	50 ( 4.1)	258 ( 2.3)	17 ( 2.6)	261 ( 4.6)
TENNESSEE	13 ( 2.6)	265 ( 3.1)!	30 ( 3.5)	265 ( 2.2)	40 ( 3.9)	267 ( 2.8)	17 ( 3.0)	261 ( 5.0)
TEXAS	13 ( 2.7)	271 ( 5.7)!	25 ( 3.0)	273 ( 2.3)	38 ( 3.4)	269 ( 3.0)	24 ( 2.5)	273 ( 4.0)
UTAH	11 ( 1.1)	275 ( 2.3)	20 ( 1.2)	279 ( 1.9)	36 ( 1.9)	277 ( 1.5)	33 ( 1.7)	279 ( 2.1)
VERMONT†	5 ( 1.0)	287 ( 7.5)	26 ( 2.2)	276 ( 2.3)	48 ( 3.1)	281 ( 1.6)	21 ( 2.8)	281 ( 3.9)
VIRGINIA	11 ( 1.7)	273 ( 5.3)	25 ( 2.6)	269 ( 2.3)	45 ( 2.7)	268 ( 2.7)	19 ( 2.8)	275 ( 3.6)
WASHINGTON	9 ( 2.2)	263 ( 7.5)!	23 ( 2.6)	275 ( 2.7)	34 ( 2.9)	277 ( 2.7)	35 ( 3.1)	282 ( 2.3)
WEST VIRGINIA	11 ( 1.9)	265 ( 3.6)	36 ( 3.4)	264 ( 2.0)	40 ( 3.4)	265 ( 2.2)	13 ( 2.5)	268 ( 3.3)
WISCONSIN†	7 ( 2.5)	287 ( 3.7)!	27 ( 3.7)	284 ( 3.0)	46 ( 4.5)	281 ( 2.7)	20 ( 3.1)	287 ( 3.4)
WYOMING	7 ( 0.5)	277 ( 3.1)	29 ( 1.0)	274 ( 1.8)	40 ( 1.2)	275 ( 1.5)	24 ( 1.2)	275 ( 1.9)

**Other Jurisdictions**

DDESS	10 ( 1.4)	... ( ... )	28 ( 1.2)	268 ( 5.1)	33 ( 2.0)	273 ( 3.7)	28 ( 2.1)	265 ( 3.2)
DoDDS	3 ( 0.4)	... ( ... )	9 ( 0.5)	280 ( 2.2)	39 ( 0.9)	277 ( 1.2)	49 ( 0.9)	272 ( 1.6)
GUAM	15 ( 1.2)	236 ( 3.3)	4 ( 0.7)	... ( ... )	65 ( 1.6)	236 ( 2.8)	16 ( 1.6)	220 ( 5.7)

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).

... Characteristics of the sample do not permit a reliable estimate.

! Interpret with caution — the nature of the sample does not allow accurate determination of the variability of this statistic.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 6.38**

**1996 Mathematics Assessment**



POPULATION:

1996 Grade 8 Public School Students

REPORTED STATISTICS:

Percentage of Students and Average Mathematics Scale Score

STUDENTS' REPORTS ON:

Solving Mathematics Problems in Small Groups or with a Partner

In this mathematics class, how often do you solve mathematics problems in small groups or with a partner?	Never or Hardly Ever		Once or Twice a Month		Once or Twice a Week		Almost Every Day	
	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )
<b>JURISDICTIONS</b>								
<b>Nation</b>								
NATION	27 ( 1.6)	268 ( 1.8)	27 ( 1.2)	275 ( 1.5)	29 ( 1.2)	271 ( 1.5)	17 ( 1.4)	269 ( 3.0)
NORTHEAST	26 ( 2.8)	273 ( 3.5)	35 ( 5.2)	280 ( 3.8)	25 ( 2.7)	272 ( 5.0)	14 ( 4.2)	280 ( 9.4)!
SOUTHEAST	33 ( 3.2)	262 ( 3.9)	28 ( 2.1)	269 ( 3.1)	26 ( 1.9)	263 ( 3.7)	13 ( 2.8)	261 ( 4.0)!
CENTRAL	28 ( 2.8)	273 ( 3.1)	26 ( 2.1)	281 ( 2.9)	29 ( 2.5)	279 ( 4.3)	17 ( 3.1)	270 ( 9.4)
WEST	24 ( 3.2)	267 ( 4.1)	23 ( 1.0)	272 ( 3.1)	32 ( 2.0)	269 ( 2.3)	22 ( 1.9)	268 ( 3.5)
<b>States</b>								
ALABAMA	42 ( 1.7)	252 ( 2.2)	26 ( 1.3)	262 ( 2.6)	22 ( 1.2)	258 ( 3.5)	11 ( 1.4)	257 ( 3.6)
ALASKA†	31 ( 1.3)	278 ( 3.0)	22 ( 1.3)	279 ( 2.9)	28 ( 1.4)	279 ( 2.7)	18 ( 1.2)	274 ( 3.5)
ARIZONA	27 ( 1.9)	268 ( 1.7)	24 ( 1.4)	272 ( 2.3)	28 ( 1.7)	268 ( 1.9)	22 ( 1.7)	267 ( 2.7)
ARKANSAS†	39 ( 1.8)	259 ( 2.0)	27 ( 1.5)	268 ( 1.8)	22 ( 1.1)	261 ( 2.3)	12 ( 1.3)	263 ( 3.3)
CALIFORNIA	25 ( 1.7)	260 ( 3.0)	23 ( 1.3)	266 ( 2.8)	30 ( 1.4)	261 ( 2.3)	22 ( 1.8)	266 ( 3.3)
COLORADO	23 ( 1.8)	272 ( 1.9)	24 ( 1.4)	279 ( 2.1)	31 ( 1.3)	277 ( 1.4)	22 ( 1.5)	275 ( 1.8)
CONNECTICUT	32 ( 1.7)	274 ( 1.7)	28 ( 1.3)	285 ( 1.3)	28 ( 1.2)	283 ( 2.1)	13 ( 1.3)	277 ( 3.3)
DELAWARE	25 ( 1.2)	264 ( 2.4)	31 ( 1.2)	269 ( 1.5)	31 ( 1.1)	266 ( 1.7)	13 ( 0.7)	267 ( 2.5)
DISTRICT OF COLUMBIA	23 ( 1.0)	227 ( 2.7)	22 ( 0.9)	242 ( 3.2)	32 ( 1.0)	235 ( 1.9)	23 ( 1.1)	228 ( 2.2)
FLORIDA	33 ( 1.6)	261 ( 2.1)	30 ( 1.4)	268 ( 2.5)	26 ( 1.1)	265 ( 2.5)	12 ( 1.0)	264 ( 3.4)
GEORGIA	33 ( 1.8)	258 ( 1.9)	28 ( 1.2)	269 ( 2.0)	26 ( 1.3)	264 ( 2.3)	12 ( 1.1)	258 ( 3.0)
HAWAII	29 ( 0.9)	263 ( 2.2)	23 ( 1.1)	266 ( 1.8)	30 ( 1.1)	260 ( 1.8)	18 ( 0.8)	259 ( 1.7)
INDIANA	34 ( 2.0)	273 ( 2.5)	30 ( 1.7)	278 ( 2.0)	25 ( 1.8)	277 ( 2.1)	11 ( 1.2)	277 ( 2.9)
IOWA†	25 ( 2.1)	279 ( 2.1)	33 ( 1.8)	286 ( 1.4)	30 ( 1.9)	286 ( 1.5)	11 ( 1.4)	284 ( 2.7)
KENTUCKY	25 ( 1.8)	267 ( 1.9)	37 ( 1.3)	269 ( 1.1)	28 ( 1.6)	264 ( 1.6)	10 ( 1.0)	265 ( 2.8)
LOUISIANA	38 ( 2.2)	249 ( 2.2)	25 ( 1.1)	258 ( 2.2)	22 ( 1.7)	254 ( 1.8)	15 ( 1.3)	252 ( 2.9)
MAINE	22 ( 1.5)	281 ( 2.1)	30 ( 1.6)	284 ( 1.4)	31 ( 1.5)	287 ( 2.0)	17 ( 1.1)	283 ( 2.6)
MARYLAND†	27 ( 2.0)	262 ( 2.2)	32 ( 1.4)	273 ( 2.3)	30 ( 1.6)	273 ( 3.3)	11 ( 0.9)	273 ( 5.0)
MASSACHUSETTS	27 ( 2.4)	271 ( 1.9)	26 ( 1.3)	279 ( 2.3)	30 ( 1.7)	280 ( 2.7)	17 ( 1.8)	284 ( 3.0)
MICHIGAN†	23 ( 1.6)	270 ( 2.9)	27 ( 1.5)	279 ( 2.4)	30 ( 1.5)	279 ( 2.3)	20 ( 1.7)	280 ( 2.6)
MINNESOTA	26 ( 1.5)	282 ( 2.2)	27 ( 1.3)	285 ( 2.0)	29 ( 1.3)	284 ( 1.5)	18 ( 1.6)	287 ( 2.8)
MISSISSIPPI	33 ( 2.0)	247 ( 2.0)	27 ( 1.3)	257 ( 1.4)	26 ( 1.3)	249 ( 1.6)	14 ( 1.3)	248 ( 2.4)
MISSOURI	30 ( 2.5)	268 ( 1.8)	27 ( 1.6)	275 ( 1.7)	28 ( 2.0)	275 ( 2.2)	14 ( 1.3)	276 ( 3.2)
MONTANA†	26 ( 2.3)	279 ( 1.9)	27 ( 2.1)	287 ( 2.1)	28 ( 1.5)	282 ( 2.3)	20 ( 2.1)	285 ( 2.7)
NEBRASKA	27 ( 1.7)	278 ( 1.4)	31 ( 1.2)	285 ( 1.5)	29 ( 1.3)	284 ( 1.4)	13 ( 1.2)	284 ( 2.8)
NEW MEXICO	35 ( 1.5)	260 ( 1.3)	23 ( 1.0)	270 ( 2.0)	25 ( 1.3)	259 ( 2.2)	17 ( 1.2)	262 ( 2.6)
NEW YORK†	37 ( 2.1)	267 ( 2.4)	25 ( 1.3)	276 ( 2.6)	25 ( 1.5)	274 ( 2.3)	13 ( 1.3)	263 ( 3.8)
NORTH CAROLINA	29 ( 1.8)	263 ( 2.1)	30 ( 1.2)	273 ( 1.6)	29 ( 1.4)	269 ( 2.0)	12 ( 1.3)	265 ( 3.6)
NORTH DAKOTA	34 ( 1.5)	284 ( 1.5)	30 ( 1.4)	285 ( 1.8)	24 ( 1.2)	282 ( 1.7)	13 ( 1.0)	288 ( 1.7)
OREGON	27 ( 1.5)	273 ( 2.3)	23 ( 1.2)	282 ( 2.5)	30 ( 1.3)	277 ( 2.0)	20 ( 1.5)	275 ( 2.0)
RHODE ISLAND	36 ( 0.9)	269 ( 1.1)	27 ( 0.9)	273 ( 1.7)	27 ( 1.0)	268 ( 2.3)	9 ( 0.7)	258 ( 2.7)
SOUTH CAROLINA†	28 ( 1.9)	263 ( 2.0)	28 ( 1.3)	265 ( 1.9)	32 ( 1.5)	258 ( 2.5)	12 ( 1.4)	253 ( 3.4)
TENNESSEE	35 ( 2.4)	263 ( 1.8)	32 ( 1.7)	267 ( 2.0)	21 ( 1.3)	263 ( 2.8)	12 ( 1.7)	258 ( 4.7)
TEXAS	32 ( 2.0)	269 ( 2.1)	25 ( 1.4)	274 ( 2.4)	28 ( 1.5)	268 ( 1.7)	15 ( 1.2)	268 ( 3.4)
UTAH	34 ( 1.3)	275 ( 1.4)	22 ( 0.8)	281 ( 1.5)	26 ( 1.1)	276 ( 1.8)	19 ( 0.9)	277 ( 1.8)
VERMONT†	26 ( 1.5)	282 ( 2.5)	27 ( 1.2)	280 ( 1.6)	32 ( 1.3)	278 ( 1.5)	15 ( 0.8)	276 ( 1.9)
VIRGINIA	36 ( 2.0)	266 ( 2.3)	29 ( 1.3)	274 ( 1.9)	23 ( 1.2)	271 ( 2.1)	12 ( 1.1)	271 ( 2.2)
WASHINGTON	29 ( 1.8)	273 ( 2.6)	25 ( 1.2)	282 ( 2.0)	28 ( 1.3)	276 ( 1.7)	18 ( 1.3)	276 ( 2.1)
WEST VIRGINIA	41 ( 1.9)	263 ( 1.5)	30 ( 1.2)	268 ( 1.7)	20 ( 1.2)	265 ( 2.2)	10 ( 1.1)	264 ( 3.0)
WISCONSIN†	30 ( 2.0)	283 ( 2.5)	31 ( 1.6)	283 ( 2.0)	26 ( 1.7)	283 ( 2.0)	13 ( 1.3)	281 ( 3.5)
WYOMING	27 ( 0.9)	271 ( 1.4)	25 ( 1.0)	275 ( 1.8)	30 ( 0.9)	276 ( 1.9)	18 ( 0.8)	278 ( 1.8)
<b>Other Jurisdictions</b>								
DDESS	37 ( 1.7)	269 ( 2.8)	32 ( 1.8)	271 ( 4.7)	21 ( 1.6)	268 ( 4.6)	10 ( 1.2)	269 ( 5.5)
DoDDS	14 ( 0.9)	286 ( 2.1)	18 ( 1.0)	281 ( 2.4)	33 ( 1.0)	273 ( 1.6)	35 ( 0.9)	269 ( 1.4)
GUAM	40 ( 1.3)	238 ( 2.6)	18 ( 1.2)	243 ( 4.2)	27 ( 1.4)	239 ( 2.6)	15 ( 1.0)	236 ( 4.3)

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).

! Interpret with caution — the nature of the sample does not allow accurate determination of the variability of this statistic.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 6.39**

**1992 Mathematics Assessment**



POPULATION:

1992 Grade 8 Public School Students

REPORTED STATISTICS:

Percentage of Students and Average Mathematics Scale Score

TEACHERS' REPORTS ON:

Amount of Homework Assigned

Approximately how much mathematics homework do you assign each day?

None	15 Minutes	30 Minutes	45 Minutes	One Hour or More
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JURISDICTIONS	PCT ( SE )		SS ( SE )		PCT ( SE )		SS ( SE )		PCT ( SE )		SS ( SE )		PCT ( SE )		SS ( SE )	
<b>Nation</b>																
NATION	3 ( 0.7)	233 ( 4.1)!	29 ( 2.1)	262 ( 1.8)	48 ( 2.6)	268 ( 1.5)	15 ( 2.0)	282 ( 3.8)	4 ( 0.9)	287 ( 5.3)!						
NORTHEAST	1 ( 0.5)	... ( ... )	29 ( 5.0)	265 ( 5.4)!	59 ( 6.2)	265 ( 3.6)	9 ( 4.7)	306 ( 7.7)!	2 ( 0.8)	... ( ... )						
SOUTHEAST	3 ( 1.5)	... ( ... )	27 ( 3.7)	254 ( 2.2)	51 ( 5.7)	263 ( 1.3)	14 ( 4.6)	273 ( 7.8)!	4 ( 1.6)	282 ( 6.7)!						
CENTRAL	2 ( ... )	... ( ... )	36 ( 5.9)	268 ( 2.7)!	43 ( 4.6)	278 ( 3.1)	15 ( 3.5)	289 ( 5.8)!	3 ( 1.7)	... ( ... )						
WEST	4 ( 1.5)	... ( ... )	25 ( 2.7)	261 ( 3.7)	43 ( 3.6)	267 ( 3.0)	22 ( 3.2)	278 ( 4.8)	6 ( 2.2)	290 ( 7.9)!						
<b>States</b>																
ALABAMA	3 ( 1.1)	248 ( 7.3)!	24 ( 3.9)	247 ( 3.2)	56 ( 3.2)	252 ( 2.6)	13 ( 2.7)	265 ( 6.0)!	4 ( 1.5)	263 ( 17.5)!						
ALASKA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )						
ARIZONA	5 ( 2.0)	259 ( 4.9)!	32 ( 2.8)	255 ( 2.0)	47 ( 3.3)	266 ( 2.1)	12 ( 2.0)	281 ( 3.3)	5 ( 1.3)	286 ( 7.7)!						
ARKANSAS	4 ( 1.4)	238 ( 6.3)!	30 ( 3.0)	252 ( 2.4)	51 ( 2.9)	258 ( 1.7)	13 ( 1.7)	265 ( 4.6)	2 ( 0.7)	... ( ... )						
CALIFORNIA	2 ( 0.6)	... ( ... )	29 ( 2.7)	254 ( 2.5)	50 ( 2.9)	261 ( 2.5)	13 ( 1.9)	283 ( 3.7)	6 ( 1.6)	275 ( 5.5)!						
COLORADO	2 ( 0.7)	... ( ... )	25 ( 2.8)	266 ( 2.7)	53 ( 3.1)	272 ( 1.7)	15 ( 2.0)	279 ( 3.8)	5 ( 1.1)	290 ( 4.4)!						
CONNECTICUT	1 ( 0.2)	... ( ... )	26 ( 2.9)	261 ( 2.6)	55 ( 2.8)	276 ( 1.7)	15 ( 2.1)	286 ( 7.4)	4 ( 1.0)	291 ( 5.2)!						
DELAWARE	2 ( 0.4)	... ( ... )	29 ( 0.9)	251 ( 1.7)	51 ( 1.0)	265 ( 1.2)	12 ( 0.9)	280 ( 3.3)	6 ( 2.0)	287 ( 2.6)						
DISTRICT OF COLUMBIA	0 ( ... )	... ( ... )	21 ( 1.0)	234 ( 2.8)	52 ( 1.3)	229 ( 1.5)	17 ( 0.8)	247 ( 2.1)	10 ( 0.6)	249 ( 2.8)						
FLORIDA	4 ( 1.0)	234 ( 5.8)!	30 ( 2.7)	252 ( 2.3)	49 ( 2.9)	262 ( 2.0)	11 ( 1.7)	277 ( 4.4)	6 ( 1.3)	281 ( 6.2)!						
GEORGIA	4 ( 0.8)	235 ( 4.5)	31 ( 2.8)	251 ( 2.3)	49 ( 3.1)	260 ( 1.8)	13 ( 1.7)	275 ( 3.5)	2 ( 0.6)	... ( ... )						
HAWAII	3 ( 0.4)	... ( ... )	19 ( 0.7)	243 ( 1.9)	50 ( 0.9)	257 ( 0.9)	19 ( 0.7)	266 ( 1.7)	9 ( 0.6)	283 ( 2.7)						
INDIANA	1 ( 0.7)	... ( ... )	33 ( 2.7)	263 ( 1.5)	55 ( 2.5)	271 ( 1.9)	9 ( 1.4)	292 ( 4.9)	2 ( 0.8)	... ( ... )						
IOWA	2 ( 0.9)	... ( ... )	28 ( 3.4)	276 ( 2.0)	58 ( 3.8)	284 ( 1.4)	11 ( 2.5)	301 ( 5.3)!	1 ( 1.0)	... ( ... )						
KENTUCKY	3 ( 0.8)	230 ( 4.9)!	33 ( 3.5)	255 ( 2.0)	46 ( 3.1)	266 ( 1.7)	13 ( 2.6)	276 ( 4.5)	5 ( 1.4)	290 ( 5.8)!						
LOUISIANA	2 ( 0.9)	... ( ... )	38 ( 3.5)	251 ( 2.0)	52 ( 3.6)	251 ( 2.5)	7 ( 1.3)	252 ( 8.1)	2 ( 0.8)	... ( ... )						
MAINE	1 ( 0.6)	... ( ... )	26 ( 3.3)	271 ( 2.0)	60 ( 3.4)	280 ( 1.6)	10 ( 2.1)	292 ( 3.0)!	2 ( 0.8)	... ( ... )						
MARYLAND	0 ( 0.2)	... ( ... )	30 ( 2.7)	253 ( 2.6)	57 ( 2.6)	268 ( 2.1)	11 ( 1.7)	290 ( 4.0)	2 ( 0.9)	... ( ... )						
MASSACHUSETTS	1 ( 0.3)	... ( ... )	15 ( 2.3)	261 ( 3.5)	58 ( 3.2)	271 ( 1.7)	20 ( 2.4)	288 ( 3.8)	6 ( 1.7)	278 ( 4.5)!						
MICHIGAN	1 ( 0.4)	... ( ... )	29 ( 3.0)	265 ( 2.4)	49 ( 3.4)	268 ( 2.7)	15 ( 2.8)	276 ( 5.8)	7 ( 1.2)	263 ( 5.0)						
MINNESOTA	2 ( 1.0)	... ( ... )	27 ( 3.9)	277 ( 2.3)	57 ( 3.7)	282 ( 1.5)	11 ( 2.5)	295 ( 4.2)!	2 ( 0.8)	... ( ... )						
MISSISSIPPI	3 ( 1.5)	... ( ... )	31 ( 3.4)	242 ( 2.7)	49 ( 3.7)	247 ( 2.0)	11 ( 2.2)	258 ( 5.0)	6 ( 2.0)	252 ( 8.8)!						
MISSOURI	3 ( 1.0)	246 ( 8.3)!	27 ( 3.1)	264 ( 1.9)	52 ( 3.9)	271 ( 1.6)	14 ( 2.3)	288 ( 3.9)	4 ( 0.9)	295 ( 5.3)!						
MONTANA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )						
NEBRASKA	1 ( 0.3)	... ( ... )	34 ( 3.1)	268 ( 2.4)	50 ( 3.6)	280 ( 1.4)	13 ( 2.6)	295 ( 3.5)!	2 ( 0.8)	... ( ... )						
NEW MEXICO	3 ( 0.8)	234 ( 3.8)!	33 ( 3.0)	253 ( 1.8)	44 ( 2.6)	262 ( 1.2)	17 ( 2.3)	268 ( 2.4)	3 ( 0.6)	300 ( 4.2)!						
NEW YORK	0 ( ... )	... ( ... )	26 ( 3.2)	260 ( 3.8)	59 ( 2.9)	267 ( 3.2)	11 ( 1.9)	279 ( 5.7)	3 ( 0.9)	... ( ... )						
NORTH CAROLINA	3 ( 0.7)	226 ( 6.5)!	31 ( 2.9)	248 ( 2.2)	50 ( 3.3)	260 ( 1.8)	15 ( 2.3)	273 ( 4.1)	2 ( 0.6)	... ( ... )						
NORTH DAKOTA	2 ( 0.9)	... ( ... )	20 ( 2.9)	279 ( 1.9)	60 ( 3.7)	284 ( 1.3)	15 ( 2.2)	286 ( 4.0)	3 ( 0.8)	... ( ... )						
OREGON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )						
RHODE ISLAND	2 ( 0.2)	... ( ... )	18 ( 0.8)	248 ( 1.8)	59 ( 1.1)	266 ( 1.0)	15 ( 0.8)	280 ( 2.4)	6 ( 0.4)	289 ( 2.0)						
SOUTH CAROLINA	2 ( 0.5)	... ( ... )	38 ( 3.1)	250 ( 1.9)	50 ( 3.4)	264 ( 1.9)	9 ( 1.5)	288 ( 5.5)	1 ( 0.4)	... ( ... )						
TENNESSEE	1 ( 0.5)	... ( ... )	29 ( 3.5)	255 ( 2.4)	55 ( 3.5)	258 ( 1.8)	11 ( 2.2)	275 ( 3.7)!	3 ( 0.9)	279 ( 9.2)!						
TEXAS	3 ( 0.6)	232 ( 4.2)	32 ( 3.3)	256 ( 1.8)	48 ( 3.0)	266 ( 2.3)	13 ( 2.0)	278 ( 3.9)	5 ( 1.1)	299 ( 6.2)!						
UTAH	2 ( 0.5)	... ( ... )	29 ( 2.3)	265 ( 1.9)	52 ( 2.4)	277 ( 1.3)	14 ( 1.7)	284 ( 2.4)	2 ( 0.8)	296 ( 3.3)!						
VERMONT	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )						
VIRGINIA	2 ( 0.8)	234 ( 4.5)!	32 ( 2.6)	254 ( 1.6)	53 ( 2.6)	272 ( 1.6)	9 ( 1.2)	295 ( 3.6)	3 ( 0.8)	298 ( 11.5)!						
WASHINGTON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )						
WEST VIRGINIA	5 ( 1.1)	237 ( 2.6)!	52 ( 3.1)	254 ( 1.1)	39 ( 3.2)	267 ( 2.2)	4 ( 1.1)	281 ( 6.3)!	1 ( 0.4)	... ( ... )						
WISCONSIN	1 ( 0.5)	... ( ... )	34 ( 3.9)	272 ( 2.0)	57 ( 4.3)	282 ( 2.2)	7 ( 1.7)	290 ( 6.1)!	1 ( 0.5)	... ( ... )						
WYOMING	2 ( 1.3)	... ( ... )	42 ( 2.7)	272 ( 1.3)	43 ( 2.8)	278 ( 1.1)	11 ( 1.8)	283 ( 2.3)	2 ( 1.1)	... ( ... )						
<b>Other Jurisdictions</b>																
DDESS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )						
DoDDS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )						
GUAM	3 ( 0.3)	... ( ... )	32 ( 0.9)	229 ( 1.9)	38 ( 1.1)	235 ( 1.5)	7 ( 0.8)	255 ( 5.0)	19 ( 1.1)	246 ( 2.0)						

— State or other jurisdiction did not participate in the NAEP assessment year presented in this table.  
 ... Characteristics of the sample do not permit a reliable estimate.  
 ! Interpret with caution — the nature of the sample does not allow accurate determination of the variability of this statistic.  
 SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 6.39** (continued)

**1996 Mathematics Assessment**



POPULATION:

1996 Grade 8 Public School Students

REPORTED STATISTICS:

Percentage of Students and Average Mathematics Scale Score

TEACHERS' REPORTS ON:

Amount of Homework Assigned

Approximately how much mathematics homework do you assign each day?

None	15 Minutes	30 Minutes	45 Minutes	One Hour or More
------	------------	------------	------------	------------------

JURISDICTIONS	PCT ( SE)		SS ( SE)		PCT ( SE)		SS ( SE)		PCT ( SE)		SS ( SE)		PCT ( SE)		SS ( SE)	
<b>Nation</b>																
NATION	1 ( 0.5)	...	32 ( 2.7)	266 ( 2.3)	52 ( 2.7)	274 ( 1.9)>	10 ( 1.2)	284 ( 3.9)	5 ( 0.8)	281 ( 3.6)						
NORTHEAST	0 ( ...)	...	20 ( 4.3)	265 ( 8.3)!	60 ( 6.3)	280 ( 4.4)	15 ( 3.6)	284 ( 6.1)!	5 ( 1.8)	...						
SOUTHEAST	1 ( 0.5)	...	41 ( 5.3)	258 ( 4.2)	49 ( 5.0)	269 ( 4.4)	4 ( 1.1)	287 (10.8)!	4 ( 1.8)	...						
CENTRAL	2 ( 1.1)	...	36 ( 5.1)	273 ( 2.7)	52 ( 5.4)	281 ( 5.7)	7 ( 2.4)	288 ( 8.8)!	3 ( 2.3)	...						
WEST	2 ( 1.3)	...	30 ( 5.3)	268 ( 5.6)!	49 ( 5.1)	268 ( 3.0)	13 ( 2.4)	282 ( 7.5)!	5 ( 1.0)	294 ( 6.4)!						
<b>States</b>																
ALABAMA	3 ( 1.4)	243 ( 4.6)!	31 ( 3.6)	247 ( 3.1)	52 ( 4.2)	260 ( 3.0)	11 ( 3.0)	271 ( 4.1)!	3 ( 1.0)	...						
ALASKA†	3 ( 1.5)	...	26 ( 2.6)	277 ( 4.0)	47 ( 3.0)	277 ( 3.5)	17 ( 2.6)	281 ( 3.3)	7 ( 1.0)	292 ( 3.2)						
ARIZONA	3 ( 0.9)	...	36 ( 4.1)	261 ( 2.2)	47 ( 3.9)	269 ( 2.3)	10 ( 1.6)	290 ( 3.4)	5 ( 1.4)	291 (11.0)!						
ARKANSAS†	6 ( 2.7)	233 ( 9.7)!	34 ( 4.9)	261 ( 2.1)	49 ( 4.4)	266 ( 1.8)>	7 ( 1.6)	274 ( 7.1)!	3 ( 1.3)	...						
CALIFORNIA	2 ( 0.8)	...	26 ( 3.4)	259 ( 2.5)	51 ( 3.2)	262 ( 2.4)	13 ( 2.1)	277 ( 5.7)	8 ( 1.5)	281 ( 6.0)						
COLORADO	1 ( 0.8)	...	21 ( 3.0)	267 ( 2.6)	50 ( 3.0)	272 ( 1.6)	19 ( 2.3)	287 ( 3.2)	7 ( 1.7)	299 ( 4.8)!						
CONNECTICUT	0 ( 0.2)	...	18 ( 2.2)	265 ( 2.3)	61 ( 2.1)	281 ( 1.6)	16 ( 1.7)	298 ( 4.1)	5 ( 1.0)	298 ( 4.7)!						
DELAWARE	1 ( 0.2)	...	21 ( 1.0)<	257 ( 2.5)	66 ( 1.2)>	267 ( 1.2)	10 ( 0.8)	292 ( 3.6)	2 ( 0.3)<	...						
DISTRICT OF COLUMBIA	0 ( ...)	...	25 ( 1.0)	233 ( 2.1)	44 ( 1.1)<	232 ( 2.0)	17 ( 1.3)	234 ( 4.5)	14 ( 0.6)>	221 ( 3.0)<						
FLORIDA	2 ( 0.8)	...	31 ( 3.2)	256 ( 5.1)	46 ( 2.7)	264 ( 1.7)	16 ( 2.5)	274 ( 3.7)	5 ( 0.8)	281 ( 7.5)						
GEORGIA	2 ( 0.9)	...	23 ( 2.6)	254 ( 2.7)	59 ( 2.7)	263 ( 2.3)	13 ( 1.9)	283 ( 5.3)	3 ( 0.8)	292 ( 6.6)!						
HAWAII	3 ( 0.6)	...	29 ( 1.1)>	249 ( 2.2)	44 ( 1.2)<	264 ( 1.8)>	16 ( 1.0)	270 ( 2.5)	7 ( 0.7)	292 ( 4.2)						
INDIANA	2 ( 0.9)	...	28 ( 2.8)	270 ( 2.8)	53 ( 3.3)	278 ( 2.1)	13 ( 2.5)	283 ( 5.5)!	4 ( 1.1)	276 ( 8.1)!						
IOWA†	1 ( 0.3)	...	36 ( 4.1)	274 ( 2.1)	44 ( 4.0)	289 ( 1.5)	17 ( 3.7)	292 ( 2.3)!	2 ( 0.9)	...						
KENTUCKY	3 ( 1.0)	...	32 ( 3.1)	260 ( 1.9)	53 ( 3.3)	270 ( 1.9)	10 ( 2.4)	282 ( 6.3)!	2 ( 0.5)	...						
LOUISIANA	2 ( ...)	...	40 ( 3.8)	252 ( 1.9)	48 ( 3.8)	256 ( 2.4)	8 ( 2.4)	250 ( 9.3)!	2 ( 0.6)	...						
MAINE	1 ( 0.3)	...	14 ( 2.0)<	271 ( 3.7)	65 ( 2.7)	283 ( 1.6)	17 ( 2.6)	291 ( 3.0)	2 ( 0.8)	...						
MARYLAND†	0 ( ...)	...	30 ( 3.2)	255 ( 2.8)	49 ( 3.1)	273 ( 3.1)	15 ( 2.2)	291 ( 5.2)	6 ( 1.5)	292 ( 8.5)!						
MASSACHUSETTS	0 ( ...)	...	12 ( 1.6)	258 ( 3.6)	62 ( 2.7)	275 ( 2.1)	21 ( 2.7)	294 ( 4.0)	4 ( 1.2)	301 (10.5)!						
MICHIGAN†	3 ( 1.0)	...	23 ( 3.5)	269 ( 3.4)	60 ( 3.8)	281 ( 2.3)>	12 ( 2.1)	299 ( 4.3)>	3 ( 1.1)	...						
MINNESOTA	2 ( 0.8)	...	26 ( 2.8)	272 ( 1.9)	56 ( 2.9)	286 ( 1.8)	13 ( 2.0)	298 ( 4.7)	4 ( 1.2)	297 ( 8.9)!						
MISSISSIPPI	2 ( 0.9)	...	36 ( 3.6)	249 ( 1.9)	53 ( 3.6)	251 ( 2.3)	7 ( 1.7)	255 ( 6.0)!	2 ( 0.7)	...						
MISSOURI	2 ( 0.8)	...	30 ( 3.8)	270 ( 2.1)	49 ( 3.6)	274 ( 2.1)	16 ( 2.8)	286 ( 4.2)	3 ( 1.4)	282 ( 9.9)!						
MONTANA†	2 ( 0.7)	...	41 ( 3.3)	279 ( 2.0)	44 ( 3.3)	283 ( 2.1)	11 ( 2.3)	296 ( 3.5)!	3 ( 1.1)	312 ( 5.1)!						
NEBRASKA	2 ( 0.6)	...	32 ( 2.8)	273 ( 1.9)	51 ( 2.6)	284 ( 1.5)	12 ( 2.1)	299 ( 3.1)	3 ( 1.1)	299 ( 6.0)!						
NEW MEXICO	4 ( 0.7)	...	16 ( 1.4)<	254 ( 2.2)	56 ( 2.6)>	262 ( 1.4)	20 ( 2.2)	278 ( 2.8)	5 ( 0.5)	285 ( 4.2)						
NEW YORK†	0 ( ...)	...	36 ( 4.2)	272 ( 2.5)	55 ( 4.0)	274 ( 2.4)	6 ( 1.2)	288 ( 8.9)!	3 ( 1.5)	...						
NORTH CAROLINA	2 ( 0.8)	...	31 ( 2.7)	257 ( 2.1)>	54 ( 2.8)	268 ( 2.1)	11 ( 1.8)	297 ( 3.7)>	3 ( 0.9)	280 ( 8.1)!						
NORTH DAKOTA	1 ( 0.3)	...	22 ( 2.2)	278 ( 2.6)	56 ( 2.7)	283 ( 1.4)	20 ( 2.1)	297 ( 2.2)	1 ( 0.2)	...						
OREGON	3 ( 1.1)	262 ( 7.0)!	34 ( 2.7)	266 ( 2.3)	48 ( 2.9)	282 ( 2.7)	12 ( 2.0)	293 ( 5.1)	3 ( 1.3)	...						
RHODE ISLAND	2 ( 0.3)	...	20 ( 1.0)	255 ( 2.7)	57 ( 1.2)	272 ( 0.9)>	17 ( 0.9)	279 ( 3.6)	4 ( 0.5)<	310 ( 4.3)>						
SOUTH CAROLINA†	4 ( 1.4)	228 ( 5.4)!	37 ( 4.2)	252 ( 2.6)	45 ( 4.0)	265 ( 2.5)	10 ( 1.9)	285 ( 6.1)	5 ( 1.5)	265 ( 8.9)!						
TENNESSEE	4 ( 1.5)	232 ( 8.8)!	27 ( 2.9)	258 ( 2.5)	46 ( 3.7)	269 ( 2.1)>	17 ( 3.4)	274 ( 5.2)!	6 ( 1.6)	267 ( 8.2)!						
TEXAS	5 ( 1.8)	247 ( 4.3)!	31 ( 2.7)	259 ( 2.0)	39 ( 3.2)	275 ( 2.5)	20 ( 2.6)	287 ( 2.9)	5 ( 1.2)	274 ( 9.1)!						
UTAH	4 ( 0.7)	259 ( 3.9)	30 ( 2.0)	271 ( 1.8)	51 ( 1.9)	280 ( 1.1)	13 ( 1.2)	291 ( 2.7)	3 ( 1.0)	286 (10.4)!						
VERMONT†	1 ( 0.2)	...	19 ( 2.5)	264 ( 2.5)	61 ( 3.1)	280 ( 1.6)	17 ( 2.4)	294 ( 3.4)	2 ( 0.6)	...						
VIRGINIA	0 ( 0.1)	...	27 ( 2.6)	255 ( 2.0)	57 ( 2.4)	270 ( 1.9)	13 ( 1.4)	297 ( 3.6)	4 ( 1.1)	292 (14.6)!						
WASHINGTON	5 ( 1.1)	257 ( 6.2)!	32 ( 3.2)	267 ( 3.1)	49 ( 3.2)	282 ( 1.9)	11 ( 1.8)	286 ( 3.8)	4 ( 1.2)	290 ( 7.3)!						
WEST VIRGINIA	6 ( 1.6)	242 ( 3.8)!	47 ( 3.0)	258 ( 1.7)	37 ( 2.9)	272 ( 2.1)	9 ( 1.7)	285 ( 3.8)	1 ( 0.7)	...						
WISCONSIN†	2 ( 0.8)	...	32 ( 3.1)	273 ( 2.7)	51 ( 3.3)	286 ( 2.4)	14 ( 2.3)	297 ( 4.1)	2 ( 0.7)	...						
WYOMING	3 ( 0.3)	...	43 ( 1.2)	269 ( 1.5)	43 ( 1.3)	279 ( 1.3)	8 ( 0.7)	283 ( 4.4)	4 ( 0.3)	301 ( 2.2)						
<b>Other Jurisdictions</b>																
DDESS	0 ( ...)	...	41 ( 1.6)	263 ( 4.1)	52 ( 2.1)	268 ( 2.8)	7 ( 1.0)	...	0 ( ...)	...						
DoDDS	5 ( 0.2)	265 ( 3.7)	36 ( 1.1)	264 ( 1.2)	40 ( 1.0)	279 ( 1.4)	13 ( 0.8)	293 ( 2.1)	7 ( 0.3)	285 ( 3.3)						
GUAM	6 ( 0.7)	...	10 ( 0.9)<	...	23 ( 1.6)<	233 ( 4.5)	14 ( 1.2)>	241 ( 6.8)	47 ( 1.2)>	234 ( 3.2)<						

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).  
 ... Characteristics of the sample do not permit a reliable estimate.  
 > (<) The value for the students was significantly higher (lower) than in the 1992 assessment at about the 95% confidence level using appropriate multiple comparison procedures.  
 ! Interpret with caution — the nature of the sample does not allow accurate determination of the variability of this statistic.  
 SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 6.40**

**1992 Mathematics Assessment**



POPULATION:

1992 Grade 8 Public School Students

REPORTED STATISTICS:

Percentage of Students and Average Mathematics Scale Score

STUDENTS' REPORTS ON:

Time Spent on Homework

*Approximately how much time do you spend on mathematics homework each day?*

**I Am Not Taking Mathematics This Year**

**None**

**15 Minutes**

**JURISDICTIONS**

PCT ( SE )

SS ( SE )

PCT ( SE )

SS ( SE )

PCT ( SE )

SS ( SE )

**Nation**

NATION	0 ( 0.1 )	... ( ... )	8 ( 0.4 )	254 ( 2.4 )	27 ( 0.8 )	269 ( 1.4 )
NORTHEAST	0 ( ... )	... ( ... )	7 ( 0.9 )	256 ( 5.8 )	33 ( 2.5 )	267 ( 3.6 )
SOUTHEAST	0 ( 0.2 )	... ( ... )	9 ( 1.1 )	246 ( 4.1 )	25 ( 0.9 )	262 ( 3.0 )
CENTRAL	0 ( 0.2 )	... ( ... )	6 ( 0.6 )	262 ( 5.1 )	31 ( 1.5 )	278 ( 2.6 )
WEST	0 ( ... )	... ( ... )	9 ( 0.8 )	256 ( 4.2 )	22 ( 1.5 )	267 ( 2.1 )

**States**

ALABAMA	0 ( 0.1 )	... ( ... )	8 ( 0.8 )	247 ( 2.6 )	26 ( 1.2 )	255 ( 2.1 )
ALASKA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
ARIZONA	0 ( 0.1 )	... ( ... )	9 ( 0.9 )	259 ( 3.0 )	26 ( 1.4 )	267 ( 1.6 )
ARKANSAS	0 ( 0.1 )	... ( ... )	9 ( 0.9 )	251 ( 2.3 )	30 ( 0.9 )	260 ( 1.5 )
CALIFORNIA	0 ( ... )	... ( ... )	7 ( 0.6 )	250 ( 3.1 )	25 ( 1.3 )	258 ( 2.1 )
COLORADO	0 ( 0.1 )	... ( ... )	8 ( 0.6 )	259 ( 3.2 )	26 ( 1.0 )	275 ( 1.7 )
CONNECTICUT	0 ( 0.1 )	... ( ... )	5 ( 0.7 )	255 ( 4.0 )	33 ( 1.1 )	276 ( 1.6 )
DELAWARE	0 ( ... )	... ( ... )	7 ( 0.6 )	249 ( 2.9 )	36 ( 1.4 )	264 ( 1.7 )
DISTRICT OF COLUMBIA	0 ( 0.2 )	... ( ... )	10 ( 0.8 )	226 ( 3.3 )	27 ( 0.9 )	238 ( 1.5 )
FLORIDA	0 ( ... )	... ( ... )	10 ( 1.0 )	251 ( 2.6 )	28 ( 1.2 )	262 ( 2.1 )
GEORGIA	0 ( ... )	... ( ... )	8 ( 0.6 )	247 ( 3.0 )	26 ( 1.1 )	260 ( 1.8 )
HAWAII	0 ( 0.1 )	... ( ... )	7 ( 0.6 )	240 ( 3.1 )	24 ( 0.8 )	251 ( 1.6 )
INDIANA	0 ( ... )	... ( ... )	7 ( 0.8 )	261 ( 3.5 )	31 ( 1.3 )	271 ( 1.4 )
IOWA	0 ( 0.1 )	... ( ... )	6 ( 0.6 )	271 ( 5.1 )	32 ( 1.1 )	286 ( 1.3 )
KENTUCKY	0 ( 0.1 )	... ( ... )	11 ( 0.6 )	252 ( 2.4 )	28 ( 1.2 )	262 ( 1.5 )
LOUISIANA	0 ( 0.1 )	... ( ... )	8 ( 0.7 )	253 ( 3.0 )	30 ( 1.2 )	255 ( 2.0 )
MAINE	0 ( 0.1 )	... ( ... )	5 ( 0.6 )	261 ( 5.0 )	29 ( 1.3 )	277 ( 1.5 )
MARYLAND	0 ( ... )	... ( ... )	5 ( 0.8 )	251 ( 4.3 )	34 ( 1.3 )	264 ( 1.8 )
MASSACHUSETTS	0 ( 0.1 )	... ( ... )	4 ( 0.5 )	249 ( 3.8 )	30 ( 1.4 )	271 ( 1.6 )
MICHIGAN	0 ( ... )	... ( ... )	8 ( 0.7 )	258 ( 2.9 )	25 ( 1.1 )	271 ( 2.1 )
MINNESOTA	0 ( ... )	... ( ... )	7 ( 0.8 )	278 ( 2.8 )	28 ( 1.4 )	284 ( 1.4 )
MISSISSIPPI	0 ( 0.2 )	... ( ... )	7 ( 1.0 )	242 ( 3.3 )	26 ( 1.2 )	249 ( 1.7 )
MISSOURI	0 ( 0.1 )	... ( ... )	7 ( 0.5 )	262 ( 2.9 )	27 ( 1.3 )	273 ( 1.6 )
MONTANA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
NEBRASKA	0 ( 0.1 )	... ( ... )	6 ( 0.6 )	271 ( 3.0 )	25 ( 1.4 )	277 ( 2.0 )
NEW MEXICO	0 ( 0.1 )	... ( ... )	11 ( 0.9 )	254 ( 2.4 )	25 ( 1.0 )	262 ( 1.3 )
NEW YORK	0 ( ... )	... ( ... )	4 ( 0.5 )	248 ( 6.5 )	42 ( 1.9 )	269 ( 1.7 )
NORTH CAROLINA	0 ( 0.1 )	... ( ... )	7 ( 0.7 )	245 ( 2.8 )	29 ( 1.3 )	258 ( 1.7 )
NORTH DAKOTA	0 ( ... )	... ( ... )	6 ( 0.6 )	283 ( 2.8 )	24 ( 1.4 )	287 ( 2.0 )
OREGON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
RHODE ISLAND	0 ( ... )	... ( ... )	4 ( 0.4 )	248 ( 3.3 )	34 ( 1.5 )	267 ( 1.6 )
SOUTH CAROLINA	0 ( 0.1 )	... ( ... )	7 ( 0.6 )	255 ( 2.4 )	32 ( 1.0 )	261 ( 1.5 )
TENNESSEE	0 ( 0.1 )	... ( ... )	7 ( 1.0 )	252 ( 3.7 )	26 ( 1.2 )	261 ( 1.9 )
TEXAS	0 ( 0.1 )	... ( ... )	9 ( 0.8 )	253 ( 2.9 )	23 ( 1.1 )	265 ( 1.6 )
UTAH	0 ( 0.1 )	... ( ... )	10 ( 0.7 )	270 ( 1.9 )	28 ( 1.0 )	277 ( 1.1 )
VERMONT	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
VIRGINIA	0 ( 0.1 )	... ( ... )	6 ( 0.5 )	248 ( 3.2 )	29 ( 1.1 )	267 ( 1.5 )
WASHINGTON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
WEST VIRGINIA	0 ( 0.1 )	... ( ... )	15 ( 1.3 )	254 ( 1.9 )	27 ( 1.1 )	263 ( 1.1 )
WISCONSIN	0 ( 0.1 )	... ( ... )	8 ( 0.8 )	271 ( 2.6 )	33 ( 1.4 )	280 ( 1.6 )
WYOMING	0 ( ... )	... ( ... )	11 ( 0.9 )	268 ( 2.2 )	30 ( 1.1 )	280 ( 1.2 )

**Other Jurisdictions**

DDESS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
DoDDS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
GUAM	0 ( 0.1 )	... ( ... )	10 ( 0.9 )	226 ( 3.9 )	22 ( 1.0 )	234 ( 2.1 )

— State or other jurisdiction did not participate in the NAEP assessment year presented in this table.

... Characteristics of the sample do not permit a reliable estimate.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.



**TABLE 6.40** (continued) **1992 Mathematics Assessment**



POPULATION: **1992 Grade 8 Public School Students**  
 REPORTED STATISTICS: **Percentage of Students and Average Mathematics Scale Score**  
 STUDENTS' REPORTS ON: **Time Spent on Homework**

*Approximately how much time do you spend on mathematics homework each day?*

	30 Minutes	45 Minutes	One Hour or More
--	------------	------------	------------------

JURISDICTIONS	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )
<b>Nation</b>						
NATION	35 ( 0.7)	269 ( 1.3)	16 ( 0.6)	269 ( 1.7)	13 ( 0.7)	266 ( 2.0)
NORTHEAST	36 ( 1.5)	272 ( 4.5)	15 ( 1.3)	276 ( 3.6)	8 ( 1.3)	266 ( 6.3)
SOUTHEAST	34 ( 1.4)	262 ( 1.8)	17 ( 0.9)	261 ( 2.8)	14 ( 1.4)	255 ( 2.8)
CENTRAL	38 ( 1.4)	273 ( 2.7)	15 ( 1.5)	274 ( 3.1)	10 ( 0.8)	270 ( 3.1)
WEST	33 ( 1.0)	270 ( 2.3)	17 ( 1.0)	270 ( 4.3)	18 ( 1.6)	271 ( 3.4)
<b>States</b>						
ALABAMA	33 ( 1.0)	254 ( 2.0)	16 ( 0.9)	252 ( 2.7)	16 ( 0.9)	247 ( 2.8)
ALASKA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
ARIZONA	32 ( 1.1)	265 ( 1.6)	18 ( 0.8)	268 ( 2.0)	15 ( 1.7)	265 ( 2.5)
ARKANSAS	30 ( 1.1)	258 ( 1.6)	17 ( 0.7)	257 ( 2.4)	14 ( 0.9)	250 ( 2.4)
CALIFORNIA	38 ( 1.1)	263 ( 2.0)	16 ( 1.0)	264 ( 2.6)	13 ( 0.8)	266 ( 3.2)
COLORADO	34 ( 1.1)	273 ( 1.4)	17 ( 0.8)	277 ( 1.7)	14 ( 0.9)	270 ( 2.1)
CONNECTICUT	40 ( 1.0)	274 ( 1.3)	13 ( 0.8)	284 ( 2.1)	8 ( 0.8)	265 ( 3.9)
DELAWARE	35 ( 1.1)	266 ( 1.4)	14 ( 0.8)	263 ( 2.8)	8 ( 0.7)	259 ( 3.1)
DISTRICT OF COLUMBIA	32 ( 1.0)	238 ( 1.5)	16 ( 1.0)	235 ( 1.7)	15 ( 0.8)	232 ( 2.2)
FLORIDA	32 ( 0.9)	261 ( 1.8)	15 ( 0.7)	261 ( 2.2)	15 ( 0.8)	261 ( 2.8)
GEORGIA	35 ( 1.0)	260 ( 1.5)	16 ( 1.0)	264 ( 2.1)	14 ( 0.8)	261 ( 2.4)
HAWAII	33 ( 1.0)	261 ( 1.3)	16 ( 1.0)	264 ( 1.9)	19 ( 0.9)	263 ( 1.9)
INDIANA	36 ( 1.3)	271 ( 1.6)	16 ( 0.8)	269 ( 2.3)	10 ( 0.7)	271 ( 2.7)
IOWA	36 ( 1.1)	283 ( 1.2)	16 ( 0.9)	285 ( 1.9)	9 ( 0.6)	280 ( 1.9)
KENTUCKY	31 ( 1.1)	266 ( 1.4)	16 ( 0.9)	264 ( 2.2)	14 ( 0.8)	261 ( 2.3)
LOUISIANA	32 ( 1.1)	251 ( 2.3)	15 ( 0.8)	249 ( 2.3)	15 ( 0.8)	240 ( 2.7)
MAINE	40 ( 1.0)	282 ( 1.2)	17 ( 0.8)	280 ( 2.1)	9 ( 0.7)	278 ( 3.2)
MARYLAND	40 ( 1.2)	270 ( 1.6)	12 ( 0.8)	268 ( 2.7)	8 ( 0.8)	257 ( 3.3)
MASSACHUSETTS	41 ( 1.1)	274 ( 1.4)	16 ( 0.9)	279 ( 1.8)	9 ( 0.9)	274 ( 3.6)
MICHIGAN	36 ( 1.1)	269 ( 1.8)	17 ( 0.8)	270 ( 2.4)	14 ( 0.9)	260 ( 2.5)
MINNESOTA	36 ( 1.2)	284 ( 1.3)	16 ( 0.9)	282 ( 2.2)	12 ( 1.0)	279 ( 2.4)
MISSISSIPPI	34 ( 1.2)	249 ( 1.4)	17 ( 1.0)	242 ( 2.3)	17 ( 1.0)	244 ( 2.6)
MISSOURI	36 ( 1.0)	271 ( 1.5)	16 ( 0.8)	273 ( 2.1)	14 ( 1.0)	269 ( 2.5)
MONTANA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
NEBRASKA	37 ( 1.1)	281 ( 1.5)	20 ( 1.0)	277 ( 2.2)	12 ( 1.1)	275 ( 2.2)
NEW MEXICO	33 ( 1.0)	258 ( 1.0)	17 ( 0.9)	261 ( 1.8)	15 ( 1.0)	264 ( 2.2)
NEW YORK	36 ( 1.3)	271 ( 2.3)	11 ( 1.1)	266 ( 3.5)	7 ( 1.0)	248 ( 5.6)
NORTH CAROLINA	35 ( 1.2)	262 ( 1.5)	17 ( 1.0)	261 ( 2.1)	12 ( 0.7)	254 ( 2.7)
NORTH DAKOTA	36 ( 1.4)	284 ( 1.3)	20 ( 1.3)	281 ( 2.0)	14 ( 1.1)	278 ( 2.2)
OREGON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
RHODE ISLAND	40 ( 1.0)	267 ( 1.5)	13 ( 0.8)	268 ( 2.4)	9 ( 0.7)	269 ( 2.8)
SOUTH CAROLINA	36 ( 0.9)	263 ( 1.4)	14 ( 0.7)	260 ( 2.6)	11 ( 0.7)	260 ( 2.3)
TENNESSEE	36 ( 1.2)	260 ( 1.5)	18 ( 0.9)	261 ( 2.5)	13 ( 0.9)	252 ( 3.1)
TEXAS	30 ( 0.9)	266 ( 1.7)	19 ( 1.0)	269 ( 2.3)	18 ( 1.1)	266 ( 2.6)
UTAH	32 ( 0.9)	273 ( 1.2)	16 ( 0.7)	276 ( 1.6)	14 ( 0.8)	275 ( 2.1)
VERMONT	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
VIRGINIA	39 ( 1.0)	269 ( 1.3)	15 ( 0.9)	273 ( 2.4)	11 ( 0.8)	268 ( 3.1)
WASHINGTON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
WEST VIRGINIA	31 ( 1.1)	261 ( 1.3)	16 ( 0.9)	259 ( 2.0)	10 ( 0.8)	255 ( 2.0)
WISCONSIN	36 ( 1.2)	280 ( 1.7)	14 ( 0.8)	280 ( 2.4)	9 ( 0.7)	267 ( 3.3)
WYOMING	31 ( 0.9)	276 ( 1.2)	16 ( 0.9)	274 ( 1.4)	13 ( 0.8)	269 ( 2.1)
<b>Other Jurisdictions</b>						
DDESS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
DoDDS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
GUAM	29 ( 1.4)	240 ( 2.0)	14 ( 1.0)	241 ( 3.0)	25 ( 1.2)	237 ( 2.1)

— State or other jurisdiction did not participate in the NAEP assessment year presented in this table.  
 SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 6.40** (continued) **1996 Mathematics Assessment**



POPULATION: **1996 Grade 8 Public School Students**  
 REPORTED STATISTICS: **Percentage of Students and Average Mathematics Scale Score**  
 STUDENTS' REPORTS ON: **Time Spent on Homework**

*Approximately how much time do you spend on mathematics homework each day?*

	I Am Not Taking Mathematics This Year		None		15 Minutes	
JURISDICTIONS	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )
<b>Nation</b>						
NATION	0 ( 0.0)	... ( ... )	8 ( 0.8)	260 ( 2.9)	33 ( 1.1)>	273 ( 1.2)
NORTHEAST	0 ( ... )	... ( ... )	5 ( 1.1)	... ( ... )	35 ( 3.6)	276 ( 2.8)
SOUTHEAST	0 ( 0.1)	... ( ... )	10 ( 1.4)	260 ( 4.0)	32 ( 1.2)>	270 ( 2.8)
CENTRAL	0 ( ... )	... ( ... )	8 ( 1.3)	258 ( 6.7)	35 ( 3.1)	279 ( 2.8)
WEST	0 ( 0.1)	... ( ... )	10 ( 1.9)	261 ( 6.5)!	30 ( 1.2)>	269 ( 3.0)
<b>States</b>						
ALABAMA	0 ( 0.2)	... ( ... )	11 ( 1.0)	246 ( 4.3)	29 ( 1.2)	262 ( 2.5)
ALASKA†	0 ( 0.1)	... ( ... )	9 ( 1.1)	257 ( 4.5)	22 ( 1.1)	279 ( 2.8)
ARIZONA	0 ( 0.1)	... ( ... )	9 ( 0.8)	263 ( 3.0)	29 ( 1.1)	268 ( 1.6)
ARKANSAS†	0 ( 0.2)	... ( ... )	14 ( 1.5)	257 ( 3.8)	29 ( 1.4)	265 ( 1.7)
CALIFORNIA	0 ( 0.2)	... ( ... )	6 ( 0.7)	247 ( 3.7)	29 ( 1.3)	261 ( 2.3)
COLORADO	0 ( 0.1)	... ( ... )	6 ( 0.6)	264 ( 2.8)	27 ( 1.1)	276 ( 1.6)
CONNECTICUT	0 ( 0.1)	... ( ... )	5 ( 0.5)	264 ( 3.1)	35 ( 1.5)	277 ( 1.6)
DELAWARE	0 ( 0.2)	... ( ... )	6 ( 0.6)	257 ( 5.3)	36 ( 1.3)	265 ( 1.9)
DISTRICT OF COLUMBIA	0 ( 0.2)	... ( ... )	7 ( 0.6)	221 ( 4.3)	25 ( 1.0)	236 ( 2.1)
FLORIDA	0 ( 0.1)	... ( ... )	10 ( 0.9)	253 ( 4.9)	29 ( 1.3)	265 ( 2.2)
GEORGIA	0 ( 0.1)	... ( ... )	9 ( 0.9)	247 ( 2.8)	28 ( 1.4)	269 ( 2.0)>
HAWAII	0 ( ... )	... ( ... )	7 ( 0.7)	245 ( 5.2)	28 ( 0.9)>	256 ( 1.6)
INDIANA	0 ( ... )	... ( ... )	8 ( 0.8)	261 ( 4.6)	30 ( 1.1)	275 ( 1.6)
IOWA†	0 ( 0.1)	... ( ... )	8 ( 0.7)	278 ( 4.1)	34 ( 1.7)	283 ( 1.9)
KENTUCKY	0 ( 0.1)	... ( ... )	12 ( 0.9)	261 ( 2.0)	29 ( 1.1)	270 ( 1.5)>
LOUISIANA	1 ( 0.3)	... ( ... )	13 ( 1.3)>	254 ( 2.1)	38 ( 1.3)>	257 ( 1.9)
MAINE	0 ( 0.1)	... ( ... )	4 ( 0.6)	262 ( 5.4)	31 ( 1.1)	284 ( 1.8)>
MARYLAND†	0 ( 0.1)	... ( ... )	5 ( 0.5)	254 ( 4.5)	37 ( 1.8)	268 ( 2.1)
MASSACHUSETTS	0 ( 0.1)	... ( ... )	4 ( 0.4)	262 ( 4.3)	33 ( 1.7)	274 ( 1.7)
MICHIGAN†	0 ( 0.1)	... ( ... )	8 ( 1.0)	271 ( 3.9)	28 ( 1.2)	280 ( 2.2)>
MINNESOTA	0 ( 0.1)	... ( ... )	9 ( 0.7)	275 ( 3.1)	32 ( 1.1)	285 ( 1.8)
MISSISSIPPI	1 ( 0.2)	... ( ... )	11 ( 0.9)	246 ( 2.3)	31 ( 0.9)>	252 ( 1.6)
MISSOURI	0 ( 0.1)	... ( ... )	9 ( 0.9)	261 ( 2.6)	30 ( 1.2)	277 ( 1.7)
MONTANA†	0 ( ... )	... ( ... )	9 ( 0.7)	274 ( 4.6)	30 ( 1.4)	287 ( 1.9)
NEBRASKA	0 ( ... )	... ( ... )	8 ( 0.7)	276 ( 2.8)	31 ( 1.2)	283 ( 1.9)
NEW MEXICO	1 ( 0.2)	... ( ... )	11 ( 0.7)	253 ( 3.0)	23 ( 0.9)	262 ( 2.0)
NEW YORK†	0 ( ... )	... ( ... )	4 ( 0.5)	252 ( 6.4)	38 ( 1.4)	276 ( 1.6)
NORTH CAROLINA	0 ( 0.1)	... ( ... )	6 ( 0.5)	250 ( 4.3)	28 ( 1.2)	269 ( 2.1)>
NORTH DAKOTA	0 ( 0.2)	... ( ... )	8 ( 0.7)	283 ( 2.9)	28 ( 1.3)	288 ( 1.5)
OREGON	0 ( 0.2)	... ( ... )	12 ( 0.8)	261 ( 2.7)	30 ( 1.2)	275 ( 1.9)
RHODE ISLAND	0 ( 0.1)	... ( ... )	6 ( 0.6)	248 ( 3.7)	36 ( 1.2)	269 ( 1.8)
SOUTH CAROLINA†	1 ( 0.2)	... ( ... )	7 ( 0.7)	257 ( 2.9)	32 ( 1.1)	261 ( 2.2)
TENNESSEE	0 ( 0.2)	... ( ... )	9 ( 0.9)	254 ( 4.3)	30 ( 1.3)	265 ( 1.7)
TEXAS	0 ( 0.2)	... ( ... )	10 ( 0.8)	260 ( 3.3)	26 ( 1.2)	272 ( 1.8)>
UTAH	0 ( 0.1)	... ( ... )	12 ( 0.6)	273 ( 2.1)	32 ( 1.0)	277 ( 1.4)
VERMONT†	0 ( ... )	... ( ... )	5 ( 0.8)	255 ( 4.4)	30 ( 1.3)	279 ( 1.5)
VIRGINIA	0 ( 0.1)	... ( ... )	8 ( 0.8)	254 ( 3.6)	33 ( 1.1)	268 ( 1.8)
WASHINGTON	0 ( 0.1)	... ( ... )	12 ( 1.0)	265 ( 2.6)	30 ( 0.9)	280 ( 1.3)
WEST VIRGINIA	0 ( 0.1)	... ( ... )	14 ( 1.0)	255 ( 1.8)	30 ( 1.1)	269 ( 1.3)>
WISCONSIN†	0 ( 0.1)	... ( ... )	8 ( 0.9)	273 ( 3.4)	32 ( 1.4)	283 ( 1.6)
WYOMING	0 ( 0.1)	... ( ... )	10 ( 0.7)	270 ( 3.7)	31 ( 1.2)	278 ( 1.2)
<b>Other Jurisdictions</b>						
DDESS	0 ( ... )	... ( ... )	7 ( 1.1)	... ( ... )	31 ( 1.7)	265 ( 4.7)
DoDDS	0 ( 0.1)	... ( ... )	10 ( 0.6)	268 ( 3.2)	27 ( 1.1)	274 ( 1.7)
GUAM	0 ( 0.2)	... ( ... )	9 ( 1.1)	222 ( 5.8)	23 ( 1.3)	232 ( 3.6)

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).  
 ... Characteristics of the sample do not permit a reliable estimate.  
 > (<) The value for the students was significantly higher (lower) than in the 1992 assessment at about the 95% confidence level using appropriate multiple comparison procedures.  
 ! Interpret with caution — the nature of the sample does not allow accurate determination of the variability of this statistic.  
 SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 6.40** (continued) **1996 Mathematics Assessment**



POPULATION: **1996 Grade 8 Public School Students**  
 REPORTED STATISTICS: **Percentage of Students and Average Mathematics Scale Score**  
 STUDENTS' REPORTS ON: **Time Spent on Homework**

*Approximately how much time do you spend on mathematics homework each day?*

	30 Minutes	45 Minutes	One Hour or More
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JURISDICTIONS	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )
<b>Nation</b>						
NATION	33 ( 0.8)	274 ( 1.8)	16 ( 0.7)	270 ( 2.1)	10 ( 0.6)<	267 ( 3.1)
NORTHEAST	37 ( 2.5)	279 ( 5.4)	16 ( 2.0)	275 ( 5.1)	7 ( 1.4)	276 ( 6.8)
SOUTHEAST	31 ( 1.2)	263 ( 2.9)	16 ( 1.5)	263 ( 4.3)	11 ( 1.0)	258 ( 6.2)
CENTRAL	33 ( 1.5)	282 ( 3.7)	14 ( 1.7)	276 ( 5.1)	10 ( 1.5)	267 (10.6)
WEST	31 ( 1.2)	271 ( 2.5)	16 ( 1.2)	270 ( 4.3)	12 ( 0.8)	270 ( 3.6)
<b>States</b>						
ALABAMA	32 ( 1.0)	260 ( 2.6)	15 ( 1.1)	257 ( 3.1)	12 ( 0.7)<	247 ( 2.8)
ALASKA†	33 ( 1.1)	278 ( 2.4)	20 ( 1.1)	284 ( 3.9)	16 ( 1.2)	285 ( 3.5)
ARIZONA	32 ( 1.2)	271 ( 1.9)	18 ( 1.1)	269 ( 2.7)	11 ( 0.8)	269 ( 3.6)
ARKANSAS†	31 ( 1.5)	266 ( 1.7)>	16 ( 1.1)	258 ( 2.8)	11 ( 0.8)	257 ( 3.3)
CALIFORNIA	35 ( 1.4)	264 ( 2.2)	16 ( 0.8)	270 ( 3.2)	13 ( 1.0)	266 ( 4.1)
COLORADO	35 ( 1.2)	277 ( 1.4)	18 ( 1.2)	280 ( 2.1)	14 ( 0.9)	274 ( 2.5)
CONNECTICUT	38 ( 1.0)	282 ( 1.7)>	15 ( 0.9)	288 ( 2.4)	7 ( 0.7)	277 ( 3.7)
DELAWARE	35 ( 1.3)	270 ( 1.7)	14 ( 0.8)	270 ( 2.5)	9 ( 1.0)	269 ( 3.4)
DISTRICT OF COLUMBIA	33 ( 0.9)	241 ( 2.3)	19 ( 0.9)	232 ( 3.7)	15 ( 0.8)	223 ( 3.3)
FLORIDA	31 ( 1.0)	266 ( 1.9)	16 ( 0.9)	268 ( 3.0)	12 ( 0.8)	262 ( 2.5)
GEORGIA	33 ( 1.1)	265 ( 2.1)	17 ( 1.0)	260 ( 2.6)	12 ( 0.9)	257 ( 3.2)
HAWAII	32 ( 1.1)	262 ( 1.6)	16 ( 0.8)	271 ( 2.0)	17 ( 0.9)	274 ( 2.5)>
INDIANA	35 ( 1.3)	278 ( 1.6)>	16 ( 0.9)	278 ( 2.8)	10 ( 1.0)	278 ( 3.2)
IOWA†	34 ( 1.2)	286 ( 1.3)	14 ( 1.1)	285 ( 2.3)	9 ( 0.9)	286 ( 3.1)
KENTUCKY	30 ( 1.0)	269 ( 1.5)	16 ( 0.8)	268 ( 2.4)	12 ( 1.0)	259 ( 2.8)
LOUISIANA	27 ( 1.0)	252 ( 1.9)	11 ( 0.8)<	251 ( 2.5)	10 ( 0.7)<	245 ( 2.5)
MAINE	40 ( 0.9)	287 ( 1.5)	16 ( 0.8)	285 ( 2.5)	8 ( 0.9)	284 ( 3.0)
MARYLAND†	36 ( 1.3)	273 ( 2.4)	14 ( 0.8)	277 ( 3.9)	8 ( 0.6)	271 ( 3.6)>
MASSACHUSETTS	40 ( 1.3)	280 ( 2.1)	15 ( 1.2)	287 ( 2.9)	8 ( 0.7)	273 ( 4.5)
MICHIGAN†	33 ( 1.0)	277 ( 2.1)>	18 ( 1.1)	280 ( 2.5)>	13 ( 0.9)	271 ( 3.1)
MINNESOTA	33 ( 1.1)	284 ( 1.6)	16 ( 0.8)	291 ( 2.7)	10 ( 0.9)	284 ( 3.5)
MISSISSIPPI	31 ( 0.9)	254 ( 1.6)	15 ( 0.9)	247 ( 2.4)	12 ( 0.6)<	245 ( 2.5)
MISSOURI	32 ( 1.2)	275 ( 1.8)	16 ( 0.9)	276 ( 2.3)	13 ( 1.0)	267 ( 2.5)
MONTANA†	33 ( 1.2)	284 ( 1.7)	17 ( 0.9)	283 ( 2.1)	11 ( 0.9)	277 ( 3.0)
NEBRASKA	34 ( 1.3)	286 ( 1.6)	17 ( 1.0)	282 ( 1.8)	11 ( 1.0)	280 ( 2.1)
NEW MEXICO	33 ( 1.1)	264 ( 2.0)	17 ( 0.9)	266 ( 2.3)	15 ( 1.0)	265 ( 2.5)
NEW YORK†	37 ( 1.3)	275 ( 2.1)	13 ( 1.0)	263 ( 3.6)	8 ( 0.9)	251 ( 5.6)
NORTH CAROLINA	38 ( 0.9)	270 ( 1.5)>	17 ( 0.9)	267 ( 2.5)	11 ( 0.7)	269 ( 2.8)>
NORTH DAKOTA	32 ( 0.9)	285 ( 1.6)	19 ( 0.9)	283 ( 1.7)	13 ( 0.8)	280 ( 2.7)
OREGON	31 ( 1.4)	281 ( 1.8)	16 ( 0.8)	285 ( 3.1)	12 ( 0.9)	280 ( 3.2)
RHODE ISLAND	36 ( 1.1)	275 ( 1.6)>	13 ( 0.7)	270 ( 2.0)	9 ( 0.7)	263 ( 2.8)
SOUTH CAROLINA†	34 ( 1.3)	263 ( 1.7)	15 ( 0.8)	261 ( 2.5)	11 ( 0.8)	255 ( 4.1)
TENNESSEE	34 ( 1.2)	266 ( 2.2)	16 ( 0.9)	265 ( 2.5)	11 ( 0.9)	258 ( 3.3)
TEXAS	30 ( 1.1)	273 ( 1.9)	17 ( 1.0)	273 ( 2.3)	16 ( 0.8)	268 ( 2.6)
UTAH	30 ( 0.9)	279 ( 1.3)>	15 ( 0.8)	277 ( 2.2)	10 ( 0.7)<	277 ( 2.5)
VERMONT†	36 ( 1.3)	281 ( 1.6)	19 ( 0.9)	283 ( 1.7)	10 ( 1.0)	279 ( 4.0)
VIRGINIA	34 ( 1.1)	274 ( 1.6)	15 ( 0.8)	273 ( 2.6)	9 ( 0.7)	273 ( 3.0)
WASHINGTON	31 ( 1.0)	279 ( 1.7)	15 ( 0.8)	277 ( 2.7)	12 ( 0.7)	274 ( 3.6)
WEST VIRGINIA	32 ( 1.2)	268 ( 1.7)>	14 ( 0.8)	265 ( 2.3)	9 ( 0.8)	259 ( 2.8)
WISCONSIN†	35 ( 1.0)	283 ( 1.8)	16 ( 1.0)	287 ( 2.6)	9 ( 0.7)	282 ( 3.5)>
WYOMING	32 ( 1.1)	275 ( 1.3)	15 ( 0.8)	272 ( 2.1)	11 ( 0.7)	276 ( 2.4)
<b>Other Jurisdictions</b>						
DDESS	35 ( 1.9)	269 ( 4.3)	16 ( 1.5)	273 ( 6.4)	11 ( 1.1)	274 ( 6.6)
DoDDS	32 ( 1.1)	277 ( 1.9)	18 ( 0.9)	278 ( 2.1)	12 ( 0.8)	272 ( 3.1)
GUAM	27 ( 1.3)	240 ( 3.4)	19 ( 1.3)	248 ( 3.7)	21 ( 1.3)	246 ( 3.2)

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).  
 > (<) The value for the students was significantly higher (lower) than in the 1992 assessment at about the 95% confidence level using appropriate multiple comparison procedures.  
 SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 6.41**

**1996 Mathematics Assessment**



POPULATION:

1996 Grade 8 Public School Students

REPORTED STATISTICS:

Percentage of Students and Average Mathematics Scale Score

STUDENTS' REPORTS ON:

Using Computers at Home

*How often do you use a computer at home for schoolwork?*

**There Is No Computer at Home**

**Never or Hardly Ever**

**Once or Twice a Month**

**Once or Twice a Week**

**Almost Every Day**

JURISDICTIONS	PCT ( SE )		SS ( SE )		PCT ( SE )		SS ( SE )		PCT ( SE )		SS ( SE )		PCT ( SE )		SS ( SE )	
<b>Nation</b>																
NATION	37 ( 1.2)	262 ( 1.3)	15 ( 0.8)	269 ( 1.9)	19 ( 0.8)	282 ( 1.5)	17 ( 0.8)	282 ( 2.1)	11 ( 0.6)	276 ( 2.7)						
NORTHEAST	33 ( 3.6)	268 ( 2.7)	14 ( 1.2)	273 ( 3.7)	23 ( 2.6)	283 ( 3.9)	19 ( 3.2)	289 ( 6.1)!	11 ( 1.5)	280 ( 7.1)						
SOUTHEAST	42 ( 2.3)	256 ( 2.0)	17 ( 1.9)	260 ( 4.8)	17 ( 1.5)	279 ( 3.6)	13 ( 1.3)	280 ( 4.1)	11 ( 1.2)	266 ( 6.3)						
CENTRAL	38 ( 2.1)	267 ( 5.5)	14 ( 1.6)	280 ( 4.5)	19 ( 1.5)	287 ( 2.6)	18 ( 0.8)	281 ( 3.6)	10 ( 1.3)	279 ( 4.5)						
WEST	36 ( 1.9)	261 ( 1.9)	16 ( 1.1)	266 ( 2.9)	17 ( 1.0)	280 ( 3.4)	19 ( 1.3)	278 ( 3.6)	13 ( 1.1)	280 ( 3.7)						
<b>States</b>																
ALABAMA	43 ( 1.8)	251 ( 1.5)	19 ( 1.1)	253 ( 2.8)	14 ( 0.9)	275 ( 3.6)	14 ( 1.2)	269 ( 3.5)	10 ( 0.8)	263 ( 3.4)						
ALASKA†	26 ( 1.5)	265 ( 2.5)	14 ( 1.1)	276 ( 5.0)	21 ( 1.1)	290 ( 2.3)	25 ( 1.5)	285 ( 2.8)	15 ( 1.2)	288 ( 3.7)						
ARIZONA	38 ( 1.7)	259 ( 2.1)	16 ( 0.9)	269 ( 2.1)	20 ( 1.3)	280 ( 1.7)	16 ( 0.9)	279 ( 1.8)	10 ( 0.8)	273 ( 3.6)						
ARKANSAS†	47 ( 1.9)	255 ( 1.8)	19 ( 0.9)	262 ( 2.3)	13 ( 0.9)	279 ( 2.2)	12 ( 1.0)	273 ( 2.9)	9 ( 0.8)	264 ( 3.5)						
CALIFORNIA	34 ( 1.5)	251 ( 1.8)	12 ( 0.7)	261 ( 2.5)	18 ( 0.7)	272 ( 2.2)	21 ( 0.9)	274 ( 2.5)	15 ( 1.0)	280 ( 3.2)						
COLORADO	28 ( 1.4)	264 ( 1.6)	13 ( 0.7)	267 ( 2.8)	21 ( 1.0)	283 ( 1.8)	24 ( 1.2)	287 ( 1.6)	14 ( 0.8)	283 ( 2.0)						
CONNECTICUT	25 ( 1.1)	264 ( 1.4)	15 ( 0.9)	269 ( 2.4)	21 ( 1.0)	288 ( 1.7)	23 ( 1.2)	291 ( 1.7)	16 ( 0.8)	288 ( 1.7)						
DELAWARE	33 ( 1.1)	256 ( 1.9)	18 ( 1.1)	267 ( 2.1)	19 ( 0.9)	277 ( 2.2)	19 ( 1.1)	275 ( 2.4)	11 ( 0.7)	273 ( 2.4)						
DISTRICT OF COLUMBIA	41 ( 1.2)	228 ( 1.9)	18 ( 0.9)	227 ( 3.5)	14 ( 0.8)	247 ( 3.5)	18 ( 1.1)	242 ( 2.9)	10 ( 0.8)	248 ( 2.5)						
FLORIDA	40 ( 1.4)	258 ( 1.5)	18 ( 1.1)	262 ( 2.9)	16 ( 0.9)	278 ( 2.0)	15 ( 0.9)	275 ( 2.8)	11 ( 1.0)	266 ( 4.9)						
GEORGIA	39 ( 1.5)	252 ( 1.4)	18 ( 0.9)	262 ( 2.1)	17 ( 1.2)	278 ( 2.1)	17 ( 0.9)	274 ( 3.1)	9 ( 0.7)	267 ( 3.9)						
HAWAII	38 ( 1.3)	255 ( 1.8)	19 ( 0.9)	260 ( 2.6)	19 ( 0.9)	274 ( 2.4)	16 ( 0.8)	274 ( 2.1)	8 ( 0.7)	271 ( 3.0)						
INDIANA	39 ( 1.6)	266 ( 1.5)	18 ( 1.2)	273 ( 2.4)	19 ( 1.2)	291 ( 2.1)	15 ( 1.0)	286 ( 2.1)	9 ( 0.8)	279 ( 2.5)						
IOWA†	32 ( 1.2)	279 ( 1.4)	13 ( 0.9)	283 ( 2.6)	23 ( 1.0)	288 ( 2.4)	21 ( 1.1)	290 ( 2.1)	11 ( 0.8)	284 ( 1.9)						
KENTUCKY	42 ( 1.2)	259 ( 1.1)	12 ( 0.8)	265 ( 2.0)	13 ( 0.7)	274 ( 2.0)	19 ( 0.9)	279 ( 2.3)	14 ( 0.8)	273 ( 2.1)						
LOUISIANA	49 ( 1.1)	250 ( 1.7)	20 ( 0.9)	250 ( 2.1)	12 ( 0.7)	269 ( 2.4)	11 ( 0.7)	256 ( 2.4)	8 ( 0.6)	255 ( 3.0)						
MAINE	26 ( 1.1)	278 ( 1.5)	12 ( 0.7)	277 ( 2.6)	18 ( 0.9)	288 ( 2.0)	25 ( 1.1)	291 ( 2.0)	19 ( 1.0)	288 ( 1.9)						
MARYLAND†	28 ( 1.4)	254 ( 1.8)	18 ( 1.1)	272 ( 2.6)	23 ( 0.9)	280 ( 2.2)	19 ( 1.1)	283 ( 3.9)	11 ( 1.0)	281 ( 4.6)						
MASSACHUSETTS	26 ( 1.3)	264 ( 1.9)	14 ( 0.8)	268 ( 2.5)	18 ( 0.9)	285 ( 2.1)	25 ( 1.3)	289 ( 2.4)	17 ( 1.1)	285 ( 3.1)						
MICHIGAN†	32 ( 1.4)	267 ( 2.1)	16 ( 1.0)	272 ( 2.5)	18 ( 1.0)	286 ( 2.2)	20 ( 1.2)	288 ( 2.7)	14 ( 1.1)	283 ( 3.1)						
MINNESOTA	28 ( 1.4)	276 ( 2.0)	16 ( 0.8)	277 ( 2.3)	24 ( 1.0)	293 ( 1.8)	21 ( 1.1)	292 ( 1.7)	11 ( 0.6)	286 ( 2.5)						
MISSISSIPPI	50 ( 1.3)	247 ( 1.4)	17 ( 1.1)	251 ( 1.6)	11 ( 0.8)	265 ( 2.4)	10 ( 0.7)	257 ( 2.9)	11 ( 0.8)	252 ( 2.3)						
MISSOURI	38 ( 1.3)	267 ( 1.4)	18 ( 0.9)	271 ( 2.0)	18 ( 1.0)	282 ( 2.0)	15 ( 0.9)	282 ( 2.7)	11 ( 0.6)	273 ( 2.8)						
MONTANA†	34 ( 1.5)	276 ( 2.1)	18 ( 1.2)	284 ( 2.5)	20 ( 1.4)	288 ( 2.5)	19 ( 1.3)	292 ( 2.0)	10 ( 0.8)	285 ( 2.8)						
NEBRASKA	34 ( 1.2)	274 ( 1.6)	14 ( 0.7)	279 ( 1.9)	22 ( 1.0)	292 ( 1.8)	20 ( 1.2)	291 ( 2.0)	10 ( 0.5)	287 ( 2.6)						
NEW MEXICO	42 ( 1.5)	254 ( 1.3)	16 ( 0.9)	258 ( 2.2)	15 ( 0.9)	273 ( 3.1)	17 ( 1.1)	276 ( 2.5)	10 ( 0.8)	271 ( 2.8)						
NEW YORK†	37 ( 1.7)	260 ( 2.6)	15 ( 1.0)	270 ( 3.1)	16 ( 1.0)	284 ( 1.8)	20 ( 1.3)	282 ( 2.4)	11 ( 0.9)	277 ( 3.7)						
NORTH CAROLINA	38 ( 1.5)	260 ( 1.5)	16 ( 0.7)	264 ( 2.5)	19 ( 1.1)	280 ( 2.1)	18 ( 0.9)	276 ( 2.7)	10 ( 0.7)	274 ( 2.9)						
NORTH DAKOTA	35 ( 1.0)	278 ( 1.5)	20 ( 0.8)	287 ( 1.8)	22 ( 0.8)	291 ( 2.0)	16 ( 0.9)	288 ( 1.4)	8 ( 0.7)	284 ( 3.0)						
OREGON	27 ( 1.2)	267 ( 2.0)	17 ( 0.9)	270 ( 2.0)	20 ( 0.9)	286 ( 2.0)	23 ( 1.0)	289 ( 2.3)	13 ( 0.7)	282 ( 2.5)						
RHODE ISLAND	34 ( 1.1)	259 ( 1.8)	15 ( 0.8)	262 ( 3.1)	21 ( 1.0)	277 ( 2.1)	18 ( 0.8)	282 ( 1.9)	12 ( 0.7)	278 ( 2.1)						
SOUTH CAROLINA†	45 ( 1.3)	254 ( 1.6)	17 ( 0.8)	261 ( 2.6)	14 ( 0.8)	275 ( 2.1)	14 ( 0.8)	273 ( 3.5)	10 ( 0.8)	261 ( 3.1)						
TENNESSEE	43 ( 1.2)	255 ( 1.3)	18 ( 0.9)	266 ( 2.2)	17 ( 0.9)	276 ( 2.1)	15 ( 1.2)	273 ( 2.9)	7 ( 0.6)	262 ( 3.6)						
TEXAS	41 ( 2.1)	259 ( 1.4)	17 ( 0.9)	272 ( 2.3)	16 ( 1.2)	288 ( 2.6)	16 ( 1.3)	282 ( 2.5)	10 ( 0.8)	277 ( 2.5)						
UTAH	19 ( 1.0)	269 ( 1.4)	17 ( 0.9)	272 ( 1.9)	28 ( 1.1)	284 ( 1.5)	23 ( 0.9)	284 ( 1.4)	12 ( 0.8)	275 ( 1.9)						
VERMONT†	28 ( 1.0)	269 ( 1.5)	13 ( 0.9)	272 ( 2.9)	16 ( 0.9)	288 ( 2.9)	25 ( 1.2)	285 ( 1.4)	19 ( 1.0)	287 ( 2.0)						
VIRGINIA	34 ( 1.4)	259 ( 1.7)	17 ( 0.9)	266 ( 2.2)	21 ( 1.0)	283 ( 1.6)	18 ( 0.9)	283 ( 2.2)	10 ( 0.7)	275 ( 3.1)						
WASHINGTON	28 ( 1.3)	265 ( 1.8)	16 ( 1.0)	272 ( 2.2)	23 ( 1.0)	284 ( 1.6)	21 ( 1.2)	290 ( 2.1)	12 ( 0.7)	277 ( 2.6)						
WEST VIRGINIA	42 ( 0.9)	260 ( 1.5)	19 ( 0.9)	264 ( 1.7)	16 ( 0.7)	274 ( 2.0)	13 ( 0.6)	273 ( 2.1)	9 ( 0.6)	269 ( 2.0)						
WISCONSIN†	34 ( 1.3)	275 ( 1.7)	14 ( 0.8)	277 ( 1.9)	20 ( 1.0)	291 ( 1.9)	21 ( 1.0)	293 ( 2.0)	11 ( 0.8)	289 ( 2.5)						
WYOMING	31 ( 1.0)	268 ( 1.7)	16 ( 0.8)	272 ( 1.7)	22 ( 1.0)	283 ( 1.4)	19 ( 1.0)	281 ( 2.2)	12 ( 0.6)	276 ( 2.1)						
<b>Other Jurisdictions</b>																
DDESS	29 ( 1.9)	265 ( 3.9)	19 ( 1.8)	270 ( 4.4)	20 ( 1.6)	270 ( 4.4)	23 ( 1.9)	274 ( 4.6)	10 ( 1.3)	...						
DoDDS	18 ( 0.9)	267 ( 2.3)	18 ( 0.7)	271 ( 2.2)	25 ( 0.9)	280 ( 2.2)	24 ( 0.8)	280 ( 1.8)	14 ( 0.7)	276 ( 2.1)						
GUAM	47 ( 1.5)	242 ( 2.6)	17 ( 1.2)	235 ( 3.8)	13 ( 1.2)	261 ( 4.4)	14 ( 1.3)	244 ( 4.8)	9 ( 1.0)	246 ( 6.2)						

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).

... Characteristics of the sample do not permit a reliable estimate.

! Interpret with caution — the nature of the sample does not allow accurate determination of the variability of this statistic.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 6.42**

**1996 Mathematics Assessment**



POPULATION:

1996 Grade 8 Public School Students

REPORTED STATISTICS:

Percentage of Students and Average Mathematics Scale Score

TEACHERS' REPORTS ON:

Frequency of Calculator Use

*How often do the students in this class use a calculator?*

**Never or Hardly Ever**

**Once or Twice a Month**

**Once or Twice a Week**

**Almost Every Day**

**JURISDICTIONS**

	PCT ( SE)	SS ( SE)	PCT ( SE)	SS ( SE)	PCT ( SE)	SS ( SE)	PCT ( SE)	SS ( SE)
<b>Nation</b>								
NATION	8 ( 1.5)	251 ( 5.0)	15 ( 2.2)	260 ( 3.3)	20 ( 2.6)	269 ( 3.5)	57 ( 3.0)	280 ( 1.7)
NORTHEAST	3 ( 1.4)	... ( ... )	12 ( 3.9)	256 ( 8.5)!	10 ( 3.3)	296 ( 8.3)!	75 ( 5.1)	279 ( 4.8)
SOUTHEAST	18 ( 4.9)	246 ( 7.8)!	23 ( 5.3)	265 ( 6.1)!	19 ( 4.9)	259 ( 6.2)!	40 ( 5.7)	276 ( 2.4)
CENTRAL	2 ( 1.1)	... ( ... )	9 ( 3.5)	264 (15.5)!	27 ( 7.0)	274 ( 8.7)!	63 ( 7.8)	282 ( 2.5)
WEST	8 ( 1.9)	260 ( 7.9)!	15 ( 3.3)	256 ( 7.7)!	22 ( 3.9)	263 ( 3.0)!	55 ( 4.4)	280 ( 2.9)
<b>States</b>								
ALABAMA	27 ( 3.6)	246 ( 3.4)	27 ( 3.2)	253 ( 3.8)	20 ( 3.0)	253 ( 3.9)	26 ( 3.8)	274 ( 4.0)
ALASKA†	6 ( 0.9)	... ( ... )	13 ( 1.8)	277 ( 5.5)	23 ( 2.9)	263 ( 6.2)	59 ( 2.6)	282 ( 2.0)
ARIZONA	7 ( 1.8)	252 ( 4.3)!	16 ( 4.2)	258 ( 2.9)!	20 ( 3.1)	263 ( 3.1)	57 ( 4.0)	276 ( 2.3)
ARKANSAS†	22 ( 4.7)	253 ( 3.5)!	18 ( 3.0)	254 ( 4.2)	23 ( 3.8)	262 ( 2.9)	37 ( 4.2)	272 ( 2.7)
CALIFORNIA	6 ( 1.5)	234 ( 5.1)!	11 ( 2.5)	245 ( 3.3)!	23 ( 3.2)	256 ( 2.4)	59 ( 4.0)	275 ( 2.1)
COLORADO	9 ( 2.7)	272 ( 3.6)!	11 ( 2.8)	258 ( 2.9)!	24 ( 2.8)	274 ( 2.7)	56 ( 3.6)	281 ( 2.1)
CONNECTICUT	8 ( 2.2)	261 ( 8.2)!	10 ( 1.9)	270 ( 4.0)!	23 ( 2.9)	274 ( 2.8)	60 ( 4.1)	288 ( 1.7)
DELAWARE	3 ( 0.4)	... ( ... )	11 ( 0.7)	254 ( 3.9)	28 ( 1.1)	259 ( 1.9)	58 ( 1.2)	273 ( 1.5)
DISTRICT OF COLUMBIA	9 ( 1.2)	220 ( 5.6)	44 ( 1.0)	224 ( 2.5)	26 ( 1.2)	244 ( 3.0)	21 ( 0.9)	239 ( 1.9)
FLORIDA	10 ( 1.9)	245 ( 6.6)	16 ( 2.5)	255 ( 4.4)	24 ( 2.6)	261 ( 2.8)	50 ( 3.8)	271 ( 2.3)
GEORGIA	6 ( 1.2)	252 ( 4.5)!	19 ( 2.7)	256 ( 2.7)	25 ( 2.9)	258 ( 2.7)	51 ( 4.4)	270 ( 2.5)
HAWAII	23 ( 0.9)	253 ( 1.7)	21 ( 1.2)	255 ( 1.9)	30 ( 1.0)	260 ( 2.0)	26 ( 0.9)	275 ( 2.2)
INDIANA	14 ( 3.0)	274 ( 3.7)!	28 ( 4.4)	271 ( 3.2)	27 ( 3.7)	272 ( 3.0)	32 ( 4.2)	283 ( 2.7)
IOWA†	5 ( 1.6)	285 ( 5.1)!	10 ( 2.5)	277 ( 3.6)!	17 ( 3.6)	280 ( 3.1)!	68 ( 4.5)	286 ( 1.7)
KENTUCKY	1 ( 0.8)	... ( ... )	11 ( 2.9)	260 ( 3.3)!	27 ( 3.5)	267 ( 2.4)	60 ( 4.4)	270 ( 1.9)
LOUISIANA	29 ( 3.9)	251 ( 2.6)	25 ( 3.5)	251 ( 3.4)	27 ( 3.4)	255 ( 3.4)	19 ( 2.7)	259 ( 3.6)
MAINE	3 ( 0.8)	... ( ... )	8 ( 2.0)	275 ( 5.1)!	27 ( 2.4)	280 ( 2.0)	61 ( 3.1)	286 ( 1.6)
MARYLAND†	9 ( 2.7)	255 ( 7.0)!	17 ( 2.6)	250 ( 3.3)	28 ( 3.6)	268 ( 4.4)	46 ( 4.0)	284 ( 2.7)
MASSACHUSETTS	11 ( 2.4)	262 ( 5.2)!	10 ( 2.3)	270 ( 5.6)!	21 ( 3.0)	269 ( 4.8)	58 ( 4.5)	285 ( 2.2)
MICHIGAN†	2 ( 0.9)	... ( ... )	8 ( 2.5)	258 ( 6.7)!	12 ( 2.3)	264 ( 4.0)	78 ( 3.9)	285 ( 1.9)
MINNESOTA	7 ( 2.0)	270 ( 5.8)!	5 ( 1.6)	271 ( 6.7)!	13 ( 2.7)	272 ( 2.8)!	75 ( 3.9)	289 ( 1.7)
MISSISSIPPI	15 ( 2.5)	247 ( 3.3)	20 ( 3.4)	246 ( 3.4)	30 ( 3.2)	245 ( 2.7)	35 ( 4.0)	261 ( 2.3)
MISSOURI	8 ( 2.6)	267 ( 6.9)!	6 ( 1.5)	271 ( 4.1)!	16 ( 2.8)	266 ( 4.1)	71 ( 3.8)	277 ( 1.6)
MONTANA†	4 ( 1.2)	282 ( 5.9)!	11 ( 1.8)	277 ( 3.7)	18 ( 2.3)	278 ( 3.5)	67 ( 3.1)	286 ( 1.4)
NEBRASKA	7 ( 1.8)	273 ( 2.8)!	8 ( 1.3)	270 ( 3.1)	20 ( 2.7)	276 ( 2.2)	64 ( 3.5)	287 ( 1.3)
NEW MEXICO	16 ( 2.0)	254 ( 4.8)	17 ( 1.4)	260 ( 3.7)	28 ( 2.5)	266 ( 1.9)	39 ( 2.5)	269 ( 2.0)
NEW YORK†	20 ( 2.8)	263 ( 4.2)	23 ( 3.3)	267 ( 4.7)	16 ( 2.7)	276 ( 4.8)	41 ( 4.2)	281 ( 2.3)
NORTH CAROLINA	3 ( 1.1)	256 (10.1)!	17 ( 2.4)	258 ( 2.8)	29 ( 3.2)	266 ( 2.3)	51 ( 3.9)	273 ( 2.4)
NORTH DAKOTA	9 ( 1.6)	281 ( 3.4)	9 ( 1.6)	280 ( 5.6)	10 ( 2.1)	281 ( 3.6)!	73 ( 2.4)	286 ( 1.0)
OREGON	4 ( 1.4)	256 ( 5.0)!	8 ( 2.3)	273 ( 6.7)!	18 ( 2.8)	269 ( 3.6)	70 ( 3.8)	281 ( 1.9)
RHODE ISLAND	16 ( 0.6)	265 ( 2.4)	10 ( 0.7)	268 ( 3.8)	25 ( 1.0)	271 ( 1.9)	50 ( 1.0)	274 ( 1.6)
SOUTH CAROLINA†	12 ( 2.5)	253 ( 3.3)!	28 ( 3.7)	253 ( 4.2)	27 ( 3.5)	260 ( 2.4)	32 ( 3.7)	271 ( 3.0)
TENNESSEE	24 ( 3.6)	257 ( 3.6)	30 ( 3.5)	263 ( 2.8)	28 ( 3.1)	269 ( 2.5)	18 ( 2.6)	273 ( 3.4)
TEXAS	27 ( 3.7)	262 ( 4.7)	19 ( 2.9)	261 ( 3.7)	23 ( 2.9)	268 ( 2.8)	31 ( 3.2)	287 ( 1.9)
UTAH	4 ( 0.7)	271 ( 3.4)	4 ( 0.6)	268 ( 4.3)	14 ( 1.4)	268 ( 2.8)	78 ( 1.6)	280 ( 1.0)
VERMONT†	3 ( 0.8)	281 ( 9.2)!	13 ( 2.5)	274 ( 4.1)!	30 ( 2.0)	280 ( 2.9)	54 ( 2.8)	280 ( 1.7)
VIRGINIA	12 ( 2.2)	253 ( 6.6)	26 ( 2.9)	265 ( 2.4)	20 ( 2.2)	266 ( 2.7)	42 ( 3.5)	281 ( 2.3)
WASHINGTON	10 ( 1.8)	264 ( 4.2)	9 ( 2.4)	255 ( 5.0)!	17 ( 2.4)	267 ( 4.1)	64 ( 3.4)	285 ( 1.5)
WEST VIRGINIA	11 ( 1.7)	265 ( 3.6)	27 ( 3.4)	259 ( 2.3)	28 ( 3.1)	262 ( 2.2)	34 ( 3.3)	272 ( 2.3)
WISCONSIN†	3 ( 1.2)	... ( ... )	8 ( 2.1)	275 ( 3.3)!	20 ( 3.6)	269 ( 3.5)	69 ( 4.3)	289 ( 1.8)
WYOMING	9 ( 1.3)	268 ( 4.6)	13 ( 0.8)	268 ( 2.7)	14 ( 0.6)	266 ( 2.4)	63 ( 1.1)	280 ( 1.2)
<b>Other Jurisdictions</b>								
DDESS	9 ( 1.1)	... ( ... )	18 ( 1.9)	252 ( 5.9)	38 ( 1.9)	269 ( 3.8)	35 ( 1.8)	272 ( 2.8)
DoDDS	1 ( 0.1)	... ( ... )	2 ( 0.1)	... ( ... )	21 ( 0.7)	265 ( 1.8)	76 ( 0.7)	278 ( 1.0)
GUAM	14 ( 1.1)	228 ( 5.2)	12 ( 1.6)	... ( ... )	18 ( 1.1)	229 ( 5.4)	57 ( 1.7)	241 ( 2.9)

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).

... Characteristics of the sample do not permit a reliable estimate.

! Interpret with caution — the nature of the sample does not allow accurate determination of the variability of this statistic.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 6.43**

**1996 Mathematics Assessment**



POPULATION:

1996 Grade 8 Public School Students

REPORTED STATISTICS:

Percentage of Students and Average Mathematics Scale Score

STUDENTS' REPORTS ON:

Frequency of Calculator Use

How often in this class do you use a calculator?	Never or Hardly Ever		Once or Twice a Month		Once or Twice a Week		Almost Every Day	
	PCT ( SE)	SS ( SE)	PCT ( SE)	SS ( SE)	PCT ( SE)	SS ( SE)	PCT ( SE)	SS ( SE)
<b>JURISDICTIONS</b>								
<b>Nation</b>								
NATION	11 ( 1.1)	254 ( 2.7)	13 ( 0.9)	265 ( 2.0)	27 ( 1.4)	267 ( 1.5)	49 ( 2.5)	278 ( 1.6)
NORTHEAST	7 ( 1.2)	257 ( 6.2)	9 ( 1.7)	266 ( 3.1)	26 ( 4.2)	270 ( 5.1)	58 ( 6.1)	283 ( 4.2)
SOUTHEAST	18 ( 3.6)	252 ( 5.0)!	18 ( 1.4)	261 ( 3.4)	28 ( 2.5)	264 ( 3.3)	36 ( 4.6)	272 ( 2.5)
CENTRAL	6 ( 1.4)	255 ( 7.0)!	12 ( 2.4)	273 ( 5.1)	26 ( 2.9)	274 ( 4.5)	56 ( 5.7)	281 ( 3.4)
WEST	11 ( 1.7)	256 ( 5.1)	13 ( 1.1)	262 ( 3.9)	27 ( 1.1)	263 ( 2.0)	48 ( 3.2)	277 ( 2.9)
<b>States</b>								
ALABAMA	25 ( 1.8)	246 ( 2.4)	19 ( 1.4)	256 ( 2.8)	27 ( 1.3)	258 ( 2.5)	30 ( 2.7)	266 ( 2.9)
ALASKA†	8 ( 0.7)	260 ( 4.3)	9 ( 0.8)	272 ( 3.8)	25 ( 1.3)	269 ( 2.0)	58 ( 1.6)	286 ( 2.5)
ARIZONA	11 ( 1.2)	252 ( 4.1)	13 ( 1.2)	262 ( 2.6)	24 ( 1.6)	263 ( 2.4)	52 ( 2.7)	276 ( 1.7)
ARKANSAS†	17 ( 1.9)	251 ( 2.9)	19 ( 1.3)	262 ( 2.6)	28 ( 1.4)	262 ( 2.1)	36 ( 2.3)	267 ( 2.0)
CALIFORNIA	11 ( 1.1)	243 ( 2.6)	13 ( 1.3)	252 ( 2.9)	28 ( 1.3)	259 ( 1.9)	48 ( 2.3)	274 ( 2.2)
COLORADO	10 ( 1.3)	266 ( 3.0)	11 ( 1.1)	270 ( 2.9)	26 ( 1.6)	276 ( 1.7)	52 ( 2.4)	279 ( 1.6)
CONNECTICUT	11 ( 0.9)	263 ( 2.9)	16 ( 1.4)	274 ( 2.9)	29 ( 1.3)	277 ( 1.6)	44 ( 2.1)	288 ( 1.8)
DELAWARE	7 ( 0.6)	254 ( 2.8)	16 ( 0.9)	263 ( 2.0)	27 ( 1.0)	264 ( 1.9)	51 ( 1.1)	271 ( 1.5)
DISTRICT OF COLUMBIA	30 ( 1.1)	225 ( 1.3)	22 ( 0.9)	240 ( 2.6)	28 ( 1.2)	234 ( 2.1)	20 ( 0.8)	240 ( 3.2)
FLORIDA	13 ( 1.4)	250 ( 3.1)	17 ( 1.0)	259 ( 3.7)	28 ( 1.6)	263 ( 2.2)	42 ( 2.5)	273 ( 1.9)
GEORGIA	13 ( 1.1)	251 ( 2.3)	14 ( 1.4)	260 ( 2.4)	27 ( 1.4)	257 ( 2.1)	47 ( 2.8)	270 ( 2.5)
HAWAII	22 ( 1.2)	255 ( 2.3)	20 ( 1.0)	263 ( 1.6)	31 ( 1.0)	262 ( 1.9)	26 ( 1.0)	269 ( 2.2)
INDIANA	17 ( 1.8)	268 ( 2.6)	18 ( 1.4)	272 ( 1.8)	29 ( 2.1)	274 ( 2.2)	36 ( 3.0)	282 ( 2.2)
IOWA†	5 ( 0.8)	278 ( 3.9)	10 ( 1.3)	282 ( 2.3)	25 ( 1.7)	282 ( 1.7)	60 ( 2.9)	287 ( 1.5)
KENTUCKY	5 ( 0.7)	262 ( 3.6)	12 ( 1.1)	262 ( 1.9)	32 ( 1.4)	266 ( 1.2)	52 ( 2.1)	269 ( 1.7)
LOUISIANA	27 ( 2.5)	250 ( 2.3)	21 ( 1.4)	258 ( 2.0)	26 ( 1.3)	253 ( 2.0)	26 ( 2.3)	253 ( 2.5)
MAINE	6 ( 0.6)	270 ( 4.6)	12 ( 1.1)	279 ( 2.1)	29 ( 1.5)	282 ( 1.6)	53 ( 2.1)	289 ( 1.5)
MARYLAND†	14 ( 1.6)	252 ( 2.9)	20 ( 1.7)	260 ( 3.2)	29 ( 1.4)	271 ( 2.7)	37 ( 2.7)	283 ( 2.8)
MASSACHUSETTS	12 ( 1.6)	260 ( 2.9)	14 ( 1.3)	272 ( 3.1)	27 ( 1.7)	275 ( 2.6)	47 ( 3.0)	286 ( 1.9)
MICHIGAN†	5 ( 0.9)	254 ( 6.3)	8 ( 1.1)	265 ( 3.6)	20 ( 1.5)	269 ( 3.0)	67 ( 2.9)	283 ( 1.7)
MINNESOTA	6 ( 0.9)	272 ( 4.5)	9 ( 1.1)	270 ( 3.3)	21 ( 1.3)	280 ( 2.4)	65 ( 2.7)	289 ( 1.4)
MISSISSIPPI	21 ( 1.8)	238 ( 2.2)	18 ( 1.2)	253 ( 2.0)	27 ( 1.3)	253 ( 1.6)	33 ( 2.3)	255 ( 1.8)
MISSOURI	9 ( 1.4)	262 ( 4.1)	10 ( 1.0)	263 ( 3.7)	22 ( 1.5)	272 ( 1.8)	60 ( 2.5)	278 ( 1.6)
MONTANA†	7 ( 0.7)	278 ( 3.3)	8 ( 0.9)	281 ( 4.1)	25 ( 1.8)	279 ( 2.6)	60 ( 2.3)	286 ( 1.4)
NEBRASKA	7 ( 0.9)	269 ( 2.7)	10 ( 0.9)	277 ( 2.4)	23 ( 1.4)	278 ( 1.5)	60 ( 2.2)	288 ( 1.3)
NEW MEXICO	18 ( 1.1)	251 ( 2.7)	15 ( 1.0)	263 ( 2.2)	28 ( 1.1)	262 ( 1.8)	38 ( 1.9)	267 ( 1.6)
NEW YORK†	20 ( 1.6)	261 ( 2.9)	16 ( 1.5)	271 ( 2.9)	28 ( 1.7)	270 ( 2.8)	36 ( 2.3)	277 ( 2.0)
NORTH CAROLINA	9 ( 1.1)	258 ( 3.0)	15 ( 1.5)	267 ( 2.6)	29 ( 1.5)	268 ( 1.7)	47 ( 3.0)	271 ( 2.2)
NORTH DAKOTA	7 ( 0.7)	274 ( 3.6)	7 ( 0.7)	284 ( 2.9)	15 ( 0.9)	280 ( 1.9)	71 ( 1.5)	286 ( 1.0)
OREGON	7 ( 0.9)	260 ( 3.0)	10 ( 1.1)	268 ( 3.4)	24 ( 1.4)	273 ( 2.3)	59 ( 2.4)	282 ( 1.6)
RHODE ISLAND	15 ( 0.9)	263 ( 2.2)	17 ( 1.0)	268 ( 1.9)	28 ( 0.9)	267 ( 2.1)	40 ( 1.1)	273 ( 1.6)
SOUTH CAROLINA†	16 ( 1.5)	251 ( 2.9)	20 ( 1.4)	260 ( 2.7)	29 ( 1.2)	259 ( 1.6)	35 ( 2.7)	267 ( 2.4)
TENNESSEE	19 ( 1.7)	257 ( 2.9)	23 ( 1.5)	264 ( 2.3)	30 ( 1.3)	264 ( 1.6)	27 ( 2.5)	268 ( 2.6)
TEXAS	18 ( 1.4)	262 ( 3.0)	18 ( 1.3)	267 ( 2.6)	29 ( 1.2)	269 ( 2.0)	35 ( 1.9)	279 ( 1.8)
UTAH	7 ( 0.7)	268 ( 3.0)	9 ( 0.7)	275 ( 2.2)	21 ( 1.0)	276 ( 1.8)	63 ( 1.4)	279 ( 1.2)
VERMONT†	8 ( 0.8)	273 ( 3.0)	11 ( 0.8)	272 ( 2.7)	29 ( 1.4)	279 ( 2.0)	52 ( 1.7)	282 ( 1.3)
VIRGINIA	16 ( 1.4)	257 ( 3.3)	19 ( 1.2)	268 ( 2.3)	28 ( 1.2)	271 ( 1.8)	37 ( 2.6)	277 ( 2.1)
WASHINGTON	11 ( 1.4)	260 ( 3.8)	12 ( 1.2)	267 ( 2.1)	25 ( 1.3)	274 ( 2.3)	51 ( 2.4)	284 ( 1.4)
WEST VIRGINIA	15 ( 1.2)	257 ( 2.1)	21 ( 1.4)	264 ( 1.9)	28 ( 1.2)	263 ( 1.6)	35 ( 2.2)	270 ( 1.8)
WISCONSIN†	5 ( 0.9)	281 ( 5.5)!	9 ( 1.1)	274 ( 3.1)	24 ( 1.5)	278 ( 2.3)	62 ( 2.7)	287 ( 1.8)
WYOMING	10 ( 0.8)	263 ( 3.5)	10 ( 0.6)	272 ( 2.8)	24 ( 0.9)	273 ( 1.5)	55 ( 1.0)	279 ( 1.2)
<b>Other Jurisdictions</b>								
DDESS	14 ( 1.3)	265 ( 5.1)	22 ( 1.7)	273 ( 3.6)	38 ( 2.0)	268 ( 3.6)	26 ( 1.5)	271 ( 5.2)
D <sub>o</sub> DDS	4 ( 0.5)	272 ( 5.3)	8 ( 0.5)	272 ( 3.4)	25 ( 1.1)	271 ( 1.4)	63 ( 1.1)	277 ( 1.2)
GUAM	25 ( 1.4)	236 ( 4.7)	12 ( 1.2)	237 ( 6.0)	27 ( 1.4)	240 ( 3.1)	36 ( 1.5)	241 ( 2.4)

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).

! Interpret with caution — the nature of the sample does not allow accurate determination of the variability of this statistic.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 6.44**

**1990 Mathematics Assessment**



POPULATION:

1990 Grade 8 Public School Students

REPORTED STATISTICS:

Percentage of Students and Average Mathematics Scale Score

TEACHERS' REPORTS ON:

Use of Calculators for Tests

Do you permit students in this class to use calculators for tests?

Yes

No

JURISDICTIONS	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )
<b>Nation</b>				
NATION	33 ( 4.5)	271 ( 2.9)	67 ( 4.5)	258 ( 1.8)
NORTHEAST	14 ( 9.2)	... ( ... )	86 ( 9.2)	268 ( 3.8)
SOUTHEAST	15 ( 8.1)	254 ( 7.6)!	85 ( 8.1)	258 ( 3.4)
CENTRAL	44 ( 7.9)	274 ( 2.7)	56 ( 7.9)	254 ( 4.1)
WEST	48 ( 8.8)	273 ( 4.7)!	52 ( 8.8)	255 ( 3.4)
<b>States</b>				
ALABAMA	21 ( 3.5)	258 ( 3.0)	79 ( 3.5)	252 ( 1.2)
ALASKA	— ( — )	— ( — )	— ( — )	— ( — )
ARIZONA	22 ( 2.8)	265 ( 3.7)	78 ( 2.8)	258 ( 1.3)
ARKANSAS	13 ( 1.9)	266 ( 2.8)	87 ( 1.9)	256 ( 0.9)
CALIFORNIA	50 ( 3.9)	264 ( 2.7)	50 ( 3.9)	250 ( 2.0)
COLORADO	45 ( 2.9)	273 ( 1.4)	55 ( 2.9)	262 ( 1.4)
CONNECTICUT	43 ( 3.3)	279 ( 2.3)	57 ( 3.3)	265 ( 1.6)
DELAWARE	33 ( 1.4)	265 ( 1.7)	67 ( 1.4)	259 ( 1.3)
DISTRICT OF COLUMBIA	49 ( 0.8)	236 ( 1.5)	51 ( 0.8)	230 ( 1.0)
FLORIDA	23 ( 2.6)	267 ( 2.7)	77 ( 2.6)	253 ( 1.5)
GEORGIA	30 ( 3.0)	268 ( 2.4)	70 ( 3.0)	254 ( 1.5)
HAWAII	15 ( 0.8)	271 ( 2.4)	85 ( 0.8)	249 ( 0.8)
INDIANA	15 ( 2.7)	273 ( 3.2)	85 ( 2.7)	267 ( 1.4)
IOWA	42 ( 4.3)	279 ( 1.9)	58 ( 4.3)	277 ( 1.6)
KENTUCKY	20 ( 2.0)	262 ( 2.4)	80 ( 2.0)	256 ( 1.3)
LOUISIANA	16 ( 3.0)	254 ( 3.5)	84 ( 3.0)	245 ( 1.4)
MAINE	— ( — )	— ( — )	— ( — )	— ( — )
MARYLAND	30 ( 3.3)	274 ( 2.9)	70 ( 3.3)	256 ( 2.0)
MASSACHUSETTS	— ( — )	— ( — )	— ( — )	— ( — )
MICHIGAN	37 ( 3.6)	273 ( 2.3)	63 ( 3.6)	260 ( 1.5)
MINNESOTA	47 ( 3.9)	280 ( 1.4)	53 ( 3.9)	272 ( 1.4)
MISSISSIPPI	— ( — )	— ( — )	— ( — )	— ( — )
MISSOURI	— ( — )	— ( — )	— ( — )	— ( — )
MONTANA	57 ( 3.2)	283 ( 1.3)	43 ( 3.2)	279 ( 1.4)
NEBRASKA	36 ( 2.3)	279 ( 1.3)	64 ( 2.3)	274 ( 1.6)
NEW MEXICO	20 ( 1.1)	259 ( 1.9)	80 ( 1.1)	256 ( 0.8)
NEW YORK	12 ( 2.5)	255 ( 5.0)	88 ( 2.5)	261 ( 1.7)
NORTH CAROLINA	18 ( 2.3)	262 ( 3.5)	82 ( 2.3)	248 ( 1.2)
NORTH DAKOTA	39 ( 3.4)	279 ( 2.0)	61 ( 3.4)	283 ( 1.7)
OREGON	53 ( 3.2)	277 ( 1.5)	47 ( 3.2)	265 ( 1.8)
RHODE ISLAND	23 ( 0.8)	267 ( 1.6)	77 ( 0.8)	258 ( 0.7)
SOUTH CAROLINA	— ( — )	— ( — )	— ( — )	— ( — )
TENNESSEE	— ( — )	— ( — )	— ( — )	— ( — )
TEXAS	22 ( 3.6)	268 ( 3.0)	78 ( 3.6)	253 ( 1.6)
UTAH	— ( — )	— ( — )	— ( — )	— ( — )
VERMONT	— ( — )	— ( — )	— ( — )	— ( — )
VIRGINIA	27 ( 2.7)	276 ( 3.7)	73 ( 2.7)	259 ( 1.6)
WASHINGTON	— ( — )	— ( — )	— ( — )	— ( — )
WEST VIRGINIA	20 ( 2.9)	267 ( 3.4)	80 ( 2.9)	254 ( 1.1)
WISCONSIN	50 ( 4.6)	278 ( 1.9)	50 ( 4.6)	272 ( 2.2)
WYOMING	49 ( 1.8)	274 ( 1.2)	51 ( 1.8)	271 ( 0.9)
<b>Other Jurisdictions</b>				
DDESS	— ( — )	— ( — )	— ( — )	— ( — )
DoDDS	— ( — )	— ( — )	— ( — )	— ( — )
GUAM	9 ( 0.4)	233 ( 2.9)	91 ( 0.4)	232 ( 0.8)

— State or other jurisdiction did not participate in the NAEP assessment year presented in this table.

... Characteristics of the sample do not permit a reliable estimate.

! Interpret with caution — the nature of the sample does not allow accurate determination of the variability of this statistic.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 6.44** (continued)

**1992 Mathematics Assessment**



POPULATION:

1992 Grade 8 Public School Students

REPORTED STATISTICS:

Percentage of Students and Average Mathematics Scale Score

TEACHERS' REPORTS ON:

Use of Calculators for Tests

Do you permit students in this class to use calculators for tests?

Yes

No

JURISDICTIONS	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )
<b>Nation</b>				
NATION	49 ( 3.1)»	275 ( 1.9)	51 ( 3.1)«	262 ( 1.6)
NORTHEAST	46 ( 6.8)	279 ( 5.1)	54 ( 6.8)	260 ( 5.0)
SOUTHEAST	36 ( 5.7)	271 ( 2.1)	64 ( 5.7)	257 ( 2.2)
CENTRAL	62 ( 6.9)	278 ( 4.2)	38 ( 6.9)	272 ( 3.2)!
WEST	53 ( 5.4)	272 ( 2.8)	47 ( 5.4)	263 ( 3.0)
<b>States</b>				
ALABAMA	41 ( 4.4)»	260 ( 2.7)	59 ( 4.4)«	248 ( 2.1)
ALASKA	— ( —)	— ( —)	— ( —)	— ( —)
ARIZONA	45 ( 4.2)»	272 ( 2.0)	55 ( 4.2)«	260 ( 1.8)
ARKANSAS	34 ( 3.7)»	265 ( 1.9)	66 ( 3.7)«	252 ( 1.6)
CALIFORNIA	57 ( 3.6)	266 ( 1.9)	43 ( 3.6)	257 ( 2.9)
COLORADO	65 ( 3.1)»	276 ( 1.4)	35 ( 3.1)«	264 ( 1.6)
CONNECTICUT	56 ( 3.5)»	284 ( 1.4)	44 ( 3.5)«	260 ( 2.5)
DELAWARE	50 ( 0.9)»	267 ( 1.3)	50 ( 0.9)«	258 ( 1.4)
DISTRICT OF COLUMBIA	60 ( 1.1)»	240 ( 1.4)	40 ( 1.1)«	229 ( 1.7)
FLORIDA	44 ( 3.3)»	272 ( 1.8)	56 ( 3.3)«	251 ( 1.7)
GEORGIA	46 ( 3.7)»	264 ( 2.1)	54 ( 3.7)«	255 ( 1.7)
HAWAII	38 ( 1.0)»	269 ( 1.4)	62 ( 1.0)«	252 ( 0.9)
INDIANA	31 ( 3.5)»	276 ( 1.9)	69 ( 3.5)«	268 ( 1.5)
IOWA	64 ( 4.0)»	287 ( 1.1)»	36 ( 4.0)«	278 ( 2.0)
KENTUCKY	64 ( 3.2)»	267 ( 1.6)	36 ( 3.2)«	256 ( 1.8)
LOUISIANA	29 ( 3.9)»	255 ( 3.1)	71 ( 3.9)«	249 ( 1.8)
MAINE	71 ( 4.1)	282 ( 1.3)	29 ( 4.1)	273 ( 2.1)
MARYLAND	54 ( 4.0)»	277 ( 2.1)	46 ( 4.0)«	254 ( 2.4)
MASSACHUSETTS	29 ( 3.7)	281 ( 2.4)	71 ( 3.7)	269 ( 1.6)
MICHIGAN	74 ( 3.3)»	270 ( 2.0)	26 ( 3.3)«	260 ( 3.2)
MINNESOTA	71 ( 3.6)»	285 ( 1.3)	29 ( 3.6)«	275 ( 2.4)
MISSISSIPPI	20 ( 3.2)	255 ( 4.4)	80 ( 3.2)	244 ( 1.3)
MISSOURI	76 ( 4.0)	274 ( 1.2)	24 ( 4.0)	266 ( 2.0)
MONTANA	— ( —)	— ( —)	— ( —)	— ( —)
NEBRASKA	64 ( 4.7)»	280 ( 1.5)	36 ( 4.7)«	274 ( 1.8)
NEW MEXICO	40 ( 3.1)»	266 ( 1.3)»	60 ( 3.1)«	256 ( 1.2)
NEW YORK	24 ( 2.9)»	278 ( 3.2)»	76 ( 2.9)«	263 ( 2.6)
NORTH CAROLINA	34 ( 3.2)»	263 ( 1.9)	66 ( 3.2)«	256 ( 1.6)»
NORTH DAKOTA	59 ( 3.5)»	285 ( 1.2)	41 ( 3.5)«	282 ( 2.0)
OREGON	— ( —)	— ( —)	— ( —)	— ( —)
RHODE ISLAND	42 ( 0.9)»	269 ( 1.2)	58 ( 0.9)«	263 ( 0.9)»
SOUTH CAROLINA	40 ( 3.0)	271 ( 1.7)	60 ( 3.0)	255 ( 1.6)
TENNESSEE	22 ( 3.4)	269 ( 3.0)	78 ( 3.4)	256 ( 1.6)
TEXAS	54 ( 3.3)»	271 ( 2.2)	46 ( 3.3)«	258 ( 1.6)
UTAH	67 ( 3.3)	278 ( 1.2)	33 ( 3.3)	268 ( 1.8)
VERMONT	— ( —)	— ( —)	— ( —)	— ( —)
VIRGINIA	34 ( 3.4)	275 ( 2.3)	66 ( 3.4)	264 ( 1.5)
WASHINGTON	— ( —)	— ( —)	— ( —)	— ( —)
WEST VIRGINIA	39 ( 3.4)»	267 ( 1.6)	61 ( 3.4)«	255 ( 1.3)
WISCONSIN	64 ( 5.5)	281 ( 1.8)	36 ( 5.5)	274 ( 3.2)
WYOMING	66 ( 3.2)»	276 ( 1.2)	34 ( 3.2)«	275 ( 1.5)
<b>Other Jurisdictions</b>				
DDESS	— ( —)	— ( —)	— ( —)	— ( —)
DoDDS	— ( —)	— ( —)	— ( —)	— ( —)
GUAM	7 ( 0.7)«	264 ( 4.3)»	93 ( 0.7)»	234 ( 1.1)

— State or other jurisdiction did not participate in the NAEP assessment year presented in this table.

» («) The value for the students was significantly higher (lower) than in the 1990 assessment at about the 95% confidence level using appropriate multiple comparison procedures.

! Interpret with caution — the nature of the sample does not allow accurate determination of the variability of this statistic.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.



**TABLE 6.44** (continued)

**1996 Mathematics Assessment**



POPULATION: 1996 Grade 8 Public School Students  
 REPORTED STATISTICS: Percentage of Students and Average Mathematics Scale Score  
 TEACHERS' REPORTS ON: Use of Calculators for Tests

Do you permit students in this class to use calculators for tests?

Yes

No

JURISDICTIONS	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )
<b>Nation</b>				
NATION	70 ( 3.0)»»	279 ( 1.6)	30 ( 3.0)«<	259 ( 2.3)
NORTHEAST	85 ( 5.7)»»	280 ( 3.8)	15 ( 5.7)«<	264 ( 4.8)!
SOUTHEAST	52 ( 6.7)»	275 ( 2.6)	48 ( 6.7)«<	256 ( 4.4)!
CENTRAL	86 ( 3.1)»»	280 ( 3.8)	14 ( 3.1)«<	262 ( 4.6)!
WEST	61 ( 6.1)	278 ( 2.7)	39 ( 6.1)	260 ( 4.6)
<b>States</b>				
ALABAMA	39 ( 3.9)»	268 ( 3.5)	61 ( 3.9)«<	250 ( 2.3)
ALASKA†	67 ( 2.8)	281 ( 2.8)	33 ( 2.8)	272 ( 3.3)
ARIZONA	67 ( 4.2)»»	273 ( 2.0)	33 ( 4.2)«<	261 ( 2.3)
ARKANSAS†	55 ( 5.7)»»	268 ( 2.0)	45 ( 5.7)«<	256 ( 2.6)
CALIFORNIA	80 ( 2.4)»»	269 ( 2.2)	20 ( 2.4)«<	249 ( 3.9)
COLORADO	68 ( 3.6)»	278 ( 1.7)	32 ( 3.6)«<	270 ( 2.4)»
CONNECTICUT	77 ( 3.3)»»	285 ( 1.7)	23 ( 3.3)«<	269 ( 4.0)
DELAWARE	84 ( 0.8)»»	270 ( 1.3)	16 ( 0.8)«<	251 ( 2.9)
DISTRICT OF COLUMBIA	49 ( 0.9)<	235 ( 2.2)	51 ( 0.9)>	228 ( 1.9)
FLORIDA	63 ( 3.5)»»	270 ( 1.9)	37 ( 3.5)«<	252 ( 3.3)
GEORGIA	72 ( 2.8)»»	267 ( 2.0)	28 ( 2.8)«<	256 ( 2.5)
HAWAII	48 ( 1.1)»»	267 ( 1.6)	52 ( 1.1)«<	256 ( 1.6)»
INDIANA	48 ( 4.2)»»	281 ( 2.3)	52 ( 4.2)«<	270 ( 2.3)
IOWA†	81 ( 3.2)»»	284 ( 1.5)	19 ( 3.2)«<	284 ( 2.7)
KENTUCKY	81 ( 4.0)»»	268 ( 1.6)	19 ( 4.0)«<	263 ( 2.7)!
LOUISIANA	37 ( 4.0)»	258 ( 2.5)	63 ( 4.0)«<	251 ( 2.1)
MAINE	74 ( 3.6)	286 ( 1.4)	26 ( 3.6)	275 ( 2.1)
MARYLAND†	69 ( 3.6)»»	281 ( 2.4)	31 ( 3.6)«<	250 ( 3.2)
MASSACHUSETTS	72 ( 3.6)>	282 ( 2.2)	28 ( 3.6)<	267 ( 3.3)
MICHIGAN†	86 ( 3.6)»»	283 ( 1.9)»»	14 ( 3.6)«<	264 ( 4.4)!
MINNESOTA	85 ( 2.9)»»	286 ( 1.5)»	15 ( 2.9)«<	273 ( 3.8)!
MISSISSIPPI	51 ( 3.4)>	257 ( 1.9)	49 ( 3.4)<	244 ( 2.2)
MISSOURI	76 ( 3.9)	276 ( 1.7)	24 ( 3.9)	269 ( 2.8)
MONTANA†	78 ( 2.0)»	284 ( 1.7)	22 ( 2.0)«<	280 ( 2.2)
NEBRASKA	76 ( 2.9)»»	285 ( 1.4)»	24 ( 2.9)«<	275 ( 1.8)
NEW MEXICO	56 ( 1.6)»»	269 ( 1.8)»	44 ( 1.6)«<	260 ( 2.1)
NEW YORK†	54 ( 3.8)»»	280 ( 2.0)»	46 ( 3.8)«<	265 ( 3.0)
NORTH CAROLINA	74 ( 3.4)»»	270 ( 1.9)	26 ( 3.4)«<	263 ( 2.7)»
NORTH DAKOTA	77 ( 2.4)»»	285 ( 1.1)	23 ( 2.4)«<	281 ( 2.6)
OREGON	85 ( 2.6)»	280 ( 1.9)	15 ( 2.6)«<	265 ( 3.4)
RHODE ISLAND	73 ( 0.8)»»	274 ( 1.3)»	27 ( 0.8)«<	262 ( 2.0)
SOUTH CAROLINA†	51 ( 3.7)>	266 ( 2.4)	49 ( 3.7)<	255 ( 2.5)
TENNESSEE	33 ( 3.6)>	271 ( 3.0)	67 ( 3.6)<	262 ( 2.1)
TEXAS	43 ( 3.6)<	282 ( 1.8)»»	57 ( 3.6)«<	263 ( 2.5)»
UTAH	85 ( 1.5)>	280 ( 1.0)	15 ( 1.5)<	267 ( 2.6)
VERMONT†	68 ( 2.7)	280 ( 1.6)	32 ( 2.7)	278 ( 1.9)
VIRGINIA	58 ( 3.5)»»	277 ( 2.1)	42 ( 3.5)«<	261 ( 3.1)
WASHINGTON	74 ( 2.7)	281 ( 1.7)	26 ( 2.7)	266 ( 3.4)
WEST VIRGINIA	51 ( 2.8)»»	270 ( 1.7)	49 ( 2.8)«<	260 ( 1.7)
WISCONSIN†	84 ( 3.4)»»	285 ( 1.9)	16 ( 3.4)«<	275 ( 3.7)!
WYOMING	72 ( 1.3)»	278 ( 1.3)	28 ( 1.3)«<	268 ( 1.7)«<
<b>Other Jurisdictions</b>				
DDESS	54 ( 2.1)	270 ( 3.1)	46 ( 2.1)	268 ( 2.5)
DoDDS	90 ( 0.9)	276 ( 1.0)	10 ( 0.9)	270 ( 2.5)
GUAM	49 ( 1.5)»»	239 ( 3.2)«<	51 ( 1.5)«<	230 ( 3.2)

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).  
 » («) The value for the students was significantly higher (lower) than in the 1990 assessment at about the 95% confidence level using appropriate multiple comparison procedures.  
 > (<) The value for the students was significantly higher (lower) than in the 1992 assessment at about the 95% confidence level using appropriate multiple comparison procedures.  
 ! Interpret with caution — the nature of the sample does not allow accurate determination of the variability of this statistic.  
 SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 6.45**

**1996 Mathematics Assessment**



POPULATION:

1996 Grade 8 Public School Students

REPORTED STATISTICS:

Percentage of Students and Average Mathematics Scale Score

TEACHERS' REPORTS ON:

Availability of Computers

Which best describes the availability of computers for use by students in your mathematics class?

None Available

One Within the Classroom

Two or Three Within the Classroom

**JURISDICTIONS**

PCT ( SE )

SS ( SE )

PCT ( SE )

SS ( SE )

PCT ( SE )

SS ( SE )

**Nation**

NATION	26 ( 3.7)	269 ( 3.1)	19 ( 3.0)	271 ( 3.9)	5 ( 1.5)	274 (10.2)!
NORTHEAST	25 ( 9.6)	284 ( 4.9)!	18 ( 6.9)	272 ( 5.5)!	0 ( ... )	... ( ... )
SOUTHEAST	26 ( 7.3)	257 ( 8.7)!	23 ( 3.9)	264 ( 3.3)	7 ( 1.9)	271 (18.4)!
CENTRAL	25 ( 8.8)	274 ( 2.7)!	25 ( 9.5)	274 (14.2)!	9 ( 5.8)	277 (26.9)!
WEST	27 ( 4.4)	266 ( 5.3)	13 ( 3.2)	275 ( 5.3)!	3 ( 1.3)	... ( ... )

**States**

ALABAMA	31 ( 3.7)	258 ( 3.0)	21 ( 3.5)	253 ( 4.2)	6 ( 1.7)	248 ( 9.4)!
ALASKA†	11 ( 2.8)	272 ( 5.7)!	28 ( 1.9)	284 ( 3.3)	12 ( 2.4)	281 ( 5.1)!
ARIZONA	25 ( 3.7)	269 ( 2.5)	22 ( 3.2)	267 ( 3.2)	7 ( 2.3)	270 ( 6.0)!
ARKANSAS†	40 ( 5.7)	266 ( 2.6)	12 ( 3.6)	266 ( 6.1)!	4 ( 1.9)	257 ( 4.9)!
CALIFORNIA	22 ( 3.9)	261 ( 4.0)	21 ( 3.2)	269 ( 4.5)	7 ( 1.9)	263 ( 4.7)!
COLORADO	12 ( 1.9)	278 ( 3.4)	19 ( 2.8)	279 ( 2.8)	6 ( 2.3)	270 ( 4.2)!
CONNECTICUT	22 ( 3.7)	276 ( 3.2)	13 ( 2.8)	271 ( 6.7)!	5 ( 1.4)	281 ( 4.4)!
DELAWARE	45 ( 1.5)	269 ( 1.3)	20 ( 1.4)	267 ( 2.7)	5 ( 0.5)	260 ( 3.7)
DISTRICT OF COLUMBIA	17 ( 0.7)	221 ( 2.7)	10 ( 0.4)	222 ( 4.9)	27 ( 0.9)	244 ( 2.9)
FLORIDA	21 ( 2.7)	252 ( 4.2)	26 ( 3.7)	267 ( 3.1)	9 ( 2.2)	264 ( 4.4)!
GEORGIA	15 ( 3.0)	267 ( 4.0)!	27 ( 4.0)	262 ( 2.8)	11 ( 2.6)	255 ( 5.6)!
HAWAII	20 ( 0.8)	260 ( 2.0)	26 ( 1.0)	259 ( 2.4)	7 ( 0.6)	255 ( 4.0)
INDIANA	19 ( 4.4)	282 ( 3.5)!	12 ( 3.0)	280 ( 4.4)!	8 ( 2.8)	260 ( 6.6)!
IOWA†	11 ( 2.8)	285 ( 4.5)!	22 ( 3.9)	285 ( 3.0)	7 ( 2.5)	278 ( 5.1)!
KENTUCKY	5 ( 1.6)	266 ( 4.4)!	22 ( 4.2)	264 ( 3.1)	8 ( 2.8)	271 ( 4.2)!
LOUISIANA	43 ( 5.3)	253 ( 2.2)	10 ( 2.7)	265 ( 3.6)!	7 ( 2.4)	246 ( 8.2)!
MAINE	13 ( 2.4)	280 ( 2.4)	23 ( 3.4)	285 ( 2.9)	9 ( 2.8)	278 ( 4.9)!
MARYLAND†	7 ( 2.0)	253 ( 6.5)!	8 ( 2.4)	278 ( 5.0)!	4 ( 1.6)	264 ( 8.6)!
MASSACHUSETTS	23 ( 3.5)	273 ( 3.9)	19 ( 3.6)	273 ( 5.0)!	2 ( 0.9)	... ( ... )
MICHIGAN†	23 ( 3.7)	271 ( 5.0)	19 ( 3.5)	278 ( 3.2)	3 ( 1.3)	... ( ... )
MINNESOTA	10 ( 2.5)	279 ( 5.4)!	21 ( 3.2)	286 ( 2.8)	4 ( 1.6)	285 (15.4)!
MISSISSIPPI	37 ( 3.8)	254 ( 2.0)	15 ( 3.5)	259 ( 3.3)!	3 ( 1.0)	246 ( 9.1)!
MISSOURI	18 ( 3.7)	269 ( 2.9)!	13 ( 3.2)	279 ( 3.4)!	8 ( 2.4)	264 ( 4.9)!
MONTANA†	6 ( 1.6)	276 ( 3.0)!	14 ( 1.9)	279 ( 4.7)	10 ( 3.2)	286 ( 5.0)!
NEBRASKA	12 ( 2.6)	282 ( 3.8)!	24 ( 3.2)	281 ( 1.8)	5 ( 1.6)	275 ( 5.5)!
NEW MEXICO	32 ( 3.1)	262 ( 2.3)	21 ( 2.1)	260 ( 2.1)	5 ( 1.2)	263 ( 4.6)!
NEW YORK†	28 ( 4.1)	264 ( 3.8)	5 ( 2.1)	274 ( 6.1)!	3 ( 1.6)	... ( ... )
NORTH CAROLINA	12 ( 2.6)	262 ( 4.8)!	16 ( 3.0)	273 ( 3.8)	9 ( 2.5)	267 ( 4.5)!
NORTH DAKOTA	13 ( 2.1)	287 ( 2.4)	20 ( 2.0)	289 ( 1.8)	6 ( 0.5)	277 ( 2.1)
OREGON	22 ( 3.7)	275 ( 3.3)	26 ( 4.6)	281 ( 2.8)	5 ( 1.8)	274 ( 6.3)!
RHODE ISLAND	15 ( 0.6)	275 ( 2.8)	7 ( 0.3)	283 ( 3.4)	0 ( ... )	... ( ... )
SOUTH CAROLINA†	21 ( 3.8)	261 ( 2.9)	20 ( 3.9)	259 ( 5.8)!	7 ( 2.1)	259 ( 5.5)!
TENNESSEE	22 ( 3.3)	259 ( 3.5)	24 ( 4.2)	267 ( 3.8)	6 ( 2.1)	258 ( 8.5)!
TEXAS	21 ( 2.8)	269 ( 3.8)	21 ( 3.7)	274 ( 3.6)	6 ( 1.8)	252 ( 5.0)!
UTAH	32 ( 2.3)	276 ( 1.4)	16 ( 2.3)	279 ( 3.5)	4 ( 1.2)	273 ( 5.1)!
VERMONT†	11 ( 1.2)	273 ( 3.0)	27 ( 2.2)	282 ( 2.2)	10 ( 2.2)	270 ( 3.5)!
VIRGINIA	8 ( 2.0)	255 ( 4.3)!	20 ( 3.2)	268 ( 2.8)	3 ( 1.0)	253 ( 8.2)!
WASHINGTON	18 ( 3.1)	278 ( 3.6)	29 ( 3.8)	275 ( 3.1)	8 ( 2.4)	279 ( 4.5)!
WEST VIRGINIA	23 ( 2.5)	266 ( 2.4)	12 ( 2.7)	266 ( 3.5)!	13 ( 2.8)	264 ( 3.8)!
WISCONSIN†	12 ( 3.2)	281 ( 4.6)!	19 ( 4.2)	277 ( 4.6)!	4 ( 2.0)	274 ( 4.4)!
WYOMING	10 ( 0.7)	275 ( 3.3)	19 ( 0.9)	278 ( 2.1)	12 ( 0.7)	269 ( 3.2)

**Other Jurisdictions**

DDESS	2 ( 0.2)	... ( ... )	12 ( 1.4)	... ( ... )	38 ( 1.4)	271 ( 4.3)
DoDDS	11 ( 0.5)	275 ( 3.6)	22 ( 1.0)	276 ( 2.4)	26 ( 0.7)	275 ( 2.0)
GUAM	53 ( 1.5)	236 ( 2.2)	0 ( ... )	... ( ... )	0 ( ... )	... ( ... )

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).

... Characteristics of the sample do not permit a reliable estimate.

! Interpret with caution — the nature of the sample does not allow accurate determination of the variability of this statistic.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 6.45** (continued) **1996 Mathematics Assessment**



POPULATION: **1996 Grade 8 Public School Students**  
 REPORTED STATISTICS: **Percentage of Students and Average Mathematics Scale Score**  
 TEACHERS' REPORTS ON: **Availability of Computers**

Which best describes the availability of computers for use by students in your mathematics class?

JURISDICTIONS	Four or More Within the Classroom		Available in a Computer Laboratory but Difficult to Access or Schedule		Available in a Computer Laboratory and Easy to Access or Schedule	
	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )
<b>Nation</b>						
NATION	7 ( 2.1)	274 ( 4.4)!	26 ( 3.6)	270 ( 2.6)	18 ( 2.8)	278 ( 4.1)
NORTHEAST	1 ( 0.7)	... ( ... )	32 (10.5)	276 ( 4.2)!	24 ( 6.9)	280 (11.5)!
SOUTHEAST	7 ( 4.0)	262 ( 6.4)!	25 ( 6.6)	266 ( 5.1)!	13 ( 3.8)	271 ( 6.5)!
CENTRAL	5 ( 3.0)	... ( ... )	22 ( 7.7)	274 ( 4.7)!	15 ( 5.8)	287 ( 4.0)!
WEST	12 ( 5.1)	275 ( 3.2)!	24 ( 3.4)	265 ( 6.2)	21 ( 5.3)	276 ( 8.0)!
<b>States</b>						
ALABAMA	6 ( 2.2)	251 ( 6.4)!	27 ( 4.3)	258 ( 4.5)	10 ( 2.8)	258 ( 4.6)!
ALASKA†	10 ( 1.5)	281 ( 5.2)	24 ( 2.2)	278 ( 2.8)	15 ( 2.3)	280 ( 4.7)
ARIZONA	3 ( 1.3)	... ( ... )	24 ( 2.5)	272 ( 2.4)	18 ( 2.9)	267 ( 2.6)
ARKANSAS†	7 ( 2.7)	244 (11.6)!	16 ( 3.3)	263 ( 3.5)	21 ( 4.0)	257 ( 3.1)
CALIFORNIA	5 ( 1.6)	269 ( 8.1)!	28 ( 3.5)	260 ( 3.1)	17 ( 3.2)	267 ( 5.4)!
COLORADO	2 ( 1.0)	... ( ... )	41 ( 4.1)	278 ( 2.4)	19 ( 3.3)	270 ( 3.8)
CONNECTICUT	2 ( 1.1)	... ( ... )	40 ( 3.5)	282 ( 2.7)	18 ( 2.5)	285 ( 2.4)
DELAWARE	6 ( 0.4)	266 ( 4.0)	19 ( 0.7)	263 ( 2.5)	6 ( 0.3)	272 ( 4.6)
DISTRICT OF COLUMBIA	5 ( 0.6)	236 ( 7.5)	18 ( 0.6)	222 ( 3.7)	22 ( 0.8)	227 ( 3.4)
FLORIDA	9 ( 2.3)	263 ( 4.1)!	26 ( 3.9)	263 ( 4.3)	9 ( 1.9)	268 ( 4.5)!
GEORGIA	3 ( 1.1)	256 ( 9.7)!	28 ( 3.4)	264 ( 3.2)	16 ( 2.6)	263 ( 4.2)
HAWAII	3 ( 0.4)	263 ( 5.4)	33 ( 0.9)	269 ( 1.9)	11 ( 0.6)	257 ( 2.4)
INDIANA	3 ( 1.4)	271 ( 4.0)!	37 ( 4.6)	273 ( 3.1)	21 ( 4.1)	277 ( 3.1)
IOWA†	3 ( 1.6)	... ( ... )	41 ( 4.6)	286 ( 1.6)	17 ( 3.8)	280 ( 3.4)!
KENTUCKY	7 ( 2.7)	267 ( 8.8)!	35 ( 4.8)	268 ( 2.7)	23 ( 3.9)	268 ( 2.9)
LOUISIANA	3 ( 1.4)	250 (11.5)!	21 ( 4.3)	252 ( 4.1)!	15 ( 3.5)	252 ( 4.3)!
MAINE	2 ( ... )	... ( ... )	40 ( 3.4)	283 ( 2.4)	13 ( 2.3)	292 ( 3.1)
MARYLAND†	1 ( 0.9)	... ( ... )	45 ( 4.8)	272 ( 3.9)	35 ( 4.9)	271 ( 4.1)
MASSACHUSETTS	3 ( 1.2)	... ( ... )	34 ( 3.7)	276 ( 2.8)	20 ( 3.8)	288 ( 4.0)
MICHIGAN†	5 ( 2.4)	275 ( 5.9)!	34 ( 4.2)	277 ( 2.9)	16 ( 3.4)	288 ( 4.8)!
MINNESOTA	4 ( 2.1)	... ( ... )	42 ( 3.6)	284 ( 1.8)	20 ( 3.5)	287 ( 3.1)
MISSISSIPPI	4 ( 0.7)	236 ( 7.3)	26 ( 2.9)	253 ( 3.0)	14 ( 2.8)	243 ( 3.7)!
MISSOURI	6 ( 2.5)	275 ( 6.3)!	36 ( 4.4)	277 ( 2.2)	20 ( 4.0)	278 ( 2.9)!
MONTANA†	14 ( 3.7)	278 ( 4.3)!	39 ( 2.1)	287 ( 1.4)	16 ( 2.4)	285 ( 2.9)
NEBRASKA	2 ( 0.2)	... ( ... )	37 ( 3.4)	284 ( 1.9)	20 ( 3.0)	287 ( 2.3)
NEW MEXICO	4 ( 1.2)	... ( ... )	28 ( 2.7)	267 ( 3.0)	11 ( 1.5)	267 ( 2.6)
NEW YORK†	3 ( 1.6)	... ( ... )	40 ( 4.3)	277 ( 2.3)	22 ( 4.0)	278 ( 3.6)
NORTH CAROLINA	2 ( 1.0)	... ( ... )	40 ( 4.3)	267 ( 2.1)	21 ( 3.5)	269 ( 3.4)
NORTH DAKOTA	4 ( 0.5)	276 ( 6.9)	45 ( 2.9)	287 ( 1.6)	13 ( 1.8)	275 ( 3.2)
OREGON	3 ( 1.3)	... ( ... )	29 ( 3.6)	278 ( 2.7)	15 ( 3.1)	282 ( 4.8)!
RHODE ISLAND	0 ( ... )	... ( ... )	41 ( 1.1)	269 ( 1.6)	37 ( 1.0)	268 ( 1.3)
SOUTH CAROLINA†	4 ( 1.2)	263 ( 5.7)!	30 ( 4.3)	263 ( 2.7)	18 ( 3.4)	259 ( 3.9)
TENNESSEE	24 ( 3.8)	268 ( 3.1)	17 ( 2.9)	267 ( 3.5)	7 ( 1.8)	262 ( 8.6)!
TEXAS	7 ( 1.9)	261 ( 4.7)!	22 ( 3.1)	277 ( 2.5)	23 ( 3.5)	271 ( 2.8)
UTAH	4 ( 0.6)	274 ( 5.8)	26 ( 2.0)	275 ( 2.0)	18 ( 2.1)	281 ( 1.8)
VERMONT†	8 ( 2.3)	286 ( 3.5)!	33 ( 2.7)	280 ( 1.7)	11 ( 2.4)	287 ( 2.9)!
VIRGINIA	5 ( 2.8)	251 (26.7)!	37 ( 3.5)	274 ( 2.5)	26 ( 3.1)	274 ( 3.0)
WASHINGTON	5 ( 1.2)	279 ( 6.5)!	26 ( 3.4)	274 ( 2.4)	14 ( 2.7)	281 ( 5.1)
WEST VIRGINIA	4 ( 1.7)	256 ( 6.2)!	35 ( 3.6)	262 ( 1.9)	13 ( 3.1)	272 ( 3.4)!
WISCONSIN†	1 ( 0.6)	... ( ... )	45 ( 5.0)	285 ( 1.8)	18 ( 3.5)	291 ( 4.6)!
WYOMING	10 ( 0.6)	265 ( 3.7)	34 ( 1.1)	277 ( 1.8)	15 ( 1.0)	273 ( 2.1)
<b>Other Jurisdictions</b>						
DDESS	26 ( 2.1)	276 ( 3.9)	15 ( 1.1)	270 ( 5.1)	7 ( 1.0)	... ( ... )
DoDDS	10 ( 1.0)	275 ( 2.7)	8 ( 0.6)	266 ( 3.2)	22 ( 0.7)	278 ( 2.0)
GUAM	8 ( 0.6)	... ( ... )	32 ( 1.5)	230 ( 4.5)	6 ( 0.7)	... ( ... )

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).

... Characteristics of the sample do not permit a reliable estimate.

! Interpret with caution — the nature of the sample does not allow accurate determination of the variability of this statistic.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 6.46**

**1996 Mathematics Assessment**



POPULATION:

1996 Grade 8 Public School Students

REPORTED STATISTICS:

Percentage of Students and Average Mathematics Scale Score

TEACHERS' REPORTS ON:

Primary Use of Computers

*If you do use computers, what is the primary use of these computers for mathematics instruction?*

	Drill and Practice		Demonstration of New Topics in Mathematics		Playing Mathematical/Learning Games		Simulations and Applications		I Do Not Use Computers for Instruction	
JURISDICTIONS	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )
<b>Nation</b>										
NATION	18 ( 2.5)	270 ( 4.3)	5 ( 1.5)	280 ( 3.8)!	13 ( 2.4)	266 ( 4.3)	13 ( 2.9)	281 ( 4.5)!	52 ( 3.9)	270 ( 1.5)
NORTHEAST	15 ( 4.5)	...	5 ( ...)	...	8 ( 4.4)	...	17 ( 8.4)	290 ( 17.4)!	55 ( 9.0)	272 ( 3.2)!
SOUTHEAST	23 ( 3.8)	265 ( 5.2)	6 ( 2.3)	276 ( 9.8)!	16 ( 4.5)	247 ( 8.0)!	5 ( 2.6)	...	50 ( 6.4)	265 ( 3.4)
CENTRAL	8 ( 1.9)	260 ( 11.3)!	4 ( 0.9)	...	13 ( 6.3)	284 ( 5.2)!	23 ( 8.4)	285 ( 7.1)!	53 ( 11.5)	276 ( 4.8)!
WEST	22 ( 6.7)	275 ( 7.9)!	5 ( ...)	...	13 ( 3.7)	275 ( 6.7)!	10 ( 3.5)	266 ( 5.4)!	50 ( 5.5)	267 ( 2.7)
<b>States</b>										
ALABAMA	22 ( 3.5)	250 ( 4.3)	6 ( 2.2)	276 ( 6.8)!	15 ( 3.3)	255 ( 5.0)!	5 ( 2.2)	273 ( 9.6)!	53 ( 4.5)	256 ( 2.9)
ALASKA†	4 ( 1.6)	...	14 ( 1.4)	281 ( 3.8)	17 ( 2.6)	282 ( 4.9)	8 ( 1.4)	291 ( 3.9)	57 ( 2.5)	276 ( 2.1)
ARIZONA	12 ( 2.2)	265 ( 4.3)	5 ( 1.8)	283 ( 5.2)!	16 ( 2.8)	261 ( 3.2)	15 ( 3.7)	268 ( 4.4)!	52 ( 4.7)	271 ( 2.0)
ARKANSAS†	19 ( 3.9)	253 ( 4.9)!	5 ( 2.0)	259 ( 6.3)!	8 ( 2.0)	263 ( 6.2)!	5 ( 1.4)	269 ( 6.1)!	63 ( 4.8)	264 ( 2.0)
CALIFORNIA	4 ( 1.2)	250 ( 7.3)!	5 ( 1.7)	287 ( 8.9)!	19 ( 3.2)	266 ( 2.8)	12 ( 2.3)	273 ( 4.0)	60 ( 3.5)	262 ( 2.6)
COLORADO	15 ( 2.9)	271 ( 4.0)!	6 ( 1.6)	283 ( 5.7)!	17 ( 2.7)	278 ( 3.7)	15 ( 2.7)	276 ( 4.2)	48 ( 3.4)	275 ( 1.7)
CONNECTICUT	12 ( 2.6)	273 ( 5.1)!	7 ( 2.0)	291 ( 5.9)!	8 ( 2.1)	273 ( 9.2)!	18 ( 3.0)	290 ( 3.2)	56 ( 4.3)	278 ( 1.8)
DELAWARE	2 ( 0.4)	...	13 ( 1.7)	268 ( 3.2)	16 ( 0.9)	260 ( 3.6)	10 ( 0.8)	267 ( 3.4)	60 ( 1.5)	267 ( 1.3)
DISTRICT OF COLUMBIA	24 ( 1.3)	246 ( 3.9)	6 ( 0.5)	...	15 ( 1.0)	228 ( 2.8)	26 ( 1.5)	226 ( 3.0)	29 ( 1.2)	230 ( 2.6)
FLORIDA	17 ( 3.2)	263 ( 3.6)	6 ( 1.9)	281 ( 7.1)!	22 ( 3.1)	263 ( 2.2)	12 ( 3.6)	268 ( 8.9)!	43 ( 4.5)	261 ( 3.6)
GEORGIA	18 ( 2.6)	253 ( 3.2)	5 ( 1.7)	278 ( 7.1)!	21 ( 2.9)	266 ( 3.6)	10 ( 2.3)	266 ( 5.9)!	46 ( 4.2)	263 ( 2.6)
HAWAII	8 ( 0.5)	261 ( 2.9)	5 ( 0.6)	279 ( 2.8)	22 ( 1.0)	252 ( 2.6)	5 ( 0.4)	274 ( 4.2)	60 ( 1.0)	265 ( 1.4)
INDIANA	18 ( 3.0)	268 ( 4.4)	4 ( 1.6)	277 ( 5.5)!	15 ( 3.5)	276 ( 4.0)!	14 ( 3.1)	276 ( 3.1)!	49 ( 5.1)	278 ( 2.1)
IOWA†	7 ( 2.5)	278 ( 4.3)!	6 ( 1.9)	302 ( 3.5)!	16 ( 3.6)	283 ( 2.7)!	18 ( 4.1)	284 ( 2.3)!	53 ( 4.8)	283 ( 2.1)
KENTUCKY	15 ( 3.2)	266 ( 4.2)!	4 ( 1.7)	266 ( 7.6)!	18 ( 3.4)	261 ( 2.9)	23 ( 3.8)	267 ( 2.9)	41 ( 4.5)	271 ( 1.9)
LOUISIANA	17 ( 3.4)	248 ( 4.6)	2 ( 1.5)	...	15 ( 3.2)	260 ( 3.7)!	3 ( 1.1)	239 ( 8.1)!	62 ( 4.7)	254 ( 2.3)
MAINE	6 ( 1.6)	290 ( 3.8)!	8 ( 2.1)	288 ( 4.8)!	11 ( 2.6)	278 ( 4.8)!	19 ( 3.2)	290 ( 4.0)	56 ( 3.7)	282 ( 1.5)
MARYLAND†	37 ( 4.6)	262 ( 3.5)	9 ( 2.0)	275 ( 3.5)!	12 ( 2.7)	277 ( 4.3)!	16 ( 3.2)	284 ( 6.6)!	25 ( 3.5)	271 ( 3.9)
MASSACHUSETTS	5 ( 1.8)	266 ( 9.6)!	7 ( 1.9)	290 ( 6.4)!	17 ( 3.6)	273 ( 6.0)!	14 ( 3.4)	286 ( 5.3)!	58 ( 4.4)	278 ( 2.2)
MICHIGAN†	6 ( 2.3)	269 ( 6.3)!	10 ( 2.8)	285 ( 6.5)!	8 ( 2.3)	281 ( 4.3)!	14 ( 3.0)	292 ( 3.7)!	63 ( 4.8)	276 ( 2.3)
MINNESOTA	8 ( 2.3)	281 ( 5.0)!	16 ( 3.2)	285 ( 3.8)!	12 ( 2.8)	283 ( 5.1)!	21 ( 3.0)	289 ( 3.7)	44 ( 4.6)	283 ( 2.5)
MISSISSIPPI	24 ( 3.7)	244 ( 3.9)	2 ( 1.2)	...	7 ( 2.0)	250 ( 5.7)!	2 ( 0.7)	...	64 ( 4.4)	255 ( 1.6)
MISSOURI	16 ( 3.8)	276 ( 3.1)!	8 ( 2.4)	283 ( 5.9)!	17 ( 3.4)	276 ( 2.8)	16 ( 3.3)	279 ( 3.6)!	43 ( 4.7)	272 ( 1.9)
MONTANA†	7 ( 2.1)	277 ( 7.7)!	12 ( 2.6)	284 ( 3.6)!	20 ( 4.0)	278 ( 3.0)!	35 ( 2.7)	287 ( 2.0)	26 ( 4.0)	286 ( 3.0)
NEBRASKA	6 ( 1.3)	269 ( 4.9)!	12 ( 2.1)	287 ( 3.7)	16 ( 2.1)	279 ( 2.7)	14 ( 1.7)	286 ( 1.8)	53 ( 3.6)	284 ( 1.5)
NEW MEXICO	16 ( 2.0)	263 ( 2.7)	2 ( 0.4)	...	10 ( 1.5)	262 ( 3.7)	7 ( 0.9)	267 ( 3.2)	65 ( 2.0)	264 ( 1.9)
NEW YORK†	12 ( 3.5)	274 ( 4.4)!	8 ( 2.3)	283 ( 4.2)!	7 ( 2.1)	257 ( 6.1)!	15 ( 3.2)	279 ( 3.3)!	58 ( 5.3)	271 ( 2.4)
NORTH CAROLINA	27 ( 3.6)	266 ( 3.6)	5 ( 1.5)	279 ( 6.7)!	17 ( 2.8)	270 ( 3.5)	16 ( 2.7)	268 ( 3.1)	36 ( 3.3)	268 ( 2.1)
NORTH DAKOTA	14 ( 1.3)	278 ( 2.8)	16 ( 2.5)	290 ( 2.3)	10 ( 1.8)	282 ( 3.7)	20 ( 1.6)	288 ( 2.2)	41 ( 3.1)	284 ( 1.8)
OREGON	2 ( 1.0)	...	5 ( 2.1)	283 ( 8.9)!	13 ( 2.8)	274 ( 4.6)!	16 ( 2.9)	281 ( 5.6)	64 ( 4.2)	278 ( 1.7)
RHODE ISLAND	6 ( 0.4)	262 ( 4.3)	5 ( 0.4)	276 ( 3.7)	19 ( 0.6)	269 ( 1.7)	13 ( 0.9)	274 ( 2.9)	57 ( 1.1)	271 ( 1.1)
SOUTH CAROLINA†	26 ( 4.2)	258 ( 4.0)	3 ( 1.2)	...	12 ( 2.8)	260 ( 3.8)!	5 ( 1.5)	266 ( 6.3)!	55 ( 4.5)	262 ( 2.1)
TENNESSEE	21 ( 3.6)	265 ( 4.7)	4 ( 1.8)	264 ( 7.1)!	18 ( 3.7)	266 ( 5.1)!	8 ( 2.9)	272 ( 4.0)!	50 ( 4.4)	262 ( 2.3)
TEXAS	26 ( 4.2)	264 ( 3.5)	4 ( 1.4)	278 ( 5.4)!	11 ( 2.7)	270 ( 4.3)!	14 ( 2.8)	277 ( 5.5)!	45 ( 4.2)	272 ( 3.0)
UTAH	13 ( 1.5)	276 ( 3.1)	11 ( 1.8)	282 ( 3.1)	8 ( 1.2)	271 ( 2.1)	8 ( 1.9)	279 ( 2.7)!	60 ( 2.4)	277 ( 1.4)
VERMONT†	10 ( 0.9)	280 ( 2.1)	4 ( 1.3)	283 ( 5.0)!	8 ( 2.1)	275 ( 6.4)!	25 ( 3.4)	282 ( 2.2)	54 ( 2.6)	281 ( 1.7)
VIRGINIA	22 ( 3.2)	265 ( 2.3)	6 ( 1.5)	286 ( 5.1)!	17 ( 2.7)	268 ( 4.0)	21 ( 2.6)	276 ( 6.2)	35 ( 3.9)	268 ( 2.2)
WASHINGTON	7 ( 2.0)	268 ( 7.9)!	9 ( 2.2)	278 ( 6.1)!	14 ( 2.9)	274 ( 4.8)!	17 ( 2.3)	286 ( 3.1)	52 ( 3.6)	275 ( 1.8)
WEST VIRGINIA	20 ( 3.4)	267 ( 2.9)	4 ( 1.7)	266 ( 8.6)!	10 ( 2.2)	259 ( 3.9)!	2 ( 1.1)	...	64 ( 4.0)	266 ( 1.7)
WISCONSIN†	8 ( 2.0)	282 ( 5.5)!	6 ( 2.1)	291 ( 9.4)!	12 ( 3.2)	274 ( 3.4)!	19 ( 4.1)	287 ( 5.0)!	55 ( 5.2)	285 ( 1.9)
WYOMING	13 ( 0.7)	269 ( 2.8)	10 ( 0.4)	285 ( 1.7)	24 ( 0.8)	273 ( 2.1)	10 ( 0.7)	269 ( 2.9)	43 ( 1.0)	278 ( 1.5)
<b>Other Jurisdictions</b>										
DDESS	21 ( 1.6)	266 ( 3.5)	0 ( ...)	...	27 ( 2.0)	267 ( 3.8)	21 ( 1.3)	266 ( 6.5)	31 ( 1.8)	274 ( 4.1)
DoDDS	4 ( 0.6)	274 ( 2.7)	6 ( 0.4)	283 ( 2.7)	14 ( 0.9)	274 ( 3.4)	21 ( 1.1)	279 ( 2.4)	54 ( 1.0)	273 ( 1.5)
GUAM	25 ( 1.6)	236 ( 4.2)	11 ( 1.3)	...	12 ( 0.9)	...	0 ( ...)	...	52 ( 1.7)	231 ( 3.7)

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).

... Characteristics of the sample do not permit a reliable estimate.

! Interpret with caution — the nature of the sample does not allow accurate determination of the variability of this statistic.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 6.47**

**1996 Mathematics Assessment**



POPULATION:

1996 Grade 8 Public School Students

REPORTED STATISTICS:

Percentage of Students and Average Mathematics Scale Score

TEACHERS' REPORTS ON:

Frequency of Use of Computers

*How often do the students in this class use a computer?*

**Never or Hardly Ever**

**Once or Twice a Month**

**Once or Twice a Week**

**Almost Every Day**

**JURISDICTIONS**

	PCT ( SE)	SS ( SE)	PCT ( SE)	SS ( SE)	PCT ( SE)	SS ( SE)	PCT ( SE)	SS ( SE)
<b>Nation</b>								
NATION	70 ( 3.9)	273 ( 1.4)	22 ( 3.9)	277 ( 3.9)	8 ( 1.5)	262 ( 5.5)	1 ( 0.4)	250 ( 8.6)!
NORTHEAST	82 ( 6.0)	278 ( 2.6)	13 ( 5.6)	289 (18.6)!	5 ( 2.4)	... ( ... )	0 ( ... )	... ( ... )
SOUTHEAST	65 ( 7.8)	265 ( 3.9)	23 ( 6.9)	263 ( 5.5)!	9 ( 4.2)	275 (14.0)!	3 ( 1.7)	241 ( 9.5)!
CENTRAL	66 (11.6)	276 ( 3.3)	28 (12.1)	282 ( 6.3)!	6 ( 2.1)	... ( ... )	0 ( ... )	... ( ... )
WEST	69 ( 5.8)	271 ( 2.7)	21 ( 5.3)	278 ( 7.8)!	9 ( 3.6)	255 ( 6.5)!	1 ( 0.6)	... ( ... )
<b>States</b>								
ALABAMA	65 ( 4.0)	257 ( 2.4)	23 ( 4.1)	260 ( 5.5)	9 ( 2.4)	256 ( 4.6)!	3 ( 1.2)	... ( ... )
ALASKA†	73 ( 2.8)	280 ( 2.2)	14 ( 2.3)	281 ( 3.7)	12 ( 2.6)	265 ( 6.7)!	2 ( 1.2)	... ( ... )
ARIZONA	70 ( 3.5)	271 ( 1.7)	22 ( 3.4)	268 ( 3.1)	6 ( 1.6)	247 ( 5.8)!	2 ( 1.2)	... ( ... )
ARKANSAS†	76 ( 4.5)	265 ( 1.5)	12 ( 3.5)	259 ( 5.1)!	11 ( 3.2)	251 ( 7.1)!	0 ( ... )	... ( ... )
CALIFORNIA	73 ( 3.4)	264 ( 2.1)	22 ( 3.2)	265 ( 3.5)	4 ( 1.4)	262 ( 7.7)!	1 ( 0.5)	... ( ... )
COLORADO	71 ( 3.7)	276 ( 1.4)	26 ( 3.6)	276 ( 3.6)	3 ( 0.7)	271 (10.1)!	1 ( ... )	... ( ... )
CONNECTICUT	72 ( 3.1)	282 ( 1.4)	20 ( 3.0)	280 ( 3.4)	8 ( 1.7)	278 ( 4.8)!	1 ( ... )	... ( ... )
DELAWARE	80 ( 1.0)	268 ( 1.1)	9 ( 0.8)	260 ( 3.2)	11 ( 0.8)	264 ( 3.8)	0 ( 0.1)	... ( ... )
DISTRICT OF COLUMBIA	47 ( 1.5)	233 ( 3.0)	20 ( 1.3)	225 ( 3.9)	33 ( 1.2)	234 ( 1.9)	0 ( ... )	... ( ... )
FLORIDA	63 ( 3.6)	264 ( 2.9)	21 ( 2.9)	266 ( 2.4)	14 ( 2.6)	259 ( 3.9)	2 ( 0.6)	... ( ... )
GEORGIA	62 ( 3.8)	265 ( 2.0)	23 ( 3.3)	269 ( 4.2)	11 ( 2.0)	252 ( 3.1)	4 ( 1.3)	245 ( 8.1)!
HAWAII	81 ( 0.9)	265 ( 1.3)	11 ( 0.8)	247 ( 3.3)	6 ( 0.7)	251 ( 4.0)	2 ( 0.2)	... ( ... )
INDIANA	68 ( 3.8)	276 ( 2.0)	25 ( 3.4)	278 ( 3.3)	5 ( 1.5)	265 ( 5.1)!	1 ( 0.9)	... ( ... )
IOWA†	70 ( 4.5)	285 ( 1.6)	22 ( 4.2)	285 ( 2.1)!	7 ( 2.4)	274 ( 2.8)!	1 ( ... )	... ( ... )
KENTUCKY	48 ( 4.3)	271 ( 2.1)	39 ( 4.6)	267 ( 2.3)	12 ( 2.9)	259 ( 3.7)!	1 ( 0.6)	... ( ... )
LOUISIANA	76 ( 4.0)	255 ( 1.9)	9 ( 2.1)	260 ( 3.3)!	13 ( 3.3)	243 ( 5.0)!	2 ( 0.7)	... ( ... )
MAINE	65 ( 3.6)	282 ( 1.4)	21 ( 3.2)	289 ( 3.5)	12 ( 3.0)	276 ( 4.8)!	2 ( 1.2)	... ( ... )
MARYLAND†	56 ( 4.4)	278 ( 2.7)	27 ( 3.6)	267 ( 4.6)	13 ( 2.7)	260 ( 6.4)	3 ( 1.1)	270 (26.2)!
MASSACHUSETTS	68 ( 3.6)	277 ( 2.2)	22 ( 3.6)	281 ( 4.8)	10 ( 2.3)	276 ( 5.2)!	0 ( ... )	... ( ... )
MICHIGAN†	78 ( 3.7)	278 ( 2.0)	14 ( 3.1)	289 ( 4.6)!	7 ( 2.1)	282 ( 7.8)!	1 ( 0.7)	... ( ... )
MINNESOTA	72 ( 3.8)	285 ( 1.6)	20 ( 3.3)	283 ( 3.5)	6 ( 2.1)	286 (10.0)!	3 ( 1.4)	... ( ... )
MISSISSIPPI	69 ( 4.1)	254 ( 1.6)	16 ( 2.6)	245 ( 3.1)	11 ( 2.7)	239 ( 6.3)!	3 ( 1.4)	256 ( 7.9)!
MISSOURI	60 ( 4.5)	273 ( 1.8)	26 ( 3.4)	279 ( 3.1)	11 ( 3.1)	271 ( 3.8)!	2 ( 1.1)	... ( ... )
MONTANA†	59 ( 3.3)	284 ( 1.7)	29 ( 2.7)	285 ( 2.4)	10 ( 2.0)	277 ( 5.8)!	3 ( 1.4)	... ( ... )
NEBRASKA	72 ( 2.4)	282 ( 1.3)	21 ( 2.1)	285 ( 2.1)	5 ( 1.2)	284 ( 3.3)!	2 ( 0.8)	... ( ... )
NEW MEXICO	80 ( 1.8)	266 ( 1.5)	10 ( 1.3)	260 ( 3.5)	7 ( 1.0)	259 ( 1.9)	3 ( 0.9)	... ( ... )
NEW YORK†	77 ( 3.3)	273 ( 2.1)	17 ( 2.8)	279 ( 2.9)	5 ( 1.9)	259 ( 4.1)!	1 ( 0.5)	... ( ... )
NORTH CAROLINA	58 ( 3.3)	269 ( 1.8)	30 ( 3.0)	267 ( 2.4)	10 ( 2.0)	268 ( 3.8)	2 ( 0.7)	... ( ... )
NORTH DAKOTA	73 ( 2.8)	285 ( 1.1)	23 ( 2.5)	281 ( 2.4)	2 ( 1.0)	... ( ... )	2 ( 1.3)	... ( ... )
OREGON	75 ( 3.3)	278 ( 1.7)	17 ( 3.0)	275 ( 3.9)	5 ( 1.8)	279 ( 6.7)!	2 ( 1.0)	... ( ... )
RHODE ISLAND	72 ( 0.9)	272 ( 1.2)	19 ( 0.8)	269 ( 1.9)	7 ( 0.5)	264 ( 4.2)	2 ( 0.1)	... ( ... )
SOUTH CAROLINA†	64 ( 4.5)	261 ( 2.3)	20 ( 3.1)	264 ( 2.7)	12 ( 2.8)	256 ( 3.6)!	5 ( 1.4)	241 ( 8.4)!
TENNESSEE	60 ( 4.4)	266 ( 2.0)	18 ( 3.2)	261 ( 3.8)	13 ( 2.5)	269 ( 4.7)	9 ( 2.3)	263 ( 3.9)!
TEXAS	59 ( 4.2)	274 ( 2.4)	25 ( 3.8)	271 ( 3.3)	14 ( 3.0)	265 ( 4.6)!	2 ( 0.9)	... ( ... )
UTAH	76 ( 2.0)	278 ( 1.3)	14 ( 1.0)	278 ( 2.3)	8 ( 1.8)	274 ( 4.5)!	2 ( 0.8)	276 ( 2.6)!
VERMONT†	60 ( 3.1)	280 ( 1.9)	30 ( 2.6)	280 ( 1.5)	6 ( 2.1)	267 ( 6.7)!	4 ( 1.2)	... ( ... )
VIRGINIA	63 ( 3.8)	271 ( 1.7)	29 ( 2.9)	276 ( 2.1)	6 ( 1.6)	253 ( 7.1)!	2 ( 1.5)	... ( ... )
WASHINGTON	72 ( 2.6)	277 ( 1.8)	19 ( 2.2)	279 ( 4.1)	8 ( 1.7)	272 ( 5.8)!	2 ( 0.6)	... ( ... )
WEST VIRGINIA	80 ( 3.0)	267 ( 1.2)	11 ( 2.1)	260 ( 4.0)	8 ( 2.2)	257 ( 4.6)!	1 ( 0.4)	... ( ... )
WISCONSIN†	72 ( 3.8)	285 ( 2.1)	19 ( 3.3)	285 ( 4.3)	7 ( 2.0)	271 ( 8.3)!	3 ( 1.6)	... ( ... )
WYOMING	50 ( 1.0)	278 ( 1.4)	35 ( 1.0)	274 ( 1.4)	12 ( 0.6)	272 ( 3.0)	3 ( 0.3)	265 ( 5.5)
<b>Other Jurisdictions</b>								
DDESS	57 ( 2.2)	270 ( 4.1)	24 ( 1.5)	261 ( 4.1)	18 ( 1.7)	276 ( 4.3)	1 ( 0.2)	... ( ... )
D <sub>o</sub> DDS	68 ( 0.9)	274 ( 1.4)	17 ( 0.8)	272 ( 2.1)	11 ( 0.5)	283 ( 2.1)	3 ( 0.8)	290 ( 8.1)!
GUAM	84 ( 1.0)	234 ( 2.2)	9 ( 0.7)	... ( ... )	7 ( 0.7)	... ( ... )	0 ( ... )	... ( ... )

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).

... Characteristics of the sample do not permit a reliable estimate.

! Interpret with caution — the nature of the sample does not allow accurate determination of the variability of this statistic.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 6.48**

**1996 Mathematics Assessment**



POPULATION:

1996 Grade 8 Public School Students

REPORTED STATISTICS:

Percentage of Students and Average Mathematics Scale Score

STUDENTS' REPORTS ON:

Frequency of Computer Use

*When you do mathematics in school, how often do you use a computer?*

**Never or Hardly Ever**

**Once or Twice a Month**

**Once or Twice a Week**

**Almost Every Day**

**JURISDICTIONS**

PCT ( SE )    SS ( SE )    PCT ( SE )    SS ( SE )    PCT ( SE )    SS ( SE )    PCT ( SE )    SS ( SE )

<b>Nation</b>	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )
NATION	57 ( 1.4)	270 ( 1.3)	16 ( 0.9)	275 ( 2.2)	15 ( 0.9)	270 ( 2.0)	12 ( 0.6)	270 ( 2.2)
NORTHEAST	56 ( 3.2)	278 ( 4.1)	17 ( 1.6)	273 ( 5.3)	18 ( 3.0)	274 ( 3.3)!	10 ( 1.7)	276 ( 4.2)
SOUTHEAST	57 ( 3.0)	263 ( 3.1)	13 ( 1.8)	266 ( 3.4)	17 ( 1.9)	269 ( 4.4)	14 ( 1.3)	258 ( 4.8)
CENTRAL	57 ( 2.5)	275 ( 3.6)	17 ( 2.4)	282 ( 4.6)	13 ( 0.8)	274 ( 3.1)	13 ( 1.1)	278 ( 5.8)
WEST	56 ( 2.8)	268 ( 2.0)	17 ( 1.3)	275 ( 4.6)	15 ( 1.5)	266 ( 4.9)	13 ( 1.1)	269 ( 3.9)
<b>States</b>								
ALABAMA	58 ( 2.1)	255 ( 2.1)	15 ( 1.0)	265 ( 3.8)	14 ( 1.3)	256 ( 3.7)	12 ( 1.1)	258 ( 4.2)
ALASKA†	55 ( 1.8)	277 ( 2.2)	15 ( 1.4)	276 ( 3.8)	15 ( 1.1)	278 ( 4.2)	15 ( 1.1)	283 ( 3.4)
ARIZONA	61 ( 1.4)	267 ( 1.6)	15 ( 0.9)	270 ( 2.0)	13 ( 1.0)	271 ( 4.1)	11 ( 1.0)	272 ( 3.6)
ARKANSAS†	59 ( 2.0)	263 ( 1.5)	12 ( 1.1)	263 ( 2.5)	16 ( 1.4)	260 ( 3.4)	13 ( 1.0)	261 ( 3.0)
CALIFORNIA	61 ( 1.6)	262 ( 1.9)	14 ( 1.0)	265 ( 2.9)	13 ( 1.2)	259 ( 3.8)	12 ( 0.9)	271 ( 4.1)
COLORADO	58 ( 1.4)	273 ( 1.3)	18 ( 1.1)	278 ( 2.1)	12 ( 0.6)	280 ( 2.3)	12 ( 0.9)	282 ( 2.2)
CONNECTICUT	60 ( 1.3)	278 ( 1.6)	14 ( 0.8)	278 ( 1.8)	13 ( 0.8)	281 ( 2.6)	13 ( 0.8)	288 ( 2.0)
DELAWARE	63 ( 1.0)	266 ( 1.2)	13 ( 0.8)	270 ( 2.6)	13 ( 0.8)	269 ( 2.8)	10 ( 0.8)	266 ( 3.7)
DISTRICT OF COLUMBIA	56 ( 1.4)	230 ( 1.6)	17 ( 1.0)	243 ( 2.5)	17 ( 0.9)	233 ( 2.5)	10 ( 0.6)	236 ( 3.6)
FLORIDA	62 ( 1.5)	264 ( 1.8)	14 ( 0.8)	267 ( 3.0)	13 ( 0.9)	257 ( 2.7)	11 ( 0.9)	270 ( 3.3)
GEORGIA	62 ( 1.5)	262 ( 1.8)	15 ( 0.9)	266 ( 2.8)	13 ( 1.0)	261 ( 3.3)	10 ( 0.8)	265 ( 3.4)
HAWAII	66 ( 1.0)	261 ( 1.3)	14 ( 0.8)	266 ( 2.7)	10 ( 0.6)	263 ( 3.8)	10 ( 0.7)	264 ( 3.4)
INDIANA	63 ( 1.9)	274 ( 1.7)	15 ( 1.4)	282 ( 2.3)	11 ( 0.8)	276 ( 2.4)	10 ( 0.7)	278 ( 2.7)
IOWA†	57 ( 1.3)	284 ( 1.5)	16 ( 1.0)	284 ( 1.6)	13 ( 0.8)	285 ( 2.5)	14 ( 0.9)	284 ( 2.2)
KENTUCKY	42 ( 2.0)	266 ( 1.5)	22 ( 0.9)	266 ( 1.5)	23 ( 1.2)	268 ( 1.8)	14 ( 0.9)	271 ( 2.2)
LOUISIANA	66 ( 1.9)	253 ( 1.6)	11 ( 1.0)	258 ( 2.5)	15 ( 1.3)	251 ( 2.8)	9 ( 0.7)	251 ( 3.1)
MAINE	53 ( 1.5)	284 ( 1.5)	16 ( 0.9)	287 ( 1.9)	14 ( 0.9)	283 ( 3.0)	17 ( 0.9)	285 ( 1.9)
MARYLAND†	54 ( 2.2)	273 ( 1.8)	19 ( 1.5)	266 ( 3.0)	17 ( 1.6)	267 ( 3.8)	10 ( 0.9)	270 ( 4.5)
MASSACHUSETTS	58 ( 1.5)	276 ( 1.7)	16 ( 1.1)	281 ( 3.0)	14 ( 0.9)	277 ( 3.4)	12 ( 0.8)	283 ( 2.7)
MICHIGAN†	57 ( 1.6)	276 ( 2.0)	14 ( 1.2)	283 ( 2.7)	13 ( 0.8)	273 ( 2.6)	16 ( 1.2)	279 ( 3.0)
MINNESOTA	56 ( 1.3)	284 ( 1.6)	18 ( 1.0)	286 ( 2.1)	14 ( 0.9)	284 ( 2.6)	12 ( 0.8)	284 ( 3.3)
MISSISSIPPI	60 ( 2.0)	251 ( 1.3)	9 ( 1.1)	254 ( 3.1)	11 ( 1.2)	247 ( 3.2)	20 ( 1.8)	248 ( 2.0)
MISSOURI	59 ( 1.7)	272 ( 1.5)	15 ( 0.9)	279 ( 2.4)	13 ( 1.0)	275 ( 2.5)	13 ( 0.8)	274 ( 2.3)
MONTANA†	57 ( 1.7)	281 ( 1.6)	19 ( 1.6)	289 ( 2.2)	13 ( 1.0)	283 ( 3.0)	12 ( 0.9)	285 ( 2.7)
NEBRASKA	58 ( 1.2)	282 ( 1.1)	17 ( 0.8)	283 ( 2.2)	13 ( 0.7)	284 ( 2.1)	11 ( 0.6)	286 ( 2.7)
NEW MEXICO	66 ( 1.4)	261 ( 1.4)	11 ( 0.7)	262 ( 2.3)	12 ( 1.0)	263 ( 4.1)	11 ( 1.0)	268 ( 3.2)
NEW YORK†	59 ( 1.2)	271 ( 1.6)	13 ( 0.8)	271 ( 3.1)	14 ( 0.8)	270 ( 3.0)	13 ( 0.9)	270 ( 3.1)
NORTH CAROLINA	53 ( 1.8)	268 ( 1.9)	19 ( 1.2)	269 ( 2.4)	16 ( 1.4)	268 ( 2.0)	12 ( 1.0)	269 ( 2.7)
NORTH DAKOTA	62 ( 1.2)	284 ( 1.1)	15 ( 0.8)	287 ( 2.2)	13 ( 0.8)	286 ( 2.0)	10 ( 0.8)	284 ( 2.0)
OREGON	61 ( 1.6)	276 ( 1.4)	15 ( 0.8)	276 ( 2.4)	13 ( 1.1)	281 ( 3.3)	12 ( 0.9)	279 ( 3.0)
RHODE ISLAND	60 ( 1.2)	268 ( 1.2)	16 ( 1.0)	269 ( 1.8)	14 ( 0.8)	270 ( 2.3)	10 ( 0.8)	276 ( 3.1)
SOUTH CAROLINA†	56 ( 2.0)	261 ( 2.2)	14 ( 1.0)	264 ( 2.3)	14 ( 1.3)	263 ( 2.4)	15 ( 1.2)	257 ( 2.6)
TENNESSEE	62 ( 2.0)	264 ( 1.4)	15 ( 1.3)	263 ( 2.2)	14 ( 1.3)	262 ( 3.4)	9 ( 0.8)	262 ( 3.7)
TEXAS	53 ( 2.0)	269 ( 1.8)	17 ( 1.2)	271 ( 1.6)	15 ( 1.0)	271 ( 2.3)	16 ( 1.1)	273 ( 2.6)
UTAH	61 ( 1.1)	277 ( 1.1)	14 ( 0.8)	278 ( 1.7)	14 ( 0.9)	277 ( 2.0)	12 ( 0.7)	278 ( 2.3)
VERMONT†	50 ( 1.3)	279 ( 1.7)	16 ( 1.0)	279 ( 2.3)	18 ( 1.1)	278 ( 1.9)	17 ( 0.9)	282 ( 2.2)
VIRGINIA	57 ( 1.8)	270 ( 1.6)	18 ( 1.0)	271 ( 2.4)	12 ( 0.8)	268 ( 3.3)	12 ( 0.8)	269 ( 3.3)
WASHINGTON	61 ( 1.4)	276 ( 1.3)	14 ( 0.8)	279 ( 2.2)	13 ( 0.8)	278 ( 3.0)	12 ( 0.9)	276 ( 2.8)
WEST VIRGINIA	68 ( 1.7)	263 ( 1.2)	13 ( 1.1)	269 ( 2.4)	10 ( 0.9)	266 ( 3.0)	9 ( 0.6)	268 ( 2.6)
WISCONSIN†	53 ( 1.7)	283 ( 1.7)	18 ( 1.1)	282 ( 1.8)	15 ( 1.2)	283 ( 2.9)	14 ( 0.9)	285 ( 2.8)
WYOMING	54 ( 1.1)	274 ( 1.3)	18 ( 0.7)	276 ( 2.5)	14 ( 0.6)	276 ( 2.3)	14 ( 0.7)	276 ( 1.9)
<b>Other Jurisdictions</b>								
DDESS	53 ( 2.1)	269 ( 3.5)	20 ( 1.7)	267 ( 5.5)	17 ( 1.6)	267 ( 5.5)	10 ( 1.2)	... ( ... )
D <sub>0</sub> DDS	60 ( 1.1)	276 ( 1.2)	14 ( 0.7)	273 ( 2.5)	11 ( 0.5)	272 ( 3.0)	15 ( 0.8)	276 ( 2.5)
GUAM	60 ( 1.7)	239 ( 2.0)	14 ( 1.3)	242 ( 4.3)	17 ( 1.2)	239 ( 4.3)	9 ( 0.9)	234 ( 6.5)

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).

... Characteristics of the sample do not permit a reliable estimate.

! Interpret with caution — the nature of the sample does not allow accurate determination of the variability of this statistic.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

## Chapter 7

# *Influences Beyond School That Facilitate Learning Mathematics*

### *Overview*

Chapter 7 contains tables which present the relationship between mathematics scale scores and home factors. It presents results about students' responses to questions concerning the home environment and students' attitudes about learning and using mathematics. Students' attitudes and beliefs about mathematics can be a contributing factor affecting the skills they will acquire and their decisions about studying mathematics in future years.

Students were asked about the number and type of literacy materials in their home, their television viewing habits, and the number of times that they changed schools because they had changed where they lived in the last two years. They were asked about the usefulness of mathematics for solving everyday problems and if they agreed that mathematics is mostly memorizing facts or that there is only one correct way to solve a mathematics problem.

NAEP also considered principals' responses to questions about parental involvement in the school. Parental involvement is increasingly sought in the school and principals were asked to characterize parental support for student achievement within their schools.

**TABLE 7.1**

**1992 Mathematics Assessment**



POPULATION:

1992 Grade 4 Public School Students

REPORTED STATISTICS:

Percentage of Students and Average Mathematics Scale Score

STUDENTS' REPORTS ON:

Discussing Studies at Home

*How often do you discuss things you have studied in school with someone at home?*

Never or Hardly Ever

Once or Twice a Month

Once or Twice a Week

Almost Every Day

**JURISDICTIONS**

PCT ( SE )    SS ( SE )    PCT ( SE )    SS ( SE )    PCT ( SE )    SS ( SE )    PCT ( SE )    SS ( SE )

**Nation**

NATION	20 ( 0.6)	209 ( 1.2)	6 ( 0.3)	220 ( 2.9)	21 ( 0.6)	225 ( 1.1)	53 ( 0.7)	220 ( 0.9)
NORTHEAST	19 ( 1.7)	212 ( 2.7)	5 ( 0.7)	... ( ... )	21 ( 0.9)	229 ( 2.9)	55 ( 1.8)	226 ( 2.8)
SOUTHEAST	22 ( 1.3)	201 ( 2.8)	5 ( 0.5)	214 ( 4.4)	20 ( 1.3)	218 ( 2.3)	53 ( 1.4)	210 ( 2.0)
CENTRAL	20 ( 1.0)	215 ( 3.0)	5 ( 0.7)	219 ( 6.9)	21 ( 1.5)	230 ( 2.5)	53 ( 1.5)	224 ( 2.1)
WEST	20 ( 1.1)	207 ( 1.9)	7 ( 0.6)	224 ( 5.2)	20 ( 1.1)	222 ( 1.7)	53 ( 1.4)	220 ( 1.6)

**States**

ALABAMA	21 ( 1.2)	202 ( 2.4)	4 ( 0.4)	217 ( 3.3)	21 ( 0.8)	213 ( 2.0)	54 ( 1.3)	208 ( 1.6)
ALASKA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
ARIZONA	23 ( 1.0)	207 ( 1.5)	5 ( 0.4)	216 ( 3.2)	22 ( 1.0)	220 ( 1.6)	50 ( 1.1)	217 ( 1.2)
ARKANSAS	24 ( 1.0)	201 ( 1.4)	4 ( 0.4)	219 ( 3.5)	22 ( 0.9)	219 ( 1.5)	50 ( 1.2)	210 ( 0.9)
CALIFORNIA	19 ( 1.1)	199 ( 1.9)	6 ( 0.5)	207 ( 4.7)	24 ( 0.9)	210 ( 2.1)	51 ( 1.2)	212 ( 1.9)
COLORADO	18 ( 0.7)	208 ( 1.6)	5 ( 0.4)	220 ( 2.5)	21 ( 0.8)	225 ( 1.7)	55 ( 1.0)	224 ( 1.0)
CONNECTICUT	16 ( 1.0)	215 ( 2.0)	6 ( 0.6)	227 ( 3.1)	24 ( 0.9)	230 ( 1.6)	55 ( 1.2)	229 ( 1.2)
DELAWARE	19 ( 0.8)	208 ( 1.8)	4 ( 0.4)	229 ( 3.1)	22 ( 0.9)	220 ( 1.6)	55 ( 1.2)	219 ( 1.1)
DISTRICT OF COLUMBIA	12 ( 0.6)	186 ( 2.1)	3 ( 0.4)	185 ( 4.3)	20 ( 0.8)	198 ( 1.5)	65 ( 0.9)	193 ( 0.8)
FLORIDA	18 ( 0.8)	206 ( 2.2)	4 ( 0.4)	211 ( 3.8)	22 ( 0.7)	217 ( 1.8)	56 ( 1.2)	215 ( 1.7)
GEORGIA	18 ( 0.9)	207 ( 1.7)	4 ( 0.4)	227 ( 3.1)	23 ( 1.0)	221 ( 2.2)	55 ( 1.3)	216 ( 1.3)
HAWAII	24 ( 1.0)	206 ( 1.9)	6 ( 0.5)	212 ( 3.6)	25 ( 1.1)	219 ( 1.7)	45 ( 1.3)	216 ( 1.5)
INDIANA	19 ( 0.7)	214 ( 1.8)	4 ( 0.5)	223 ( 2.7)	22 ( 0.9)	226 ( 1.4)	55 ( 1.0)	221 ( 1.3)
IOWA	17 ( 0.9)	219 ( 1.8)	6 ( 0.4)	232 ( 2.1)	25 ( 0.9)	233 ( 1.6)	52 ( 1.2)	232 ( 1.1)
KENTUCKY	21 ( 0.8)	208 ( 1.6)	4 ( 0.4)	218 ( 3.1)	22 ( 0.8)	219 ( 1.7)	53 ( 1.1)	216 ( 1.2)
LOUISIANA	19 ( 0.9)	201 ( 2.2)	4 ( 0.4)	206 ( 3.4)	22 ( 0.9)	209 ( 2.1)	54 ( 1.0)	204 ( 1.4)
MAINE	17 ( 1.0)	220 ( 1.3)	7 ( 0.6)	239 ( 2.4)	29 ( 1.0)	234 ( 1.5)	46 ( 1.6)	234 ( 1.5)
MARYLAND	17 ( 0.9)	207 ( 2.3)	6 ( 0.4)	217 ( 3.1)	22 ( 0.9)	224 ( 1.6)	55 ( 1.1)	218 ( 1.4)
MASSACHUSETTS	14 ( 1.0)	217 ( 2.1)	6 ( 0.6)	229 ( 3.2)	24 ( 0.8)	229 ( 1.6)	56 ( 1.2)	228 ( 1.2)
MICHIGAN	19 ( 1.1)	212 ( 2.5)	5 ( 0.4)	213 ( 3.9)	23 ( 1.1)	228 ( 2.2)	54 ( 1.2)	220 ( 1.7)
MINNESOTA	18 ( 1.0)	219 ( 1.9)	6 ( 0.5)	231 ( 2.5)	25 ( 0.9)	230 ( 1.6)	51 ( 1.0)	231 ( 1.0)
MISSISSIPPI	21 ( 1.1)	197 ( 1.8)	3 ( 0.3)	205 ( 3.3)	20 ( 1.1)	205 ( 1.8)	56 ( 1.4)	202 ( 1.3)
MISSOURI	21 ( 1.1)	213 ( 1.8)	6 ( 0.5)	225 ( 3.0)	22 ( 1.0)	225 ( 1.6)	51 ( 1.4)	224 ( 1.4)
MONTANA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
NEBRASKA	17 ( 0.9)	213 ( 1.6)	5 ( 0.5)	227 ( 3.0)	23 ( 1.1)	228 ( 1.6)	55 ( 1.3)	228 ( 1.4)
NEVADA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
NEW JERSEY	14 ( 1.1)	214 ( 2.5)	4 ( 0.5)	233 ( 4.1)	23 ( 1.1)	232 ( 1.7)	58 ( 1.5)	228 ( 1.7)
NEW MEXICO	23 ( 1.2)	204 ( 1.7)	4 ( 0.5)	220 ( 2.9)	21 ( 0.9)	217 ( 2.1)	52 ( 1.3)	215 ( 2.0)
NEW YORK	17 ( 0.9)	212 ( 2.3)	5 ( 0.5)	217 ( 4.3)	23 ( 1.1)	223 ( 1.6)	55 ( 1.4)	219 ( 1.6)
NORTH CAROLINA	20 ( 0.9)	208 ( 1.8)	4 ( 0.4)	214 ( 4.1)	21 ( 0.7)	217 ( 1.6)	55 ( 1.1)	213 ( 1.4)
NORTH DAKOTA	16 ( 1.1)	220 ( 1.5)	6 ( 0.7)	230 ( 2.7)	25 ( 1.4)	231 ( 1.1)	52 ( 1.5)	230 ( 1.0)
OREGON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
PENNSYLVANIA	13 ( 0.6)	213 ( 2.0)	5 ( 0.4)	225 ( 3.3)	25 ( 0.8)	228 ( 1.7)	57 ( 0.9)	225 ( 1.5)
RHODE ISLAND	18 ( 1.1)	209 ( 2.6)	5 ( 0.6)	217 ( 3.4)	24 ( 1.0)	219 ( 1.6)	53 ( 1.4)	216 ( 1.8)
SOUTH CAROLINA	19 ( 1.0)	203 ( 1.5)	4 ( 0.5)	219 ( 3.2)	21 ( 0.9)	215 ( 1.5)	56 ( 1.1)	215 ( 1.4)
TENNESSEE	19 ( 0.7)	202 ( 1.9)	4 ( 0.4)	209 ( 3.2)	21 ( 0.9)	215 ( 2.0)	55 ( 1.1)	213 ( 1.4)
TEXAS	21 ( 1.1)	211 ( 1.5)	6 ( 0.5)	218 ( 3.1)	22 ( 1.0)	221 ( 1.8)	51 ( 1.2)	220 ( 1.5)
UTAH	20 ( 1.0)	216 ( 1.7)	6 ( 0.5)	226 ( 2.7)	24 ( 0.9)	228 ( 1.4)	50 ( 1.0)	225 ( 1.0)
VERMONT	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
VIRGINIA	17 ( 0.9)	212 ( 1.9)	4 ( 0.4)	219 ( 3.6)	22 ( 0.8)	227 ( 1.7)	57 ( 1.1)	221 ( 1.5)
WASHINGTON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
WEST VIRGINIA	21 ( 0.9)	208 ( 1.5)	4 ( 0.4)	220 ( 3.6)	22 ( 0.8)	219 ( 1.5)	54 ( 1.2)	216 ( 1.3)
WISCONSIN	16 ( 0.9)	220 ( 2.1)	6 ( 0.5)	235 ( 2.4)	26 ( 0.9)	232 ( 1.5)	52 ( 1.2)	229 ( 1.2)
WYOMING	19 ( 0.9)	216 ( 1.8)	5 ( 0.4)	226 ( 2.7)	20 ( 1.0)	229 ( 1.4)	56 ( 1.2)	227 ( 1.0)

**Other Jurisdictions**

DDESS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
DoDDS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
GUAM	28 ( 1.2)	190 ( 1.5)	7 ( 0.5)	189 ( 2.9)	26 ( 1.0)	197 ( 1.5)	39 ( 1.2)	193 ( 1.1)

— State or other jurisdiction did not participate in the NAEP assessment year presented in this table.

... Characteristics of the sample do not permit a reliable estimate.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.



**TABLE 7.1** (continued)

**1996 Mathematics Assessment**

POPULATION:

1996 Grade 4 Public School Students

REPORTED STATISTICS:

Percentage of Students and Average Mathematics Scale Score

STUDENTS' REPORTS ON:

Discussing Studies at Home



How often do you discuss things you have studied in school with someone at home?	Never or Hardly Ever		Once or Twice a Month		Once or Twice a Week		Almost Every Day	
	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )
<b>JURISDICTIONS</b>								
<b>Nation</b>								
NATION	17 ( 0.6)<	213 ( 1.4)	5 ( 0.3)	226 ( 2.8)	22 ( 0.7)	227 ( 1.4)	56 ( 0.9)	223 ( 1.3)
NORTHEAST	15 ( 1.5)	212 ( 2.7)	4 ( 0.5)	... ( ... )	22 ( 2.2)	231 ( 3.2)	59 ( 1.9)	228 ( 3.1)
SOUTHEAST	16 ( 1.0)	206 ( 2.6)	5 ( 0.5)	219 ( 4.9)	22 ( 1.3)	219 ( 2.2)	57 ( 1.4)	217 ( 3.0)
CENTRAL	15 ( 1.3)<	223 ( 3.6)	4 ( 0.5)	... ( ... )	24 ( 1.5)	235 ( 2.2)	57 ( 1.9)	230 ( 2.0)
WEST	20 ( 1.2)	210 ( 2.7)	6 ( 0.9)	226 ( 5.4)	21 ( 1.2)	222 ( 3.1)	53 ( 1.6)	219 ( 2.9)
<b>States</b>								
ALABAMA	18 ( 0.9)	204 ( 2.0)	4 ( 0.3)	214 ( 3.6)	19 ( 0.7)	216 ( 2.0)	58 ( 1.0)	213 ( 1.3)
ALASKA†	20 ( 1.2)	216 ( 2.1)	6 ( 0.5)	220 ( 3.8)	21 ( 1.1)	227 ( 2.0)	52 ( 1.3)	227 ( 1.7)
ARIZONA	18 ( 1.2)<	210 ( 2.3)	5 ( 0.5)	226 ( 3.7)	21 ( 1.1)	219 ( 2.7)	56 ( 1.2)>	219 ( 1.9)
ARKANSAS†	21 ( 0.9)<	210 ( 2.1)>	5 ( 0.6)	222 ( 4.0)	23 ( 1.0)	221 ( 2.0)	52 ( 1.3)	216 ( 1.6)>
CALIFORNIA	15 ( 1.1)	200 ( 2.7)	5 ( 0.5)	215 ( 3.6)	24 ( 1.1)	210 ( 2.8)	56 ( 1.3)>	211 ( 1.9)
COLORADO	13 ( 0.9)<	217 ( 2.0)>	5 ( 0.4)	227 ( 3.6)	24 ( 1.0)	225 ( 1.7)	58 ( 1.3)	228 ( 1.2)>
CONNECTICUT	14 ( 0.8)	219 ( 2.3)	5 ( 0.5)	239 ( 3.1)>	23 ( 0.9)	236 ( 1.3)>	58 ( 1.0)	233 ( 1.3)
DELAWARE	18 ( 1.0)	204 ( 2.3)	5 ( 0.6)	221 ( 4.2)	20 ( 1.0)	219 ( 2.3)	56 ( 1.1)	217 ( 1.4)
DISTRICT OF COLUMBIA	12 ( 0.7)	182 ( 3.1)	5 ( 0.4)>	191 ( 4.3)	20 ( 0.8)	188 ( 1.8)<	64 ( 0.9)	188 ( 1.1)<
FLORIDA	16 ( 0.9)	207 ( 2.3)	6 ( 0.4)>	216 ( 3.8)	22 ( 1.0)	219 ( 1.4)	56 ( 1.3)	217 ( 1.5)
GEORGIA	16 ( 1.0)	208 ( 2.2)	4 ( 0.4)	220 ( 3.6)	21 ( 1.0)	219 ( 1.8)	58 ( 1.4)	216 ( 1.8)
HAWAII	19 ( 1.0)<	207 ( 2.2)	6 ( 0.5)	214 ( 3.5)	26 ( 1.1)	218 ( 1.8)	50 ( 1.2)	217 ( 1.6)
INDIANA	14 ( 0.9)<	223 ( 2.0)>	4 ( 0.5)	229 ( 3.5)	22 ( 0.9)	232 ( 1.5)>	59 ( 1.3)>	230 ( 1.2)>
IOWA†	16 ( 1.0)	220 ( 2.1)	6 ( 0.5)	229 ( 2.8)	26 ( 1.2)	232 ( 1.7)	53 ( 1.3)	231 ( 1.2)
KENTUCKY	15 ( 0.9)<	211 ( 1.7)	5 ( 0.4)	220 ( 4.1)	24 ( 1.0)	223 ( 1.4)	56 ( 1.2)	221 ( 1.2)>
LOUISIANA	18 ( 1.0)	204 ( 1.5)	4 ( 0.5)	216 ( 4.1)	22 ( 0.8)	213 ( 1.4)	55 ( 1.3)	209 ( 1.3)
MAINE	14 ( 1.0)	226 ( 2.1)	9 ( 0.7)	233 ( 2.3)	26 ( 1.1)	235 ( 1.5)	51 ( 1.4)	232 ( 1.1)
MARYLAND	12 ( 0.7)<	212 ( 2.1)	5 ( 0.4)	222 ( 3.7)	23 ( 1.0)	226 ( 2.0)	59 ( 1.0)>	220 ( 1.8)
MASSACHUSETTS	12 ( 0.8)	219 ( 1.9)	5 ( 0.5)	234 ( 3.5)	23 ( 1.2)	231 ( 1.8)	60 ( 1.5)	229 ( 1.5)
MICHIGAN†	15 ( 0.8)	217 ( 1.8)	4 ( 0.4)	234 ( 3.0)>	25 ( 1.0)	230 ( 2.0)	56 ( 1.4)	227 ( 1.6)>
MINNESOTA	16 ( 1.0)	221 ( 2.1)	6 ( 0.5)	237 ( 2.8)	24 ( 1.1)	233 ( 2.3)	54 ( 1.3)	234 ( 1.4)
MISSISSIPPI	21 ( 1.0)	204 ( 2.0)	5 ( 0.5)>	212 ( 3.2)	21 ( 0.7)	212 ( 1.7)	53 ( 1.2)	209 ( 1.3)>
MISSOURI	17 ( 0.8)	216 ( 1.6)	5 ( 0.4)	233 ( 2.4)	23 ( 0.9)	227 ( 1.4)	55 ( 1.1)	226 ( 1.3)
MONTANA†	19 ( 1.0)	218 ( 2.3)	6 ( 0.6)	230 ( 2.5)	22 ( 1.0)	228 ( 1.5)	53 ( 1.5)	231 ( 1.4)
NEBRASKA	17 ( 1.4)	216 ( 2.1)	6 ( 0.5)	230 ( 3.5)	22 ( 0.8)	232 ( 1.6)	55 ( 1.5)	229 ( 1.2)
NEVADA†	19 ( 1.0)	212 ( 1.9)	5 ( 0.5)	217 ( 3.6)	21 ( 1.0)	223 ( 1.9)	56 ( 1.2)	218 ( 1.4)
NEW JERSEY†	13 ( 0.8)	218 ( 2.7)	5 ( 0.5)	232 ( 2.8)	24 ( 1.1)	231 ( 1.8)	58 ( 1.3)	228 ( 1.5)
NEW MEXICO	21 ( 1.2)	205 ( 2.4)	5 ( 0.5)	213 ( 4.6)	21 ( 0.9)	216 ( 2.7)	53 ( 1.4)	217 ( 1.5)
NEW YORK†	15 ( 0.9)	215 ( 2.2)	6 ( 0.5)	226 ( 3.0)	22 ( 1.0)	226 ( 1.6)	57 ( 1.4)	223 ( 1.5)
NORTH CAROLINA	16 ( 0.8)<	214 ( 1.9)	4 ( 0.4)	229 ( 4.3)	21 ( 0.8)	228 ( 1.6)>	59 ( 1.1)	225 ( 1.3)>
NORTH DAKOTA	15 ( 0.8)	225 ( 2.3)	7 ( 0.6)	236 ( 2.3)	26 ( 1.0)	234 ( 1.7)	52 ( 1.0)	230 ( 1.3)
OREGON	16 ( 1.1)	212 ( 1.8)	6 ( 0.5)	230 ( 3.3)	23 ( 1.1)	225 ( 2.0)	55 ( 1.6)	226 ( 1.4)
PENNSYLVANIA‡	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
RHODE ISLAND	13 ( 1.0)<	209 ( 2.5)	6 ( 0.7)	216 ( 4.9)	25 ( 1.3)	223 ( 1.9)	56 ( 1.4)	222 ( 1.5)
SOUTH CAROLINA†	19 ( 1.1)	207 ( 1.7)	4 ( 0.4)	221 ( 3.5)	20 ( 1.0)	215 ( 1.8)	57 ( 1.4)	214 ( 1.5)
TENNESSEE	12 ( 0.8)<	210 ( 2.0)>	5 ( 0.5)	227 ( 3.8)>	26 ( 1.0)>	221 ( 1.9)	57 ( 1.3)	220 ( 1.6)>
TEXAS	17 ( 1.0)<	220 ( 1.8)>	5 ( 0.6)	231 ( 4.5)	22 ( 0.9)	232 ( 1.9)>	56 ( 1.2)>	230 ( 1.5)>
UTAH	16 ( 0.9)<	219 ( 1.9)	5 ( 0.5)	230 ( 3.1)	23 ( 0.9)	230 ( 1.7)	56 ( 1.1)>	228 ( 1.2)
VERMONT†	15 ( 0.9)	211 ( 3.0)	5 ( 0.5)	224 ( 4.5)	25 ( 1.2)	231 ( 1.7)	56 ( 1.2)	226 ( 1.5)
VIRGINIA	16 ( 1.0)	213 ( 1.9)	5 ( 0.5)	222 ( 3.1)	22 ( 0.9)	228 ( 1.6)	57 ( 1.3)	223 ( 1.6)
WASHINGTON	16 ( 1.4)	216 ( 2.5)	5 ( 0.5)	231 ( 2.8)	22 ( 1.0)	229 ( 1.4)	56 ( 1.3)	226 ( 1.1)
WEST VIRGINIA	17 ( 0.9)<	219 ( 1.8)>	5 ( 0.4)	225 ( 3.0)	21 ( 0.9)	225 ( 1.4)	57 ( 1.1)	224 ( 1.2)>
WISCONSIN	16 ( 1.0)	221 ( 1.5)	7 ( 0.6)	238 ( 2.2)	25 ( 1.0)	235 ( 1.5)	52 ( 1.3)	232 ( 1.2)
WYOMING	16 ( 1.0)	214 ( 1.6)	5 ( 0.5)	225 ( 4.3)	21 ( 0.9)	225 ( 1.4)	58 ( 1.1)	225 ( 1.7)
<b>Other Jurisdictions</b>								
DDESS	17 ( 1.3)	218 ( 1.9)	5 ( 0.7)	229 ( 5.4)	20 ( 1.1)	227 ( 2.9)	59 ( 1.5)	225 ( 1.6)
DoDDS	18 ( 0.7)	220 ( 1.6)	5 ( 0.5)	228 ( 3.3)	21 ( 0.8)	227 ( 1.9)	56 ( 1.0)	223 ( 0.9)
GUAM	22 ( 1.3)<	186 ( 3.9)	7 ( 0.7)	189 ( 6.5)	25 ( 1.4)	191 ( 2.4)	46 ( 1.5)>	189 ( 2.0)

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).  
 — State or other jurisdiction did not participate in the NAEP assessment year presented in this table.  
 ... Characteristics of the sample do not permit a reliable estimate.  
 > (<) The value for the students was significantly higher (lower) than in the 1992 assessment at about the 95% confidence level using appropriate multiple comparison procedures.  
 ‡ 1996 results for Pennsylvania are not reported for this table; the PA Department of Education requested that students refrain from answering this home environment background question.  
 SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 7.2**

**1992 Mathematics Assessment**



POPULATION:

1992 Grade 4 Public School Students

REPORTED STATISTICS:

Percentage of Students and Average Mathematics Scale Score

STUDENTS' REPORTS ON:

Literacy Materials in the Home

How many of the following types of reading materials are in your home: more than 25 books; an encyclopedia; a newspaper; magazines?

Zero to Two	Three	Four
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**JURISDICTIONS** PCT ( SE ) SS ( SE ) PCT ( SE ) SS ( SE ) PCT ( SE ) SS ( SE )

**Nation**

NATION	31 ( 1.3 )	208 ( 1.1 )	35 ( 0.7 )	220 ( 1.0 )	34 ( 1.2 )	228 ( 1.2 )
NORTHEAST	26 ( 2.8 )	207 ( 2.5 )	36 ( 1.9 )	225 ( 2.3 )	38 ( 2.5 )	234 ( 3.1 )
SOUTHEAST	36 ( 2.4 )	202 ( 2.2 )	35 ( 1.4 )	210 ( 2.2 )	29 ( 2.2 )	220 ( 2.2 )
CENTRAL	29 ( 3.2 )	213 ( 3.1 )	35 ( 1.5 )	224 ( 2.5 )	36 ( 2.7 )	231 ( 1.8 )
WEST	33 ( 2.4 )	210 ( 1.7 )	34 ( 1.1 )	220 ( 1.8 )	32 ( 2.3 )	227 ( 2.5 )

**States**

ALABAMA	37 ( 1.2 )	201 ( 1.6 )	34 ( 1.0 )	209 ( 1.9 )	29 ( 1.2 )	218 ( 2.1 )
ALASKA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
ARIZONA	38 ( 1.3 )	207 ( 1.5 )	35 ( 0.8 )	218 ( 1.3 )	28 ( 1.1 )	224 ( 1.3 )
ARKANSAS	37 ( 1.1 )	203 ( 1.2 )	33 ( 0.9 )	212 ( 1.3 )	30 ( 1.1 )	218 ( 1.1 )
CALIFORNIA	40 ( 1.7 )	196 ( 1.9 )	32 ( 1.0 )	213 ( 1.8 )	29 ( 1.5 )	222 ( 2.1 )
COLORADO	29 ( 1.2 )	210 ( 1.4 )	34 ( 1.0 )	222 ( 1.2 )	37 ( 1.1 )	229 ( 1.3 )
CONNECTICUT	24 ( 1.2 )	211 ( 2.0 )	35 ( 1.1 )	228 ( 1.4 )	41 ( 1.3 )	235 ( 1.1 )
DELAWARE	31 ( 1.0 )	205 ( 1.8 )	34 ( 1.0 )	218 ( 1.0 )	35 ( 0.9 )	230 ( 1.4 )
DISTRICT OF COLUMBIA	39 ( 0.9 )	186 ( 1.0 )	32 ( 0.9 )	193 ( 1.2 )	29 ( 0.8 )	202 ( 1.2 )
FLORIDA	36 ( 1.6 )	204 ( 1.6 )	35 ( 0.8 )	215 ( 1.5 )	29 ( 1.4 )	224 ( 1.7 )
GEORGIA	33 ( 1.0 )	206 ( 1.6 )	34 ( 1.0 )	216 ( 1.5 )	33 ( 1.2 )	225 ( 1.5 )
HAWAII	42 ( 1.5 )	207 ( 1.6 )	32 ( 1.0 )	217 ( 1.5 )	26 ( 1.3 )	224 ( 1.7 )
INDIANA	31 ( 1.4 )	212 ( 1.3 )	34 ( 0.9 )	221 ( 1.1 )	35 ( 1.4 )	229 ( 1.3 )
IOWA	24 ( 1.2 )	219 ( 1.4 )	34 ( 1.0 )	231 ( 1.3 )	42 ( 1.1 )	236 ( 1.0 )
KENTUCKY	39 ( 1.4 )	207 ( 1.0 )	33 ( 1.1 )	218 ( 1.4 )	28 ( 1.3 )	223 ( 1.6 )
LOUISIANA	39 ( 1.4 )	196 ( 1.7 )	34 ( 0.8 )	207 ( 1.7 )	27 ( 1.2 )	214 ( 1.9 )
MAINE	26 ( 1.5 )	223 ( 1.5 )	38 ( 1.1 )	233 ( 1.3 )	36 ( 1.6 )	237 ( 1.2 )
MARYLAND	31 ( 1.1 )	205 ( 1.5 )	33 ( 1.0 )	218 ( 1.7 )	36 ( 1.2 )	227 ( 1.5 )
MASSACHUSETTS	25 ( 1.2 )	215 ( 1.8 )	34 ( 1.0 )	227 ( 1.5 )	41 ( 1.4 )	234 ( 1.3 )
MICHIGAN	31 ( 1.5 )	207 ( 2.4 )	34 ( 1.0 )	223 ( 1.7 )	35 ( 1.4 )	229 ( 2.0 )
MINNESOTA	23 ( 1.3 )	217 ( 1.9 )	34 ( 0.9 )	230 ( 1.2 )	43 ( 1.2 )	235 ( 1.0 )
MISSISSIPPI	40 ( 1.3 )	194 ( 1.3 )	33 ( 0.9 )	204 ( 1.3 )	27 ( 1.2 )	212 ( 1.8 )
MISSOURI	32 ( 1.1 )	214 ( 1.5 )	34 ( 1.2 )	223 ( 1.4 )	35 ( 1.3 )	229 ( 1.6 )
MONTANA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
NEBRASKA	26 ( 1.2 )	213 ( 1.5 )	34 ( 1.0 )	226 ( 1.5 )	40 ( 1.5 )	233 ( 1.4 )
NEVADA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
NEW JERSEY	24 ( 1.5 )	214 ( 2.3 )	34 ( 1.1 )	227 ( 1.6 )	42 ( 1.8 )	235 ( 1.6 )
NEW MEXICO	41 ( 1.7 )	206 ( 1.6 )	32 ( 1.5 )	215 ( 1.7 )	27 ( 1.5 )	223 ( 1.7 )
NEW YORK	32 ( 1.2 )	206 ( 1.7 )	34 ( 1.1 )	220 ( 1.5 )	34 ( 1.3 )	229 ( 1.5 )
NORTH CAROLINA	33 ( 1.1 )	203 ( 1.4 )	34 ( 0.9 )	213 ( 1.2 )	33 ( 1.2 )	223 ( 1.5 )
NORTH DAKOTA	22 ( 1.1 )	220 ( 1.5 )	36 ( 1.2 )	229 ( 1.3 )	42 ( 1.5 )	233 ( 1.0 )
OREGON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
PENNSYLVANIA	26 ( 1.1 )	215 ( 1.4 )	35 ( 0.8 )	224 ( 1.8 )	38 ( 1.3 )	231 ( 1.6 )
RHODE ISLAND	32 ( 1.4 )	203 ( 2.4 )	35 ( 1.0 )	218 ( 1.7 )	32 ( 1.5 )	227 ( 1.5 )
SOUTH CAROLINA	35 ( 1.2 )	203 ( 1.1 )	34 ( 0.9 )	214 ( 1.5 )	31 ( 1.1 )	221 ( 1.3 )
TENNESSEE	37 ( 1.4 )	201 ( 1.6 )	32 ( 1.0 )	212 ( 1.7 )	31 ( 1.2 )	222 ( 1.3 )
TEXAS	40 ( 1.6 )	209 ( 1.3 )	32 ( 1.1 )	222 ( 1.6 )	28 ( 1.1 )	228 ( 1.7 )
UTAH	25 ( 1.3 )	215 ( 1.7 )	37 ( 1.1 )	224 ( 1.0 )	37 ( 1.6 )	231 ( 1.2 )
VERMONT	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
VIRGINIA	30 ( 1.3 )	211 ( 1.4 )	34 ( 0.9 )	221 ( 1.5 )	36 ( 1.4 )	229 ( 1.7 )
WASHINGTON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
WEST VIRGINIA	34 ( 1.3 )	208 ( 1.1 )	33 ( 0.9 )	217 ( 1.3 )	33 ( 1.1 )	222 ( 1.4 )
WISCONSIN	25 ( 1.2 )	218 ( 1.6 )	36 ( 0.8 )	230 ( 1.2 )	38 ( 1.1 )	235 ( 1.2 )
WYOMING	29 ( 1.3 )	218 ( 1.4 )	37 ( 1.1 )	227 ( 1.1 )	34 ( 1.3 )	231 ( 1.1 )

**Other Jurisdictions**

DDESS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
DoDDS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
GUAM	56 ( 1.0 )	188 ( 1.2 )	28 ( 1.1 )	199 ( 1.7 )	16 ( 0.9 )	201 ( 1.7 )

— State or other jurisdiction did not participate in the NAEP assessment year presented in this table.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 7.2** (continued) **1996 Mathematics Assessment**



POPULATION: 1996 Grade 4 Public School Students  
 REPORTED STATISTICS: Percentage of Students and Average Mathematics Scale Score  
 STUDENTS' REPORTS ON: Literacy Materials in the Home

How many of the following types of reading materials are in your home: more than 25 books; an encyclopedia; a newspaper; magazines?

	Zero to Two	Three	Four
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**JURISDICTIONS** PCT ( SE ) SS ( SE ) PCT ( SE ) SS ( SE ) PCT ( SE ) SS ( SE )

<b>Nation</b>	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )
NATION	32 ( 0.9)	212 ( 1.7)	34 ( 0.7)	224 ( 1.2)>	34 ( 0.9)	231 ( 1.3)
NORTHEAST	28 ( 1.6)	214 ( 4.0)	35 ( 1.1)	226 ( 3.0)	37 ( 1.9)	236 ( 1.6)
SOUTHEAST	34 ( 1.7)	207 ( 2.2)	34 ( 1.6)	216 ( 2.1)	32 ( 1.7)	226 ( 4.0)
CENTRAL	26 ( 1.8)	221 ( 2.1)	35 ( 1.9)	230 ( 2.6)	39 ( 2.4)	236 ( 2.4)
WEST	38 ( 1.8)	208 ( 3.5)	32 ( 1.0)	221 ( 2.2)	30 ( 1.6)	228 ( 2.9)
<b>States</b>						
ALABAMA	38 ( 1.4)	202 ( 1.5)	34 ( 1.2)	213 ( 1.2)	28 ( 1.5)	223 ( 1.8)
ALASKA†	29 ( 1.4)	213 ( 2.1)	34 ( 1.2)	224 ( 1.6)	36 ( 1.2)	233 ( 1.6)
ARIZONA	37 ( 1.8)	208 ( 1.7)	33 ( 1.1)	220 ( 2.0)	30 ( 1.6)	229 ( 1.8)>
ARKANSAS†	38 ( 1.3)	208 ( 1.8)	32 ( 1.2)	217 ( 1.7)>	30 ( 1.4)	224 ( 1.8)>
CALIFORNIA	41 ( 1.7)	197 ( 2.2)	31 ( 1.4)	215 ( 2.1)	28 ( 1.4)	223 ( 1.9)
COLORADO	29 ( 1.4)	214 ( 1.4)	32 ( 1.0)	226 ( 1.3)	39 ( 1.5)	236 ( 1.4)>
CONNECTICUT	22 ( 1.3)	215 ( 2.2)	31 ( 1.2)	232 ( 1.4)	47 ( 1.7)	240 ( 1.1)>
DELAWARE	33 ( 1.3)	204 ( 1.6)	33 ( 1.2)	216 ( 1.4)	34 ( 1.1)	225 ( 1.6)
DISTRICT OF COLUMBIA	40 ( 1.0)	179 ( 1.7)<	30 ( 1.1)	188 ( 2.3)	30 ( 0.9)	198 ( 1.4)
FLORIDA	39 ( 1.4)	207 ( 1.3)	32 ( 0.9)	218 ( 1.5)	29 ( 1.5)	227 ( 1.3)
GEORGIA	36 ( 1.6)	207 ( 1.4)	32 ( 1.0)	217 ( 1.6)	32 ( 1.6)	225 ( 2.1)
HAWAII	40 ( 1.5)	206 ( 2.0)	33 ( 1.1)	220 ( 1.6)	27 ( 1.4)	224 ( 1.7)
INDIANA	28 ( 1.4)	220 ( 1.4)>	34 ( 0.9)	229 ( 1.3)>	38 ( 1.3)	237 ( 1.6)>
IOWA†	26 ( 1.4)	220 ( 1.5)	35 ( 0.9)	228 ( 1.3)	39 ( 1.4)	236 ( 1.2)
KENTUCKY	36 ( 1.4)	211 ( 1.2)	34 ( 1.0)	222 ( 1.3)	30 ( 1.3)	229 ( 1.5)>
LOUISIANA	38 ( 1.6)	201 ( 1.5)	36 ( 1.1)	212 ( 1.2)	26 ( 1.3)	217 ( 1.6)
MAINE	25 ( 1.3)	225 ( 1.6)	37 ( 1.4)	232 ( 1.3)	38 ( 1.6)	239 ( 1.1)
MARYLAND	29 ( 1.3)	209 ( 1.8)	34 ( 1.1)	220 ( 1.8)	37 ( 1.6)	231 ( 2.1)
MASSACHUSETTS	25 ( 1.6)	217 ( 1.4)	32 ( 1.1)	228 ( 1.5)	43 ( 1.9)	237 ( 1.7)
MICHIGAN†	30 ( 1.4)	216 ( 1.6)>	35 ( 0.9)	226 ( 1.5)	35 ( 1.5)	236 ( 1.8)>
MINNESOTA	22 ( 1.2)	221 ( 1.8)	34 ( 1.2)	231 ( 1.5)	44 ( 1.5)	239 ( 1.5)
MISSISSIPPI	44 ( 1.5)	202 ( 1.5)>	32 ( 1.0)	211 ( 1.3)>	24 ( 1.2)	218 ( 1.7)
MISSOURI	31 ( 1.4)	215 ( 1.5)	35 ( 1.0)	225 ( 1.3)	35 ( 1.3)	234 ( 1.0)
MONTANA†	30 ( 1.4)	219 ( 1.7)	33 ( 0.8)	229 ( 1.5)	37 ( 1.6)	233 ( 1.6)
NEBRASKA	27 ( 1.3)	217 ( 1.7)	34 ( 0.9)	229 ( 1.4)	39 ( 1.3)	235 ( 1.4)
NEVADA†	39 ( 1.7)	209 ( 1.8)	33 ( 1.2)	221 ( 1.4)	28 ( 1.2)	227 ( 1.6)
NEW JERSEY†	28 ( 1.7)	213 ( 1.9)	33 ( 1.0)	228 ( 1.8)	40 ( 1.7)	236 ( 1.4)
NEW MEXICO	38 ( 1.6)	204 ( 2.3)	34 ( 1.0)	217 ( 1.8)	28 ( 1.5)	225 ( 1.7)
NEW YORK†	30 ( 1.3)	210 ( 2.0)	33 ( 1.1)	223 ( 1.7)	37 ( 1.4)	232 ( 1.5)
NORTH CAROLINA	33 ( 1.4)	214 ( 1.4)>	34 ( 1.0)	226 ( 1.4)>	33 ( 1.4)	233 ( 1.5)>
NORTH DAKOTA	21 ( 1.2)	223 ( 2.3)	36 ( 1.0)	233 ( 1.3)	43 ( 1.4)	235 ( 1.2)
OREGON	31 ( 1.6)	214 ( 1.8)	33 ( 1.0)	223 ( 1.3)	36 ( 1.7)	234 ( 1.6)
PENNSYLVANIA†	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
RHODE ISLAND	32 ( 1.4)	210 ( 1.7)	34 ( 1.0)	222 ( 1.8)	34 ( 1.6)	230 ( 1.7)
SOUTH CAROLINA†	36 ( 1.3)	206 ( 1.5)	35 ( 1.1)	214 ( 1.6)	29 ( 1.5)	222 ( 2.0)
TENNESSEE	32 ( 1.4)	209 ( 1.8)>	35 ( 0.9)	221 ( 1.6)>	33 ( 1.3)	227 ( 1.7)
TEXAS	35 ( 1.7)	218 ( 1.5)>	33 ( 1.1)	229 ( 1.3)>	32 ( 1.6)	241 ( 1.7)>
UTAH	28 ( 1.2)	219 ( 1.6)	36 ( 1.1)	227 ( 1.4)	36 ( 1.4)	234 ( 1.2)
VERMONT†	22 ( 0.9)	213 ( 1.9)	34 ( 1.0)	227 ( 1.8)	44 ( 1.3)	231 ( 1.4)
VIRGINIA	29 ( 1.3)	212 ( 1.6)	35 ( 1.1)	224 ( 1.4)	36 ( 1.6)	231 ( 1.7)
WASHINGTON	30 ( 1.3)	218 ( 1.8)	36 ( 1.0)	227 ( 1.5)	33 ( 1.3)	232 ( 1.3)
WEST VIRGINIA	32 ( 1.4)	215 ( 1.4)>	34 ( 1.2)	223 ( 1.2)>	34 ( 1.4)	232 ( 1.3)>
WISCONSIN	26 ( 1.4)	221 ( 1.6)	32 ( 0.9)	231 ( 1.3)	41 ( 1.3)	239 ( 1.1)
WYOMING	28 ( 1.1)	214 ( 2.1)	37 ( 0.8)	223 ( 1.8)	35 ( 1.1)	231 ( 1.5)
<b>Other Jurisdictions</b>						
DDESS	29 ( 1.3)	220 ( 2.0)	39 ( 1.3)	225 ( 1.4)	32 ( 1.0)	228 ( 2.1)
DoDDS	30 ( 1.0)	219 ( 1.3)	36 ( 1.0)	224 ( 1.2)	33 ( 1.0)	227 ( 1.7)
GUAM	51 ( 1.5)	184 ( 1.9)	32 ( 1.4)	193 ( 2.0)	17 ( 1.0)	197 ( 3.3)

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).  
 — State or other jurisdiction did not participate in the NAEP assessment year presented in this table.  
 > (<) The value for the students was significantly higher (lower) than in the 1992 assessment at about the 95% confidence level using appropriate multiple comparison procedures.  
 ‡ 1996 results for Pennsylvania are not reported for this table; the PA Department of Education requested that students refrain from answering this home environment background question.  
 SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 7.3**

**1992 Mathematics Assessment**



POPULATION:

1992 Grade 4 Public School Students

REPORTED STATISTICS:

Percentage of Students and Average Mathematics Scale Score

STUDENTS' REPORTS ON:

Television Viewing Habits

How much television do you usually watch each day?	1 Hour or Less		2 to 3 Hours		4 to 5 Hours		6 Hours or More	
	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )
<b>JURISDICTIONS</b>								
<b>Nation</b>								
NATION	21 ( 0.8)	221 ( 1.6)	35 ( 0.8)	225 ( 1.1)	22 ( 0.8)	221 ( 1.3)	22 ( 0.8)	204 ( 1.1)
NORTHEAST	20 ( 1.9)	230 ( 3.2)	36 ( 1.8)	231 ( 3.0)	22 ( 2.5)	224 ( 2.5)	23 ( 2.6)	206 ( 3.2)
SOUTHEAST	19 ( 1.7)	213 ( 3.5)	34 ( 1.5)	217 ( 2.1)	18 ( 1.2)	211 ( 2.3)	28 ( 1.8)	198 ( 1.8)
CENTRAL	18 ( 1.2)	222 ( 3.9)	38 ( 1.6)	229 ( 2.5)	25 ( 1.4)	226 ( 2.3)	20 ( 1.3)	210 ( 3.3)
WEST	26 ( 1.5)	221 ( 2.4)	33 ( 1.6)	223 ( 1.7)	22 ( 1.5)	219 ( 2.7)	20 ( 1.5)	206 ( 2.0)
<b>States</b>								
ALABAMA	18 ( 0.9)	204 ( 2.2)	33 ( 1.2)	213 ( 2.3)	24 ( 1.1)	212 ( 1.9)	25 ( 1.6)	201 ( 1.9)
ALASKA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
ARIZONA	24 ( 1.0)	210 ( 2.0)	38 ( 1.1)	220 ( 1.3)	21 ( 0.9)	219 ( 1.6)	18 ( 1.0)	207 ( 1.9)
ARKANSAS	18 ( 1.0)	205 ( 1.8)	31 ( 1.1)	217 ( 1.4)	22 ( 0.7)	217 ( 1.4)	29 ( 1.4)	202 ( 1.5)
CALIFORNIA	23 ( 1.0)	207 ( 2.7)	36 ( 1.1)	215 ( 1.9)	20 ( 0.9)	209 ( 2.1)	20 ( 1.2)	198 ( 2.1)
COLORADO	27 ( 0.9)	223 ( 1.3)	39 ( 1.0)	226 ( 1.2)	20 ( 0.7)	220 ( 1.5)	15 ( 1.0)	208 ( 1.8)
CONNECTICUT	22 ( 1.0)	230 ( 1.9)	39 ( 1.2)	232 ( 1.1)	22 ( 0.9)	229 ( 1.4)	17 ( 1.1)	209 ( 1.9)
DELAWARE	19 ( 0.9)	220 ( 2.2)	35 ( 1.2)	227 ( 1.4)	21 ( 1.1)	219 ( 2.0)	26 ( 1.2)	204 ( 1.0)
DISTRICT OF COLUMBIA	16 ( 0.8)	194 ( 1.6)	26 ( 0.8)	198 ( 1.4)	20 ( 0.8)	196 ( 1.6)	37 ( 1.0)	187 ( 1.1)
FLORIDA	21 ( 1.2)	213 ( 2.1)	33 ( 1.0)	221 ( 1.6)	21 ( 0.8)	216 ( 2.2)	26 ( 1.5)	203 ( 2.0)
GEORGIA	21 ( 1.2)	216 ( 2.1)	33 ( 1.1)	222 ( 1.4)	22 ( 1.1)	219 ( 2.0)	24 ( 1.1)	203 ( 1.6)
HAWAII	27 ( 1.2)	214 ( 2.4)	31 ( 1.0)	220 ( 1.4)	18 ( 0.8)	218 ( 1.9)	23 ( 1.0)	205 ( 1.7)
INDIANA	18 ( 1.0)	220 ( 1.9)	38 ( 1.1)	226 ( 1.2)	23 ( 0.9)	222 ( 1.3)	20 ( 1.2)	211 ( 1.7)
IOWA	18 ( 0.9)	230 ( 1.8)	43 ( 1.3)	234 ( 1.0)	24 ( 0.9)	231 ( 1.2)	15 ( 1.1)	215 ( 2.2)
KENTUCKY	17 ( 0.9)	211 ( 1.8)	36 ( 1.1)	219 ( 1.5)	23 ( 1.0)	218 ( 1.5)	24 ( 1.1)	210 ( 1.6)
LOUISIANA	18 ( 0.9)	206 ( 1.9)	32 ( 1.1)	210 ( 1.7)	21 ( 1.0)	209 ( 2.2)	28 ( 1.3)	195 ( 2.0)
MAINE	22 ( 1.1)	234 ( 1.6)	43 ( 1.5)	236 ( 1.4)	21 ( 1.1)	231 ( 1.5)	14 ( 1.2)	218 ( 1.6)
MARYLAND	18 ( 0.7)	221 ( 1.9)	34 ( 0.9)	225 ( 1.7)	23 ( 0.9)	219 ( 1.6)	25 ( 1.2)	203 ( 1.9)
MASSACHUSETTS	24 ( 1.4)	228 ( 2.0)	40 ( 0.9)	232 ( 1.3)	22 ( 0.9)	226 ( 2.0)	14 ( 1.2)	210 ( 2.1)
MICHIGAN	19 ( 0.9)	221 ( 2.7)	37 ( 1.4)	227 ( 1.6)	22 ( 0.9)	223 ( 1.9)	22 ( 1.3)	203 ( 2.5)
MINNESOTA	23 ( 1.1)	227 ( 1.5)	43 ( 1.1)	233 ( 1.1)	21 ( 0.9)	230 ( 1.4)	14 ( 0.9)	214 ( 2.3)
MISSISSIPPI	19 ( 1.0)	198 ( 2.1)	31 ( 1.2)	208 ( 1.3)	19 ( 1.0)	206 ( 1.6)	31 ( 1.6)	196 ( 1.5)
MISSOURI	19 ( 1.0)	221 ( 1.9)	37 ( 1.1)	229 ( 1.3)	23 ( 1.0)	224 ( 1.3)	21 ( 1.2)	210 ( 2.0)
MONTANA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
NEBRASKA	20 ( 0.9)	222 ( 1.9)	43 ( 1.2)	230 ( 1.6)	23 ( 1.0)	228 ( 1.7)	14 ( 0.8)	212 ( 1.9)
NEVADA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
NEW JERSEY	20 ( 1.2)	231 ( 2.5)	38 ( 1.3)	233 ( 1.7)	22 ( 1.2)	228 ( 1.6)	20 ( 1.3)	212 ( 2.2)
NEW MEXICO	24 ( 1.0)	211 ( 2.0)	36 ( 1.2)	218 ( 2.1)	20 ( 1.0)	218 ( 1.5)	20 ( 1.1)	203 ( 2.1)
NEW YORK	16 ( 1.0)	221 ( 2.5)	34 ( 1.2)	226 ( 1.5)	26 ( 0.9)	221 ( 1.5)	24 ( 1.6)	203 ( 2.3)
NORTH CAROLINA	20 ( 1.0)	211 ( 2.0)	33 ( 1.0)	220 ( 1.4)	22 ( 0.9)	217 ( 1.4)	26 ( 1.3)	203 ( 1.6)
NORTH DAKOTA	23 ( 1.2)	226 ( 1.6)	44 ( 1.1)	233 ( 1.0)	22 ( 1.2)	229 ( 1.1)	11 ( 1.2)	216 ( 2.0)
OREGON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
PENNSYLVANIA	19 ( 1.0)	226 ( 2.3)	42 ( 1.3)	230 ( 1.3)	21 ( 0.9)	227 ( 1.9)	18 ( 1.3)	207 ( 1.7)
RHODE ISLAND	20 ( 1.0)	216 ( 2.3)	38 ( 1.1)	220 ( 1.7)	22 ( 1.1)	218 ( 1.6)	19 ( 1.3)	203 ( 2.8)
SOUTH CAROLINA	19 ( 1.0)	216 ( 2.2)	31 ( 1.0)	218 ( 1.4)	22 ( 0.8)	215 ( 1.4)	28 ( 1.3)	202 ( 1.5)
TENNESSEE	19 ( 1.0)	214 ( 1.9)	37 ( 1.2)	216 ( 1.6)	22 ( 0.8)	215 ( 1.4)	22 ( 1.2)	197 ( 1.8)
TEXAS	20 ( 0.8)	214 ( 1.9)	35 ( 1.3)	224 ( 1.7)	24 ( 1.0)	223 ( 1.4)	21 ( 1.2)	207 ( 1.5)
UTAH	32 ( 1.0)	224 ( 1.4)	41 ( 1.0)	227 ( 1.1)	18 ( 0.8)	225 ( 1.6)	10 ( 0.9)	212 ( 2.2)
VERMONT	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
VIRGINIA	19 ( 0.9)	224 ( 2.1)	35 ( 1.1)	228 ( 2.3)	22 ( 1.0)	222 ( 1.4)	24 ( 1.4)	207 ( 1.4)
WASHINGTON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
WEST VIRGINIA	16 ( 0.9)	212 ( 2.0)	38 ( 1.4)	219 ( 1.2)	22 ( 0.8)	220 ( 1.4)	23 ( 1.2)	207 ( 1.6)
WISCONSIN	20 ( 1.1)	228 ( 1.4)	43 ( 1.1)	233 ( 1.3)	22 ( 1.0)	229 ( 1.5)	14 ( 0.8)	216 ( 1.8)
WYOMING	27 ( 1.0)	223 ( 1.4)	42 ( 1.0)	229 ( 1.0)	17 ( 0.8)	228 ( 1.3)	13 ( 0.9)	217 ( 2.0)
<b>Other Jurisdictions</b>								
DDESS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
DoDDS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
GUAM	34 ( 1.1)	188 ( 1.3)	30 ( 1.2)	199 ( 1.4)	15 ( 0.7)	200 ( 2.4)	21 ( 0.9)	186 ( 1.8)

— State or other jurisdiction did not participate in the NAEP assessment year presented in this table.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 7.3** (continued)

**1996 Mathematics Assessment**



POPULATION:

1996 Grade 4 Public School Students

REPORTED STATISTICS:

Percentage of Students and Average Mathematics Scale Score

STUDENTS' REPORTS ON:

Television Viewing Habits

How much television do you usually watch each day?	1 Hour or Less		2 to 3 Hours		4 to 5 Hours		6 Hours or More	
	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )
<b>JURISDICTIONS</b>								
<b>Nation</b>								
NATION	24 ( 1.1)	223 ( 1.8)	36 ( 0.7)	228 ( 1.2)	20 ( 0.7)	224 ( 1.5)	20 ( 0.8)	208 ( 1.5)
NORTHEAST	23 ( 1.9)	224 ( 3.9)	37 ( 2.2)	233 ( 2.0)	22 ( 1.3)	232 ( 3.0)	18 ( 2.0)	208 ( 3.1)
SOUTHEAST	21 ( 1.6)	217 ( 3.3)	31 ( 1.4)	223 ( 2.5)	19 ( 1.6)	220 ( 2.0)	30 ( 2.1)	204 ( 2.9)
CENTRAL	23 ( 2.3)	234 ( 2.7)	39 ( 1.1)	234 ( 2.1)	20 ( 1.7)	231 ( 2.0)	18 ( 1.7)	216 ( 2.5)
WEST	28 ( 2.4)	218 ( 3.9)	36 ( 1.5)	224 ( 2.8)	19 ( 1.2)	216 ( 3.1)	17 ( 1.4)	208 ( 3.1)
<b>States</b>								
ALABAMA	21 ( 1.1)	210 ( 2.1)	32 ( 1.3)	218 ( 1.6)	21 ( 0.8)	213 ( 2.0)	26 ( 1.5)	203 ( 1.4)
ALASKA†	33 ( 1.3)	222 ( 2.2)	38 ( 1.2)	229 ( 1.4)	14 ( 0.8)	225 ( 2.0)	15 ( 1.0)	215 ( 2.9)
ARIZONA	29 ( 1.3)>	214 ( 2.2)	34 ( 1.1)	224 ( 1.8)	19 ( 1.0)	222 ( 1.9)	18 ( 1.2)	208 ( 2.8)
ARKANSAS†	21 ( 1.0)	214 ( 2.1)>	33 ( 1.3)	222 ( 1.9)	21 ( 0.9)	219 ( 1.6)	25 ( 1.5)	207 ( 2.0)
CALIFORNIA	28 ( 1.2)>	209 ( 2.6)	35 ( 1.2)	213 ( 2.0)	17 ( 0.8)	211 ( 2.6)	19 ( 1.1)	201 ( 1.8)
COLORADO	33 ( 1.4)>	228 ( 1.5)	39 ( 1.1)	229 ( 1.2)	17 ( 0.6)	225 ( 1.7)	11 ( 0.9)<	212 ( 2.2)
CONNECTICUT	26 ( 1.2)	236 ( 1.6)	39 ( 1.4)	236 ( 1.4)	20 ( 1.1)	233 ( 1.7)	16 ( 1.3)	215 ( 1.9)
DELAWARE	19 ( 1.0)	216 ( 2.1)	36 ( 1.3)	220 ( 1.4)<	19 ( 0.9)	218 ( 1.8)	25 ( 0.9)	204 ( 1.4)
DISTRICT OF COLUMBIA	18 ( 0.8)	192 ( 2.8)	26 ( 0.8)	192 ( 2.0)<	18 ( 0.7)	191 ( 1.5)	37 ( 1.0)	180 ( 1.2)<
FLORIDA	20 ( 0.9)	215 ( 1.8)	35 ( 1.2)	222 ( 1.4)	21 ( 1.0)	220 ( 1.7)	24 ( 1.2)	205 ( 2.1)
GEORGIA	22 ( 1.0)	214 ( 2.3)	35 ( 1.3)	222 ( 1.6)	20 ( 0.8)	218 ( 1.6)	24 ( 1.5)	207 ( 1.9)
HAWAII	31 ( 1.1)	216 ( 2.1)	35 ( 1.2)	220 ( 1.6)	16 ( 0.8)	219 ( 1.9)	18 ( 1.1)<	202 ( 2.9)
INDIANA	19 ( 0.9)	232 ( 2.3)>	41 ( 1.4)	233 ( 1.2)>	22 ( 1.0)	229 ( 1.3)>	18 ( 1.1)	219 ( 1.7)>
IOWA†	21 ( 1.1)	229 ( 1.9)	42 ( 1.3)	233 ( 1.3)	21 ( 0.9)	231 ( 1.4)	15 ( 1.1)	217 ( 1.8)
KENTUCKY	16 ( 0.8)	218 ( 2.1)	37 ( 1.2)	226 ( 1.2)>	23 ( 1.1)	223 ( 1.6)	23 ( 1.2)	209 ( 1.6)
LOUISIANA	21 ( 1.0)	209 ( 1.9)	31 ( 1.1)	213 ( 1.6)	21 ( 0.8)	213 ( 1.5)	26 ( 1.3)	202 ( 1.5)>
MAINE	25 ( 1.3)	236 ( 1.8)	43 ( 1.5)	234 ( 1.3)	18 ( 0.9)	232 ( 1.6)	14 ( 1.0)	220 ( 2.1)
MARYLAND	20 ( 1.1)	227 ( 3.0)	36 ( 1.2)	228 ( 2.0)	20 ( 0.9)	222 ( 1.9)	24 ( 1.5)	204 ( 1.4)
MASSACHUSETTS	26 ( 1.4)	232 ( 2.0)	42 ( 1.4)	233 ( 1.4)	19 ( 1.1)	227 ( 1.7)	14 ( 1.2)	212 ( 1.9)
MICHIGAN†	20 ( 1.1)	228 ( 2.7)	41 ( 1.1)	231 ( 1.3)	21 ( 0.8)	228 ( 1.4)	19 ( 1.0)	212 ( 1.9)>
MINNESOTA	24 ( 1.0)	234 ( 1.7)>	45 ( 1.2)	236 ( 1.4)	20 ( 1.0)	232 ( 1.7)	11 ( 0.7)	213 ( 2.9)
MISSISSIPPI	20 ( 1.1)	208 ( 2.0)>	29 ( 1.2)	215 ( 1.6)>	20 ( 0.9)	212 ( 1.9)	32 ( 1.3)	201 ( 1.4)
MISSOURI	20 ( 0.9)	225 ( 1.4)	39 ( 1.2)	229 ( 1.3)	23 ( 1.1)	228 ( 1.2)	18 ( 1.2)	211 ( 1.9)
MONTANA†	31 ( 1.3)	228 ( 2.0)	40 ( 1.0)	231 ( 1.4)	18 ( 1.0)	228 ( 1.8)	12 ( 1.0)	215 ( 2.1)
NEBRASKA	25 ( 1.1)>	224 ( 2.2)	40 ( 1.1)	233 ( 1.4)	20 ( 1.0)	231 ( 1.4)	15 ( 1.0)	214 ( 2.3)
NEVADA†	24 ( 1.3)	217 ( 2.3)	38 ( 1.1)	220 ( 1.4)	21 ( 0.9)	219 ( 2.1)	17 ( 1.1)	212 ( 2.2)
NEW JERSEY†	19 ( 1.1)	231 ( 2.2)	35 ( 1.3)	234 ( 1.8)	24 ( 1.3)	229 ( 1.7)	22 ( 1.4)	212 ( 2.3)
NEW MEXICO	29 ( 1.3)>	212 ( 2.5)	38 ( 1.2)	218 ( 1.7)	17 ( 1.0)	216 ( 2.1)	16 ( 1.2)	206 ( 3.0)
NEW YORK†	20 ( 1.1)	227 ( 2.2)	38 ( 1.3)	228 ( 1.4)	21 ( 1.0)<	226 ( 1.8)	21 ( 1.3)	206 ( 2.3)
NORTH CAROLINA	22 ( 1.1)	228 ( 2.2)>	38 ( 1.3)>	230 ( 1.4)>	20 ( 0.9)	224 ( 1.6)>	20 ( 1.1)<	210 ( 1.8)>
NORTH DAKOTA	19 ( 0.9)	232 ( 1.5)>	45 ( 1.2)	233 ( 1.2)	22 ( 0.9)	232 ( 1.7)	13 ( 0.9)	220 ( 2.7)
OREGON	27 ( 1.2)	224 ( 2.1)	37 ( 1.0)	227 ( 1.6)	22 ( 0.9)	227 ( 1.6)	14 ( 1.2)	207 ( 2.0)
PENNSYLVANIA‡	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
RHODE ISLAND	25 ( 1.3)	219 ( 2.2)	40 ( 1.2)	225 ( 1.5)	20 ( 0.9)	221 ( 1.5)	15 ( 1.1)	210 ( 2.4)
SOUTH CAROLINA†	19 ( 0.8)	215 ( 2.4)	32 ( 1.3)	219 ( 1.5)	21 ( 1.0)	217 ( 1.4)	27 ( 1.3)	202 ( 1.9)
TENNESSEE	18 ( 0.9)	217 ( 2.1)	37 ( 1.4)	225 ( 1.6)>	22 ( 0.9)	221 ( 1.7)>	22 ( 1.3)	209 ( 2.0)>
TEXAS	24 ( 1.3)	229 ( 2.7)>	38 ( 1.0)	232 ( 1.6)>	22 ( 0.8)	230 ( 1.5)>	17 ( 1.1)	218 ( 1.9)>
UTAH	34 ( 1.3)	228 ( 1.5)	43 ( 1.1)	230 ( 1.1)	14 ( 0.9)	222 ( 1.7)	9 ( 0.7)	214 ( 2.4)
VERMONT†	33 ( 1.5)	227 ( 1.7)	40 ( 1.4)	229 ( 1.5)	16 ( 1.0)	223 ( 2.1)	11 ( 1.0)	210 ( 3.3)
VIRGINIA	18 ( 0.9)	228 ( 2.2)	36 ( 1.2)	229 ( 1.5)	21 ( 1.0)	222 ( 1.7)	24 ( 1.3)	209 ( 1.6)
WASHINGTON	28 ( 1.2)	228 ( 1.6)	40 ( 1.1)	228 ( 1.3)	19 ( 0.8)	225 ( 1.8)	14 ( 1.1)	210 ( 2.3)
WEST VIRGINIA	16 ( 0.8)	218 ( 1.9)	38 ( 1.3)	227 ( 1.1)>	24 ( 1.0)	228 ( 1.6)>	21 ( 1.1)	217 ( 1.5)>
WISCONSIN	22 ( 1.0)	232 ( 1.8)	42 ( 1.3)	236 ( 1.2)	21 ( 0.9)	231 ( 1.6)	15 ( 0.8)	219 ( 1.6)
WYOMING	31 ( 0.9)	222 ( 2.0)	42 ( 1.0)	228 ( 1.4)	16 ( 0.8)	224 ( 1.6)	11 ( 0.9)	209 ( 2.7)
<b>Other Jurisdictions</b>								
DDESS	20 ( 1.1)	224 ( 2.2)	37 ( 1.3)	229 ( 1.4)	20 ( 1.2)	225 ( 2.6)	24 ( 1.0)	217 ( 2.0)
DoDDS	25 ( 1.1)	224 ( 1.6)	37 ( 1.0)	228 ( 1.1)	19 ( 0.7)	225 ( 1.5)	20 ( 1.0)	213 ( 1.8)
GUAM	40 ( 1.4)>	185 ( 1.8)	28 ( 1.3)	192 ( 2.2)<	16 ( 1.0)	195 ( 2.6)	16 ( 1.0)<	187 ( 3.6)

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).  
 — State or other jurisdiction did not participate in the NAEP assessment year presented in this table.  
 > (<) The value for the students was significantly higher (lower) than in the 1992 assessment at about the 95% confidence level using appropriate multiple comparison procedures.  
 ‡ 1996 results for Pennsylvania are not reported for this table; the PA Department of Education requested that students refrain from answering this home environment background question.  
 SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 7.4**

**1992 Mathematics Assessment**



POPULATION:

1992 Grade 4 Public School Students

REPORTED STATISTICS:

Percentage of Students and Average Mathematics Scale Score

SCHOOLS' REPORTS ON:

Parental Support

*How would you characterize parental support for student achievement within your school?*

**Somewhat to Very Negative**

**Somewhat Positive**

**Very Positive**

**JURISDICTIONS**

PCT ( SE )

SS ( SE )

PCT ( SE )

SS ( SE )

PCT ( SE )

SS ( SE )

**Nation**

NATION	5 ( 1.2)	202 ( 4.9)!	54 ( 3.2)	215 ( 1.3)	41 ( 3.2)	225 ( 1.7)
NORTHEAST	1 ( ... )	... ( ... )	47 ( 6.9)	216 ( 3.0)	52 ( 7.5)	231 ( 4.0)
SOUTHEAST	10 ( 3.7)	195 ( 7.2)!	48 ( 6.0)	204 ( 2.1)	42 ( 6.2)	221 ( 3.7)
CENTRAL	5 ( 1.9)	... ( ... )	62 ( 5.3)	223 ( 2.4)	33 ( 5.1)	225 ( 3.1)
WEST	4 ( 1.6)	200 ( 3.8)!	56 ( 7.4)	214 ( 2.8)	41 ( 6.9)	224 ( 2.3)

**States**

ALABAMA	18 ( 3.7)	198 ( 2.7)!	57 ( 5.2)	206 ( 2.0)	26 ( 4.6)	220 ( 3.8)
ALASKA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
ARIZONA	11 ( 3.0)	203 ( 4.7)!	57 ( 5.1)	214 ( 2.0)	32 ( 4.7)	222 ( 2.1)
ARKANSAS	14 ( 3.2)	204 ( 2.6)!	68 ( 4.2)	211 ( 1.3)	19 ( 3.4)	213 ( 3.1)
CALIFORNIA	7 ( 2.5)	192 ( 6.2)!	46 ( 5.1)	199 ( 2.7)	47 ( 4.8)	219 ( 2.2)
COLORADO	11 ( 2.9)	212 ( 3.5)!	43 ( 4.6)	217 ( 1.5)	46 ( 4.5)	227 ( 1.4)
CONNECTICUT	0 ( ... )	... ( ... )	47 ( 4.8)	221 ( 2.1)	53 ( 4.8)	232 ( 1.8)
DELAWARE	0 ( ... )	... ( ... )	73 ( 0.2)	216 ( 0.9)	27 ( 0.2)	223 ( 1.7)
DISTRICT OF COLUMBIA	6 ( 0.1)	183 ( 2.7)	53 ( 0.3)	186 ( 0.8)	41 ( 0.3)	202 ( 0.9)
FLORIDA	7 ( 2.3)	201 ( 4.7)!	48 ( 5.0)	213 ( 1.9)	45 ( 5.4)	217 ( 2.4)
GEORGIA	9 ( 2.8)	209 ( 3.3)!	50 ( 5.1)	208 ( 1.8)	41 ( 4.6)	227 ( 2.3)
HAWAII	4 ( 1.6)	... ( ... )	62 ( 4.8)	212 ( 1.5)	34 ( 4.7)	220 ( 2.4)
INDIANA	5 ( 2.3)	213 ( 8.6)!	55 ( 5.2)	220 ( 1.6)	40 ( 4.8)	224 ( 1.8)
IOWA	7 ( 2.3)	224 ( 4.9)!	47 ( 4.4)	225 ( 1.4)	46 ( 4.3)	235 ( 1.1)
KENTUCKY	16 ( 3.5)	206 ( 2.3)!	58 ( 5.1)	214 ( 1.2)	26 ( 4.0)	223 ( 2.1)
LOUISIANA	15 ( 3.6)	192 ( 3.2)!	57 ( 4.5)	201 ( 2.1)	28 ( 4.0)	219 ( 2.5)
MAINE	7 ( 3.0)	220 ( 3.6)!	64 ( 5.9)	231 ( 1.1)	29 ( 5.5)	235 ( 1.8)!
MARYLAND	3 ( 1.9)	... ( ... )	53 ( 4.8)	213 ( 2.3)	44 ( 4.5)	225 ( 2.0)
MASSACHUSETTS	1 ( ... )	... ( ... )	56 ( 4.9)	223 ( 1.6)	43 ( 4.8)	232 ( 2.1)
MICHIGAN	6 ( 2.2)	203 ( 8.1)!	56 ( 4.7)	218 ( 2.1)	39 ( 4.4)	225 ( 3.6)
MINNESOTA	2 ( ... )	... ( ... )	41 ( 5.0)	226 ( 2.0)	57 ( 4.7)	230 ( 1.2)
MISSISSIPPI	10 ( 3.2)	192 ( 4.7)!	74 ( 4.1)	201 ( 1.4)	17 ( 3.6)	213 ( 3.9)!
MISSOURI	10 ( 3.4)	209 ( 4.5)!	50 ( 5.0)	220 ( 1.7)	40 ( 4.6)	229 ( 1.7)
MONTANA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
NEBRASKA	6 ( 1.9)	213 ( 7.0)!	55 ( 4.0)	224 ( 1.6)	39 ( 4.2)	229 ( 1.8)
NEVADA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
NEW JERSEY	5 ( 2.1)	204 (10.1)!	39 ( 4.5)	218 ( 2.8)	56 ( 4.4)	236 ( 1.9)
NEW MEXICO	15 ( 3.6)	205 ( 2.8)!	46 ( 6.0)	209 ( 1.8)	39 ( 6.1)	221 ( 2.2)
NEW YORK	7 ( 2.8)	214 ( 5.0)!	53 ( 5.0)	217 ( 1.9)	40 ( 5.1)	221 ( 3.3)
NORTH CAROLINA	12 ( 2.8)	203 ( 1.7)!	59 ( 5.4)	211 ( 1.4)	29 ( 4.5)	221 ( 2.3)
NORTH DAKOTA	4 ( 1.7)	227 ( 8.6)!	53 ( 4.5)	227 ( 1.2)	44 ( 4.7)	231 ( 1.1)
OREGON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
PENNSYLVANIA	8 ( 2.4)	209 ( 7.0)!	53 ( 5.1)	223 ( 1.9)	39 ( 5.0)	230 ( 2.4)
RHODE ISLAND	5 ( 2.1)	199 ( 8.5)!	63 ( 4.7)	215 ( 1.9)	32 ( 4.7)	219 ( 3.3)
SOUTH CAROLINA	9 ( 2.9)	206 ( 2.7)!	59 ( 5.3)	208 ( 1.6)	31 ( 4.8)	222 ( 1.9)
TENNESSEE	15 ( 3.4)	205 ( 2.7)!	53 ( 4.9)	211 ( 1.9)	32 ( 4.1)	214 ( 3.1)
TEXAS	11 ( 3.6)	211 ( 4.6)!	61 ( 5.2)	215 ( 1.7)	28 ( 4.6)	226 ( 3.2)
UTAH	9 ( 2.9)	215 ( 3.2)!	53 ( 4.7)	221 ( 1.3)	38 ( 4.5)	230 ( 1.4)
VERMONT	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
VIRGINIA	9 ( 2.5)	212 ( 3.3)!	52 ( 5.3)	214 ( 1.7)	40 ( 4.8)	231 ( 2.7)
WASHINGTON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
WEST VIRGINIA	11 ( 2.9)	208 ( 2.2)!	64 ( 4.8)	214 ( 1.1)	25 ( 4.0)	222 ( 2.2)
WISCONSIN	4 ( 1.9)	... ( ... )	49 ( 4.5)	226 ( 1.6)	47 ( 4.6)	231 ( 1.5)
WYOMING	6 ( 2.2)	214 ( 4.7)!	52 ( 4.8)	225 ( 0.9)	41 ( 4.7)	227 ( 1.6)

**Other Jurisdictions**

DDESS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
DoDDS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
GUAM	0 ( ... )	... ( ... )	71 ( 0.2)	194 ( 1.1)	29 ( 0.2)	189 ( 1.2)

— State or other jurisdiction did not participate in the NAEP assessment year presented in this table.

... Characteristics of the sample do not permit a reliable estimate.

! Interpret with caution — the nature of the sample does not allow accurate determination of the variability of this statistic.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.



**TABLE 7.4** (continued) **1996 Mathematics Assessment**

POPULATION: **1996 Grade 4 Public School Students**  
 REPORTED STATISTICS: **Percentage of Students and Average Mathematics Scale Score**  
 SCHOOLS' REPORTS ON: **Parental Support**



*How would you characterize parental support for student achievement within your school?*

	Somewhat to Very Negative		Somewhat Positive		Very Positive	
JURISDICTIONS	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )
<b>Nation</b>						
NATION	5 ( 1.5)	200 ( 5.8)!	52 ( 3.7)	220 ( 1.3)>	43 ( 3.9)	227 ( 1.7)
NORTHEAST	1 ( ... )	... ( ... )	55 ( 7.6)	220 ( 3.0)	44 ( 8.2)	238 ( 2.7)
SOUTHEAST	7 ( 4.2)	... ( ... )	49 ( 6.6)	214 ( 3.4)	43 ( 6.0)	221 ( 4.4)
CENTRAL	4 ( 2.8)	... ( ... )	54 ( 8.8)	227 ( 2.2)	41 (10.7)	233 ( 3.4)!
WEST	6 ( 2.8)	... ( ... )	50 ( 6.7)	219 ( 2.4)	44 ( 6.3)	221 ( 2.8)
<b>States</b>						
ALABAMA	12 ( 3.6)	198 ( 4.9)!	64 ( 5.2)	208 ( 1.9)	24 ( 4.4)	223 ( 2.3)
ALASKA†	7 ( 2.7)	217 ( 5.5)!	45 ( 5.0)	220 ( 2.4)	48 ( 4.5)	229 ( 1.9)
ARIZONA	6 ( 2.4)	209 ( 3.3)!	55 ( 5.6)	212 ( 2.5)	39 ( 5.4)	227 ( 2.9)
ARKANSAS†	9 ( 2.9)	196 ( 6.2)!	56 ( 6.0)	214 ( 1.8)	35 ( 5.7)	221 ( 2.6)
CALIFORNIA	7 ( 2.8)	188 ( 7.8)!	42 ( 6.2)	204 ( 2.6)	52 ( 6.6)	211 ( 3.4)
COLORADO	3 ( 1.8)	... ( ... )	51 ( 5.2)	224 ( 1.7)	46 ( 5.3)	230 ( 2.1)
CONNECTICUT	2 ( 1.4)	... ( ... )	39 ( 4.9)	224 ( 2.3)	58 ( 4.9)	239 ( 2.1)
DELAWARE	2 ( 0.2)	... ( ... )	66 ( 0.4)<	213 ( 1.1)	32 ( 0.4)>	219 ( 1.6)
DISTRICT OF COLUMBIA	13 ( 0.3)>	178 ( 2.8)	48 ( 0.4)<	179 ( 1.2)<	39 ( 0.4)<	196 ( 1.9)
FLORIDA	4 ( 2.0)	... ( ... )	54 ( 5.6)	214 ( 2.5)	42 ( 5.2)	218 ( 2.2)
GEORGIA	8 ( 3.0)	205 ( 5.8)!	57 ( 4.7)	213 ( 1.5)	35 ( 4.5)	223 ( 3.4)
HAWAII	1 ( ... )	... ( ... )	57 ( 4.9)	209 ( 2.2)	42 ( 5.0)	224 ( 2.6)
INDIANA	6 ( 2.4)	221 ( 6.4)!	47 ( 5.6)	226 ( 1.6)	47 ( 5.5)	235 ( 1.7)>
IOWA†	3 ( 2.0)	... ( ... )	42 ( 5.1)	225 ( 1.6)	55 ( 5.0)	234 ( 1.4)
KENTUCKY	5 ( 2.4)	... ( ... )	62 ( 5.4)	219 ( 1.6)	33 ( 5.0)	224 ( 2.8)
LOUISIANA	9 ( 2.6)	197 ( 2.9)!	56 ( 5.2)	208 ( 1.4)	35 ( 5.0)	217 ( 3.2)
MAINE	4 ( 2.1)	... ( ... )	51 ( 4.7)	230 ( 1.4)	45 ( 4.5)	236 ( 1.4)
MARYLAND	5 ( 2.1)	... ( ... )	50 ( 4.9)	211 ( 2.2)	44 ( 5.1)	233 ( 2.9)
MASSACHUSETTS	1 ( ... )	... ( ... )	45 ( 5.1)	223 ( 2.2)	54 ( 5.2)	234 ( 1.8)
MICHIGAN†	4 ( 2.3)	... ( ... )	48 ( 4.7)	224 ( 2.2)	48 ( 4.6)	233 ( 2.4)
MINNESOTA	0 ( ... )	... ( ... )	36 ( 5.4)	230 ( 2.0)	64 ( 5.4)	236 ( 1.5)
MISSISSIPPI	14 ( 3.3)	196 ( 3.5)!	62 ( 5.0)	207 ( 1.5)>	24 ( 4.1)	218 ( 2.9)
MISSOURI	4 ( 2.1)	... ( ... )	56 ( 5.2)	224 ( 1.5)	39 ( 5.5)	227 ( 2.7)
MONTANA†	3 ( 1.8)	... ( ... )	48 ( 5.6)	222 ( 1.9)	50 ( 5.8)	233 ( 1.8)
NEBRASKA	2 ( 1.4)	... ( ... )	46 ( 4.8)	223 ( 1.9)	52 ( 4.9)	231 ( 2.3)
NEVADA†	5 ( 2.4)	205 ( 5.8)!	53 ( 5.9)	215 ( 2.4)	42 ( 5.9)	223 ( 2.4)
NEW JERSEY†	4 ( 2.0)	... ( ... )	41 ( 5.3)	218 ( 2.5)	55 ( 5.2)	237 ( 2.3)
NEW MEXICO	8 ( 3.4)	188 ( 8.5)!	46 ( 5.4)	212 ( 1.8)	46 ( 5.2)	221 ( 2.1)
NEW YORK†	1 ( ... )	... ( ... )	46 ( 5.3)	214 ( 2.7)	53 ( 5.4)	231 ( 2.0)
NORTH CAROLINA	3 ( 1.7)	... ( ... )	46 ( 5.0)	221 ( 1.4)>	51 ( 5.3)>	229 ( 2.0)
NORTH DAKOTA	1 ( ... )	... ( ... )	41 ( 4.6)	228 ( 2.6)	58 ( 4.7)	233 ( 1.0)
OREGON	5 ( 2.6)	200 ( 2.4)!	59 ( 5.6)	221 ( 1.6)	35 ( 5.1)	230 ( 1.7)
PENNSYLVANIA†	5 ( 2.1)	214 ( 3.4)!	55 ( 5.7)	220 ( 1.9)	40 ( 5.5)	236 ( 1.8)
RHODE ISLAND	5 ( 1.9)	216 ( 7.1)!	55 ( 4.7)	217 ( 2.0)	40 ( 4.6)	226 ( 2.3)
SOUTH CAROLINA†	10 ( 3.0)	206 ( 4.1)!	54 ( 5.6)	209 ( 1.6)	36 ( 5.1)	223 ( 2.6)
TENNESSEE	2 ( 1.2)<	... ( ... )	57 ( 4.8)	218 ( 1.9)	41 ( 4.6)	224 ( 2.8)
TEXAS	3 ( ... )	... ( ... )	45 ( 5.2)	223 ( 1.6)>	53 ( 5.3)>	235 ( 2.8)
UTAH	4 ( 2.0)	... ( ... )	57 ( 5.2)	224 ( 1.4)	40 ( 5.2)	230 ( 1.8)
VERMONT†	4 ( 1.9)	204 ( 7.9)!	54 ( 4.6)	223 ( 1.7)	41 ( 4.6)	230 ( 1.7)
VIRGINIA	3 ( 1.7)	... ( ... )	44 ( 4.7)	216 ( 2.0)	53 ( 4.7)	229 ( 2.1)
WASHINGTON	4 ( 2.3)	... ( ... )	51 ( 4.2)	221 ( 1.8)	44 ( 4.0)	230 ( 1.4)
WEST VIRGINIA	4 ( 2.1)	... ( ... )	48 ( 5.5)	222 ( 1.5)>	49 ( 5.3)>	225 ( 1.8)
WISCONSIN	4 ( 2.0)	195 ( 7.8)!	47 ( 5.4)	230 ( 1.8)	49 ( 4.8)	237 ( 1.4)
WYOMING	4 ( 1.7)	... ( ... )	51 ( 4.7)	222 ( 1.5)	44 ( 4.9)	227 ( 1.9)
<b>Other Jurisdictions</b>						
DDESS	0 ( ... )	... ( ... )	42 ( 0.5)	223 ( 1.3)	58 ( 0.5)	225 ( 1.4)
DoDDS	2 ( 0.7)	... ( ... )	38 ( 2.4)	222 ( 1.0)	60 ( 2.4)	224 ( 1.0)
GUAM	0 ( ... )	... ( ... )	52 ( 0.6)<	192 ( 1.5)	48 ( 0.6)>	185 ( 1.6)

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).  
 ... Characteristics of the sample do not permit a reliable estimate.  
 > (<) The value for the students was significantly higher (lower) than in the 1992 assessment at about the 95% confidence level using appropriate multiple comparison procedures.  
 ! Interpret with caution — the nature of the sample does not allow accurate determination of the variability of this statistic.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 7.5**

**1992 Mathematics Assessment**



POPULATION:

1992 Grade 4 Public School Students

REPORTED STATISTICS:

Percentage of Students and Average Mathematics Scale Score

STUDENTS' REPORTS ON:

Mobility

*Within the past two years, how many times have you changed schools because you changed where you lived?*

	None		One		Two		Three or More	
JURISDICTIONS	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )
<b>Nation</b>								
NATION	60 ( 0.9)	225 ( 0.9)	19 ( 0.6)	216 ( 1.6)	9 ( 0.4)	206 ( 1.7)	13 ( 0.5)	201 ( 1.6)
NORTHEAST	64 ( 1.9)	230 ( 2.2)	19 ( 1.7)	219 ( 4.6)	7 ( 0.9)	209 ( 5.2)	10 ( 1.3)	204 ( 4.7)
SOUTHEAST	56 ( 2.1)	216 ( 2.4)	18 ( 1.4)	208 ( 2.5)	11 ( 0.9)	198 ( 3.5)	15 ( 1.1)	198 ( 2.1)
CENTRAL	63 ( 1.9)	229 ( 1.7)	18 ( 0.7)	221 ( 3.6)	8 ( 1.0)	210 ( 3.0)	10 ( 0.7)	204 ( 4.6)
WEST	56 ( 1.3)	225 ( 1.8)	20 ( 1.0)	217 ( 2.3)	10 ( 0.6)	210 ( 2.8)	14 ( 0.8)	200 ( 2.6)
<b>States</b>								
ALABAMA	62 ( 1.4)	212 ( 1.6)	18 ( 0.9)	205 ( 2.4)	8 ( 0.5)	201 ( 2.9)	11 ( 0.7)	197 ( 2.2)
ALASKA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
ARIZONA	54 ( 1.5)	220 ( 1.3)	19 ( 0.9)	216 ( 1.8)	11 ( 0.6)	208 ( 1.8)	16 ( 0.9)	204 ( 1.9)
ARKANSAS	62 ( 1.2)	213 ( 0.9)	18 ( 1.0)	208 ( 1.5)	8 ( 0.6)	206 ( 2.8)	13 ( 0.7)	202 ( 2.2)
CALIFORNIA	54 ( 2.0)	215 ( 1.9)	21 ( 1.1)	206 ( 1.8)	10 ( 0.6)	201 ( 2.3)	15 ( 1.1)	194 ( 2.4)
COLORADO	58 ( 1.3)	226 ( 1.0)	20 ( 0.9)	219 ( 1.5)	9 ( 0.5)	214 ( 2.0)	14 ( 0.9)	206 ( 2.0)
CONNECTICUT	68 ( 1.2)	233 ( 1.0)	16 ( 0.8)	222 ( 1.9)	7 ( 0.6)	207 ( 2.6)	9 ( 0.7)	206 ( 2.4)
DELAWARE	58 ( 1.3)	225 ( 0.8)	19 ( 0.8)	214 ( 1.6)	9 ( 0.6)	206 ( 2.3)	14 ( 0.9)	201 ( 1.8)
DISTRICT OF COLUMBIA	52 ( 1.0)	200 ( 1.1)	22 ( 1.0)	187 ( 1.9)	13 ( 0.6)	182 ( 2.1)	13 ( 0.7)	183 ( 1.9)
FLORIDA	50 ( 1.6)	219 ( 1.5)	22 ( 0.9)	215 ( 2.5)	11 ( 0.6)	204 ( 2.6)	16 ( 0.9)	203 ( 1.5)
GEORGIA	58 ( 1.9)	221 ( 1.3)	20 ( 0.9)	212 ( 2.2)	10 ( 0.8)	209 ( 2.7)	13 ( 0.9)	201 ( 1.8)
HAWAII	55 ( 1.3)	219 ( 1.5)	19 ( 0.8)	214 ( 1.7)	11 ( 0.7)	203 ( 2.4)	15 ( 0.9)	206 ( 2.1)
INDIANA	64 ( 1.2)	226 ( 0.9)	18 ( 0.9)	219 ( 1.7)	8 ( 0.5)	210 ( 2.2)	10 ( 0.8)	203 ( 1.7)
IOWA	71 ( 1.2)	233 ( 1.0)	16 ( 0.9)	229 ( 2.1)	5 ( 0.5)	218 ( 2.9)	8 ( 0.7)	210 ( 2.2)
KENTUCKY	64 ( 1.3)	218 ( 1.1)	17 ( 0.8)	216 ( 1.7)	8 ( 0.5)	206 ( 2.6)	11 ( 0.8)	204 ( 2.4)
LOUISIANA	59 ( 1.5)	208 ( 1.5)	19 ( 0.9)	203 ( 1.7)	9 ( 0.7)	199 ( 2.7)	13 ( 0.8)	194 ( 2.4)
MAINE	72 ( 1.4)	235 ( 1.0)	13 ( 0.8)	228 ( 2.3)	6 ( 0.6)	225 ( 3.3)	9 ( 0.7)	216 ( 2.4)
MARYLAND	58 ( 1.5)	225 ( 1.3)	20 ( 1.1)	214 ( 2.0)	11 ( 0.7)	202 ( 2.8)	11 ( 0.7)	198 ( 2.2)
MASSACHUSETTS	71 ( 1.3)	231 ( 1.2)	16 ( 0.9)	220 ( 1.8)	6 ( 0.5)	209 ( 3.3)	6 ( 0.6)	211 ( 3.1)
MICHIGAN	63 ( 1.5)	226 ( 1.7)	18 ( 0.8)	219 ( 2.2)	9 ( 0.7)	204 ( 3.5)	11 ( 0.7)	199 ( 2.9)
MINNESOTA	70 ( 1.2)	233 ( 1.0)	15 ( 0.8)	226 ( 1.6)	6 ( 0.5)	213 ( 3.0)	9 ( 0.7)	211 ( 2.4)
MISSISSIPPI	64 ( 1.3)	205 ( 1.3)	16 ( 0.8)	201 ( 2.0)	9 ( 0.5)	190 ( 2.1)	11 ( 0.9)	196 ( 2.2)
MISSOURI	64 ( 1.3)	226 ( 1.2)	17 ( 1.2)	221 ( 2.4)	7 ( 0.4)	217 ( 2.7)	12 ( 0.8)	205 ( 2.2)
MONTANA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
NEBRASKA	68 ( 1.1)	229 ( 1.3)	16 ( 0.8)	225 ( 1.9)	6 ( 0.7)	212 ( 2.7)	10 ( 0.7)	207 ( 3.0)
NEVADA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
NEW JERSEY	69 ( 1.3)	233 ( 1.4)	17 ( 0.9)	221 ( 1.8)	6 ( 0.6)	208 ( 3.9)	8 ( 0.8)	207 ( 2.7)
NEW MEXICO	57 ( 2.3)	218 ( 2.0)	19 ( 1.3)	212 ( 2.2)	9 ( 0.9)	201 ( 2.1)	14 ( 0.9)	204 ( 2.1)
NEW YORK	67 ( 1.3)	224 ( 1.2)	18 ( 1.1)	214 ( 2.2)	8 ( 0.7)	204 ( 2.9)	8 ( 0.7)	199 ( 2.8)
NORTH CAROLINA	61 ( 1.3)	216 ( 1.2)	16 ( 0.7)	215 ( 1.9)	10 ( 0.6)	206 ( 2.2)	13 ( 0.8)	199 ( 2.0)
NORTH DAKOTA	74 ( 1.5)	231 ( 0.8)	14 ( 1.0)	227 ( 1.8)	5 ( 0.5)	217 ( 2.6)	8 ( 0.9)	214 ( 2.5)
OREGON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
PENNSYLVANIA	69 ( 1.4)	230 ( 1.3)	15 ( 0.8)	220 ( 1.8)	7 ( 0.6)	208 ( 3.0)	9 ( 0.6)	202 ( 2.7)
RHODE ISLAND	66 ( 1.5)	220 ( 1.5)	18 ( 0.9)	214 ( 2.2)	7 ( 0.7)	196 ( 3.3)	9 ( 0.8)	200 ( 3.5)
SOUTH CAROLINA	62 ( 1.2)	216 ( 1.3)	18 ( 0.9)	211 ( 1.8)	9 ( 0.6)	207 ( 2.4)	11 ( 0.7)	203 ( 1.7)
TENNESSEE	61 ( 1.4)	215 ( 1.2)	19 ( 0.9)	210 ( 2.0)	8 ( 0.6)	202 ( 3.1)	12 ( 0.8)	198 ( 2.4)
TEXAS	55 ( 1.7)	223 ( 1.3)	20 ( 0.9)	219 ( 2.1)	10 ( 0.8)	211 ( 2.5)	15 ( 0.9)	206 ( 2.4)
UTAH	67 ( 1.1)	227 ( 1.0)	16 ( 0.8)	223 ( 1.8)	7 ( 0.5)	215 ( 3.0)	9 ( 0.7)	209 ( 2.1)
VERMONT	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
VIRGINIA	61 ( 1.3)	226 ( 1.4)	18 ( 0.9)	219 ( 2.0)	8 ( 0.6)	210 ( 3.1)	13 ( 0.8)	204 ( 2.0)
WASHINGTON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
WEST VIRGINIA	72 ( 1.0)	219 ( 1.1)	14 ( 0.8)	212 ( 1.8)	6 ( 0.5)	203 ( 3.0)	9 ( 0.7)	201 ( 2.1)
WISCONSIN	71 ( 1.2)	233 ( 1.1)	14 ( 0.7)	227 ( 1.8)	6 ( 0.5)	214 ( 2.5)	9 ( 0.6)	209 ( 2.5)
WYOMING	61 ( 1.3)	229 ( 0.9)	17 ( 0.7)	226 ( 1.6)	8 ( 0.6)	215 ( 2.2)	14 ( 0.9)	214 ( 1.9)
<b>Other Jurisdictions</b>								
DDESS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
DoDDS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
GUAM	45 ( 1.1)	194 ( 1.2)	21 ( 0.9)	194 ( 2.1)	15 ( 0.8)	192 ( 2.1)	18 ( 0.8)	191 ( 2.0)

— State or other jurisdiction did not participate in the NAEP assessment year presented in this table.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.



**TABLE 7.5** (continued)

**1996 Mathematics Assessment**



POPULATION:

1996 Grade 4 Public School Students

REPORTED STATISTICS:

Percentage of Students and Average Mathematics Scale Score

STUDENTS' REPORTS ON:

Mobility

Within the past two years, how many times have you changed schools because you changed where you lived?

JURISDICTIONS	None		One		Two		Three or More	
	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )
<b>Nation</b>								
NATION	62 ( 1.1)	227 ( 1.2)	19 ( 0.7)	221 ( 1.9)	8 ( 0.5)	210 ( 2.1)	11 ( 0.8)	207 ( 2.0)
NORTHEAST	66 ( 2.6)	231 ( 2.5)	18 ( 1.6)	225 ( 5.0)	9 ( 1.4)	212 ( 3.5)!	7 ( 0.7)	209 ( 5.1)
SOUTHEAST	61 ( 2.7)	220 ( 2.8)	20 ( 2.0)	215 ( 3.3)	10 ( 0.9)	205 ( 3.9)	10 ( 1.5)	201 ( 2.8)
CENTRAL	68 ( 1.7)	234 ( 1.9)	16 ( 1.1)	232 ( 3.1)	6 ( 1.0)	218 ( 6.0)	10 ( 1.0)	210 ( 2.6)
WEST	55 ( 2.0)	224 ( 2.8)	22 ( 0.9)	216 ( 3.4)	9 ( 0.8)	210 ( 4.5)	14 ( 1.9)	207 ( 3.9)
<b>States</b>								
ALABAMA	66 ( 1.4)	216 ( 1.3)	17 ( 0.8)	207 ( 1.8)	8 ( 0.6)	201 ( 2.2)	9 ( 0.8)	197 ( 2.5)
ALASKA†	59 ( 1.5)	228 ( 1.2)	19 ( 1.0)	222 ( 2.0)	8 ( 0.6)	218 ( 3.4)	14 ( 1.0)	212 ( 3.1)
ARIZONA	56 ( 1.8)	222 ( 2.1)	23 ( 1.3)	216 ( 2.6)	10 ( 0.8)	210 ( 2.7)	12 ( 0.9)	208 ( 2.5)
ARKANSAS†	63 ( 1.5)	219 ( 1.4)>	17 ( 1.0)	215 ( 2.4)	7 ( 0.6)	209 ( 2.6)	12 ( 1.0)	205 ( 2.5)
CALIFORNIA	56 ( 1.4)	216 ( 2.1)	21 ( 1.2)	204 ( 2.0)	10 ( 0.6)	197 ( 2.8)	13 ( 0.8)	197 ( 2.6)
COLORADO	60 ( 1.3)	230 ( 1.1)	21 ( 0.9)	223 ( 1.5)	8 ( 0.6)	221 ( 2.3)	11 ( 0.7)	215 ( 3.1)
CONNECTICUT	68 ( 1.4)	238 ( 1.1)>	17 ( 1.0)	226 ( 2.2)	7 ( 0.5)	214 ( 2.8)	8 ( 0.7)	208 ( 3.0)
DELAWARE	63 ( 1.2)	220 ( 1.1)<	18 ( 0.9)	215 ( 2.7)	8 ( 0.9)	201 ( 3.4)	11 ( 0.7)	197 ( 3.6)
DISTRICT OF COLUMBIA	55 ( 0.9)	194 ( 1.0)<	20 ( 0.6)	184 ( 2.1)	12 ( 0.7)	176 ( 3.6)	13 ( 0.6)	173 ( 2.9)<
FLORIDA	54 ( 1.4)	223 ( 1.4)	21 ( 1.1)	212 ( 1.8)	11 ( 0.6)	206 ( 2.0)	14 ( 0.7)	203 ( 2.1)
GEORGIA	58 ( 1.8)	221 ( 1.5)	21 ( 1.1)	214 ( 2.2)	10 ( 0.7)	206 ( 2.5)	12 ( 0.8)	201 ( 2.3)
HAWAII	60 ( 1.4)	221 ( 1.3)	18 ( 0.9)	210 ( 2.2)	9 ( 0.6)	203 ( 3.3)	12 ( 0.8)	201 ( 2.0)
INDIANA	68 ( 1.2)	233 ( 1.1)>	18 ( 0.8)	226 ( 1.5)>	5 ( 0.5)<	218 ( 2.6)	9 ( 0.7)	217 ( 2.1)>
IOWA†	73 ( 1.1)	232 ( 1.2)	15 ( 0.7)	225 ( 1.7)	5 ( 0.5)	218 ( 3.2)	7 ( 0.7)	214 ( 2.8)
KENTUCKY	69 ( 1.1)>	223 ( 1.3)>	15 ( 0.7)	216 ( 1.7)	7 ( 0.5)	212 ( 3.3)	9 ( 0.7)	208 ( 2.1)
LOUISIANA	62 ( 1.3)	212 ( 1.2)	19 ( 0.9)	206 ( 1.7)	8 ( 0.6)	202 ( 2.3)	10 ( 0.7)	201 ( 2.1)
MAINE	74 ( 1.1)	235 ( 1.2)	15 ( 0.7)	228 ( 2.0)	5 ( 0.4)	222 ( 2.9)	6 ( 0.5)	213 ( 2.7)
MARYLAND	62 ( 1.6)	228 ( 1.8)	19 ( 0.8)	217 ( 1.9)	8 ( 0.8)	202 ( 3.2)	11 ( 1.0)	203 ( 2.2)
MASSACHUSETTS	75 ( 1.7)	233 ( 1.3)	15 ( 1.0)	222 ( 2.6)	4 ( 0.4)	218 ( 3.2)	6 ( 0.8)	208 ( 2.9)
MICHIGAN†	65 ( 1.3)	231 ( 1.4)	18 ( 0.9)	222 ( 2.1)	7 ( 0.6)	214 ( 3.0)	9 ( 0.8)	208 ( 2.5)
MINNESOTA	72 ( 1.2)	235 ( 1.2)	17 ( 0.9)	227 ( 1.7)	5 ( 0.4)	222 ( 2.9)	5 ( 0.5)<	214 ( 3.8)
MISSISSIPPI	67 ( 1.5)	211 ( 1.3)>	14 ( 0.8)	205 ( 1.9)	8 ( 0.6)	204 ( 2.4)>	10 ( 0.7)	202 ( 2.0)
MISSOURI	67 ( 1.4)	228 ( 1.2)	17 ( 0.8)	221 ( 1.7)	7 ( 0.5)	216 ( 2.5)	9 ( 0.7)	211 ( 2.3)
MONTANA†	62 ( 1.3)	231 ( 1.2)	19 ( 1.0)	227 ( 1.8)	8 ( 0.7)	221 ( 3.0)	11 ( 0.9)	218 ( 2.8)
NEBRASKA	68 ( 1.4)	232 ( 1.3)	16 ( 1.0)	225 ( 2.2)	6 ( 0.5)	215 ( 3.3)	9 ( 0.7)	209 ( 2.7)
NEVADA†	47 ( 1.7)	224 ( 1.5)	23 ( 0.9)	218 ( 2.0)	12 ( 0.8)	210 ( 2.3)	18 ( 1.2)	207 ( 2.0)
NEW JERSEY†	66 ( 1.4)	233 ( 1.4)	18 ( 1.2)	223 ( 2.4)	8 ( 0.6)	209 ( 3.4)	8 ( 0.7)	204 ( 3.3)
NEW MEXICO	59 ( 1.4)	217 ( 2.1)	21 ( 1.0)	214 ( 2.3)	9 ( 0.6)	209 ( 2.6)	11 ( 0.9)	206 ( 2.4)
NEW YORK†	72 ( 1.2)	228 ( 1.1)	15 ( 0.8)	220 ( 2.4)	7 ( 0.6)	200 ( 2.8)	7 ( 0.7)	197 ( 3.2)
NORTH CAROLINA	64 ( 1.2)	229 ( 1.3)>	19 ( 1.0)	219 ( 1.6)	7 ( 0.6)<	218 ( 2.7)>	10 ( 0.6)<	207 ( 2.6)
NORTH DAKOTA	74 ( 1.1)	233 ( 1.2)	15 ( 0.7)	229 ( 2.0)	5 ( 0.5)	220 ( 3.7)	6 ( 0.5)	217 ( 3.0)
OREGON	59 ( 1.5)	229 ( 1.4)	21 ( 0.9)	221 ( 2.4)	8 ( 0.7)	217 ( 2.6)	12 ( 0.8)	204 ( 2.5)
PENNSYLVANIA‡	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
RHODE ISLAND	67 ( 1.2)	225 ( 1.4)	17 ( 0.9)	217 ( 2.1)	7 ( 0.5)	210 ( 2.9)>	9 ( 0.8)	202 ( 3.1)
SOUTH CAROLINA†	64 ( 1.3)	216 ( 1.4)	19 ( 0.9)	212 ( 2.3)	8 ( 0.7)	202 ( 2.3)	9 ( 0.6)	204 ( 2.4)
TENNESSEE	63 ( 1.5)	224 ( 1.5)>	18 ( 0.8)	220 ( 2.0)>	8 ( 0.8)	207 ( 3.0)	10 ( 0.8)	202 ( 2.6)
TEXAS	59 ( 1.6)	233 ( 1.5)>	20 ( 0.9)	227 ( 1.8)>	8 ( 0.6)	218 ( 2.5)	12 ( 0.9)	217 ( 2.0)>
UTAH	65 ( 1.4)	230 ( 1.1)	20 ( 0.9)	226 ( 1.9)	7 ( 0.6)	214 ( 3.8)	9 ( 0.7)	212 ( 2.9)
VERMONT†	73 ( 1.0)	228 ( 1.3)	15 ( 0.8)	221 ( 2.6)	5 ( 0.5)	218 ( 3.6)	6 ( 0.7)	203 ( 4.4)
VIRGINIA	63 ( 1.4)	227 ( 1.6)	19 ( 0.8)	223 ( 1.9)	8 ( 0.7)	214 ( 2.4)	10 ( 0.8)	206 ( 2.2)
WASHINGTON	59 ( 1.6)	230 ( 1.3)	20 ( 1.2)	222 ( 1.4)	8 ( 0.6)	216 ( 2.6)	13 ( 0.9)	211 ( 2.6)
WEST VIRGINIA	73 ( 1.2)	226 ( 1.1)>	15 ( 0.9)	220 ( 2.1)>	5 ( 0.4)	213 ( 3.3)	7 ( 0.6)	212 ( 2.3)>
WISCONSIN	71 ( 1.3)	235 ( 0.9)	16 ( 0.9)	229 ( 1.5)	6 ( 0.4)	217 ( 3.3)	8 ( 0.7)	213 ( 2.5)
WYOMING	62 ( 1.2)	226 ( 1.2)	20 ( 0.9)	221 ( 2.5)	7 ( 0.6)	219 ( 2.8)	11 ( 0.7)<	212 ( 2.8)
<b>Other Jurisdictions</b>								
DDESS	36 ( 1.4)	229 ( 1.5)	24 ( 1.1)	227 ( 1.8)	16 ( 0.9)	222 ( 3.4)	24 ( 1.0)	215 ( 2.0)
DoDDS	34 ( 1.1)	228 ( 1.3)	27 ( 1.1)	228 ( 1.4)	15 ( 0.7)	221 ( 1.8)	24 ( 1.1)	214 ( 1.3)
GUAM	52 ( 1.3)>	191 ( 2.0)	22 ( 1.2)	192 ( 2.3)	12 ( 0.9)	177 ( 4.0)<	14 ( 1.0)<	184 ( 4.5)

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).  
 — State or other jurisdiction did not participate in the NAEP assessment year presented in this table.  
 > (<) The value for the students was significantly higher (lower) than in the 1992 assessment at about the 95% confidence level using appropriate multiple comparison procedures.  
 ! Interpret with caution — the nature of the sample does not allow accurate determination of the variability of this statistic.  
 ‡ 1996 results for Pennsylvania are not reported for this table; the PA Department of Education requested that students refrain from answering this home environment background question.  
 SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 7.6**

**1992 Mathematics Assessment**



POPULATION:

1992 Grade 4 Public School Students

REPORTED STATISTICS:

Percentage of Students and Average Mathematics Scale Score

STUDENTS' REPORTS ON:

Usefulness of Mathematics

To what degree do you agree with the statement "Mathematics is useful for solving everyday problems?"

	Disagree		Undecided		Agree	
JURISDICTIONS	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )
<b>Nation</b>						
NATION	13 ( 0.6 )	207 ( 1.7 )	21 ( 0.9 )	218 ( 1.3 )	66 ( 1.1 )	223 ( 0.9 )
NORTHEAST	12 ( 1.1 )	209 ( 3.6 )	21 ( 1.7 )	220 ( 2.5 )	67 ( 2.0 )	230 ( 2.3 )
SOUTHEAST	15 ( 1.3 )	197 ( 3.3 )	19 ( 1.1 )	210 ( 2.2 )	65 ( 1.6 )	215 ( 2.1 )
CENTRAL	13 ( 1.4 )	215 ( 4.2 )	25 ( 2.5 )	224 ( 3.0 )	61 ( 3.0 )	226 ( 1.7 )
WEST	13 ( 1.1 )	208 ( 2.7 )	19 ( 1.4 )	214 ( 2.3 )	69 ( 1.9 )	223 ( 1.9 )
<b>States</b>						
ALABAMA	15 ( 0.9 )	198 ( 1.8 )	22 ( 1.0 )	212 ( 1.7 )	63 ( 1.3 )	211 ( 1.7 )
ALASKA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
ARIZONA	14 ( 0.8 )	206 ( 2.2 )	23 ( 0.8 )	213 ( 1.5 )	62 ( 1.1 )	220 ( 1.0 )
ARKANSAS	16 ( 0.8 )	201 ( 1.7 )	23 ( 0.9 )	211 ( 1.8 )	61 ( 1.1 )	213 ( 0.9 )
CALIFORNIA	12 ( 0.8 )	201 ( 2.4 )	23 ( 1.0 )	208 ( 2.1 )	64 ( 1.2 )	215 ( 1.7 )
COLORADO	12 ( 0.6 )	211 ( 1.9 )	24 ( 0.8 )	218 ( 1.4 )	65 ( 1.0 )	226 ( 1.0 )
CONNECTICUT	12 ( 0.7 )	217 ( 2.3 )	22 ( 1.0 )	225 ( 1.9 )	66 ( 1.1 )	231 ( 0.9 )
DELAWARE	15 ( 0.8 )	207 ( 1.9 )	24 ( 1.1 )	218 ( 2.1 )	61 ( 1.2 )	222 ( 1.2 )
DISTRICT OF COLUMBIA	17 ( 0.8 )	187 ( 1.6 )	20 ( 1.0 )	188 ( 1.8 )	63 ( 1.1 )	199 ( 0.9 )
FLORIDA	16 ( 1.0 )	204 ( 2.5 )	22 ( 0.8 )	214 ( 2.0 )	63 ( 1.1 )	218 ( 1.3 )
GEORGIA	15 ( 1.0 )	205 ( 2.1 )	22 ( 0.9 )	214 ( 1.7 )	63 ( 1.3 )	220 ( 1.3 )
HAWAII	14 ( 0.8 )	204 ( 2.3 )	25 ( 0.8 )	213 ( 1.6 )	60 ( 1.1 )	220 ( 1.5 )
INDIANA	14 ( 0.7 )	211 ( 1.8 )	24 ( 0.8 )	220 ( 1.3 )	63 ( 1.0 )	224 ( 1.1 )
IOWA	12 ( 0.9 )	220 ( 1.9 )	24 ( 0.9 )	231 ( 1.4 )	64 ( 1.1 )	233 ( 1.2 )
KENTUCKY	12 ( 0.6 )	204 ( 1.8 )	22 ( 0.8 )	212 ( 1.6 )	66 ( 1.1 )	219 ( 1.2 )
LOUISIANA	14 ( 0.7 )	198 ( 1.7 )	21 ( 1.0 )	205 ( 2.0 )	65 ( 1.2 )	208 ( 1.5 )
MAINE	10 ( 0.9 )	222 ( 2.3 )	22 ( 1.2 )	231 ( 1.3 )	68 ( 1.5 )	235 ( 1.2 )
MARYLAND	11 ( 0.8 )	201 ( 2.4 )	21 ( 0.8 )	216 ( 2.0 )	68 ( 1.0 )	223 ( 1.2 )
MASSACHUSETTS	12 ( 0.7 )	217 ( 2.2 )	23 ( 1.0 )	225 ( 1.7 )	65 ( 1.2 )	231 ( 1.1 )
MICHIGAN	13 ( 0.8 )	209 ( 2.2 )	23 ( 0.9 )	220 ( 1.9 )	65 ( 1.3 )	224 ( 1.8 )
MINNESOTA	9 ( 0.7 )	214 ( 2.3 )	21 ( 0.9 )	225 ( 1.6 )	69 ( 1.1 )	233 ( 0.9 )
MISSISSIPPI	17 ( 0.8 )	194 ( 1.9 )	20 ( 0.8 )	201 ( 2.2 )	64 ( 1.1 )	206 ( 1.0 )
MISSOURI	13 ( 1.0 )	212 ( 2.2 )	22 ( 1.1 )	225 ( 1.6 )	65 ( 1.4 )	225 ( 1.2 )
MONTANA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
NEBRASKA	12 ( 0.7 )	213 ( 2.5 )	21 ( 0.9 )	225 ( 1.7 )	67 ( 1.1 )	229 ( 1.2 )
NEVADA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
NEW JERSEY	13 ( 0.8 )	220 ( 2.6 )	22 ( 1.0 )	225 ( 2.0 )	65 ( 1.3 )	231 ( 1.5 )
NEW MEXICO	14 ( 1.0 )	202 ( 2.2 )	23 ( 1.0 )	215 ( 1.7 )	62 ( 1.3 )	217 ( 1.7 )
NEW YORK	14 ( 0.9 )	209 ( 1.7 )	21 ( 1.1 )	221 ( 1.9 )	65 ( 1.2 )	223 ( 1.5 )
NORTH CAROLINA	14 ( 0.7 )	203 ( 1.6 )	20 ( 0.8 )	212 ( 1.7 )	66 ( 1.1 )	218 ( 1.3 )
NORTH DAKOTA	9 ( 0.7 )	221 ( 2.1 )	26 ( 0.9 )	228 ( 1.4 )	65 ( 1.1 )	231 ( 0.9 )
OREGON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
PENNSYLVANIA	12 ( 0.8 )	211 ( 2.1 )	21 ( 0.9 )	224 ( 1.6 )	67 ( 1.3 )	228 ( 1.5 )
RHODE ISLAND	15 ( 1.1 )	206 ( 2.1 )	25 ( 1.0 )	218 ( 2.0 )	61 ( 1.4 )	219 ( 1.6 )
SOUTH CAROLINA	15 ( 0.7 )	203 ( 1.5 )	19 ( 0.8 )	208 ( 1.6 )	66 ( 1.0 )	217 ( 1.2 )
TENNESSEE	16 ( 0.9 )	202 ( 2.0 )	24 ( 1.2 )	211 ( 1.7 )	59 ( 1.4 )	215 ( 1.5 )
TEXAS	13 ( 0.8 )	205 ( 2.4 )	19 ( 0.9 )	219 ( 1.7 )	68 ( 1.1 )	223 ( 1.3 )
UTAH	12 ( 0.7 )	213 ( 1.9 )	22 ( 0.9 )	222 ( 1.5 )	67 ( 1.1 )	228 ( 0.9 )
VERMONT	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
VIRGINIA	14 ( 0.7 )	211 ( 1.8 )	21 ( 0.9 )	222 ( 1.9 )	65 ( 1.1 )	224 ( 1.5 )
WASHINGTON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
WEST VIRGINIA	16 ( 0.8 )	207 ( 1.6 )	25 ( 0.9 )	215 ( 1.7 )	60 ( 1.2 )	219 ( 1.1 )
WISCONSIN	11 ( 0.7 )	219 ( 2.7 )	23 ( 0.9 )	227 ( 1.6 )	66 ( 1.1 )	232 ( 1.1 )
WYOMING	12 ( 0.7 )	212 ( 2.1 )	23 ( 0.8 )	227 ( 1.6 )	66 ( 0.9 )	228 ( 0.9 )
<b>Other Jurisdictions</b>						
DDESS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
DoDDS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
GUAM	17 ( 0.8 )	187 ( 2.1 )	27 ( 1.0 )	192 ( 1.7 )	56 ( 1.3 )	198 ( 1.1 )

— State or other jurisdiction did not participate in the NAEP assessment year presented in this table.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 7.6** (continued) **1996 Mathematics Assessment**



POPULATION: **1996 Grade 4 Public School Students**  
 REPORTED STATISTICS: **Percentage of Students and Average Mathematics Scale Score**  
 STUDENTS' REPORTS ON: **Usefulness of Mathematics**

To what degree do you agree with the statement "Mathematics is useful for solving everyday problems?"

	Disagree		Undecided		Agree	
JURISDICTIONS	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )
<b>Nation</b>						
NATION	14 ( 0.7)	211 ( 2.0)	18 ( 0.7)<	221 ( 1.5)	68 ( 0.9)	228 ( 1.0)>
NORTHEAST	12 ( 0.6)	216 ( 4.1)	16 ( 0.9)	223 ( 2.0)	71 ( 1.1)	232 ( 2.8)
SOUTHEAST	15 ( 2.0)	205 ( 3.5)	17 ( 1.2)	214 ( 4.2)	68 ( 2.6)	221 ( 2.1)
CENTRAL	14 ( 1.2)	222 ( 4.0)	19 ( 1.8)	229 ( 3.2)	68 ( 1.4)	234 ( 2.1)
WEST	16 ( 1.2)	207 ( 4.0)	18 ( 1.4)	216 ( 2.1)	66 ( 1.7)	225 ( 1.9)
<b>States</b>						
ALABAMA	16 ( 0.8)	202 ( 1.6)	18 ( 0.9)<	207 ( 2.1)	66 ( 1.2)	217 ( 1.3)
ALASKA†	10 ( 0.7)	211 ( 3.9)	21 ( 1.0)	217 ( 2.1)	70 ( 1.3)	230 ( 1.5)
ARIZONA	12 ( 0.9)	205 ( 2.8)	19 ( 1.0)<	212 ( 2.3)	69 ( 1.3)>	224 ( 1.6)
ARKANSAS†	15 ( 0.9)	206 ( 2.7)	20 ( 0.8)	212 ( 2.0)	64 ( 1.3)	221 ( 1.6)>
CALIFORNIA	13 ( 0.9)	204 ( 3.0)	22 ( 1.3)	206 ( 2.6)	65 ( 1.3)	215 ( 1.9)
COLORADO	11 ( 0.7)	214 ( 2.2)	18 ( 1.0)<	221 ( 2.0)	72 ( 0.9)>	230 ( 1.0)>
CONNECTICUT	12 ( 0.8)	219 ( 2.6)	17 ( 0.9)<	231 ( 1.7)	71 ( 1.1)>	236 ( 1.1)>
DELAWARE	12 ( 0.8)	206 ( 2.7)	17 ( 0.9)<	212 ( 1.9)	71 ( 1.1)>	220 ( 1.2)
DISTRICT OF COLUMBIA	20 ( 0.9)>	184 ( 2.8)	20 ( 0.7)	186 ( 1.9)	60 ( 1.0)	193 ( 1.3)<
FLORIDA	15 ( 0.8)	208 ( 2.0)	19 ( 0.8)	215 ( 1.9)	66 ( 1.0)	221 ( 1.3)
GEORGIA	14 ( 0.8)	207 ( 1.8)	19 ( 1.0)	214 ( 2.0)	67 ( 1.3)	220 ( 1.7)
HAWAII	13 ( 0.7)	204 ( 2.4)	24 ( 0.8)	213 ( 2.1)	64 ( 1.0)	221 ( 1.6)
INDIANA	14 ( 0.9)	219 ( 1.7)>	17 ( 0.8)<	225 ( 1.6)	69 ( 1.1)>	233 ( 1.2)>
IOWA†	12 ( 0.9)	219 ( 2.1)	20 ( 1.0)<	225 ( 2.2)	69 ( 1.2)>	233 ( 1.1)
KENTUCKY	12 ( 0.8)	206 ( 2.1)	18 ( 0.9)<	214 ( 1.7)	71 ( 1.1)>	226 ( 1.1)>
LOUISIANA	17 ( 0.9)>	204 ( 1.5)>	17 ( 1.0)<	208 ( 1.7)	66 ( 1.2)	212 ( 1.3)
MAINE	10 ( 0.7)	222 ( 2.5)	18 ( 0.8)<	230 ( 1.6)	72 ( 1.0)	235 ( 1.1)
MARYLAND	11 ( 0.8)	209 ( 3.2)	17 ( 0.9)<	214 ( 2.2)	73 ( 1.2)>	226 ( 1.6)
MASSACHUSETTS	10 ( 0.8)	216 ( 2.4)	18 ( 0.9)<	227 ( 1.6)	72 ( 1.2)>	233 ( 1.4)
MICHIGAN†	13 ( 0.8)	214 ( 1.6)	19 ( 0.8)<	218 ( 1.8)	69 ( 1.2)>	232 ( 1.4)>
MINNESOTA	10 ( 0.7)	220 ( 2.1)	19 ( 1.1)	227 ( 1.9)	71 ( 1.3)	237 ( 1.1)>
MISSISSIPPI	15 ( 0.9)	200 ( 1.8)	19 ( 0.8)	203 ( 1.7)	65 ( 1.1)	214 ( 1.4)>
MISSOURI	13 ( 0.9)	211 ( 2.3)	22 ( 1.0)	221 ( 1.6)	65 ( 1.1)	230 ( 1.1)>
MONTANA†	12 ( 0.7)	218 ( 2.7)	20 ( 1.0)	221 ( 2.5)	67 ( 1.4)	233 ( 1.1)
NEBRASKA	12 ( 0.7)	217 ( 2.2)	19 ( 0.8)	221 ( 2.4)	69 ( 1.0)	233 ( 1.1)
NEVADA†	14 ( 0.7)	209 ( 2.4)	20 ( 0.9)	217 ( 1.9)	66 ( 1.0)	222 ( 1.3)
NEW JERSEY†	13 ( 0.8)	215 ( 2.3)	18 ( 0.8)<	223 ( 2.2)	69 ( 1.1)>	232 ( 1.5)
NEW MEXICO	14 ( 0.8)	202 ( 2.6)	23 ( 0.9)	212 ( 2.0)	63 ( 1.3)	219 ( 1.6)
NEW YORK†	14 ( 0.9)	210 ( 2.6)	19 ( 0.6)	224 ( 1.5)	67 ( 1.2)	227 ( 1.2)
NORTH CAROLINA	14 ( 0.8)	216 ( 2.1)>	17 ( 0.9)<	217 ( 1.7)	69 ( 1.2)	231 ( 1.2)>
NORTH DAKOTA	11 ( 0.8)	217 ( 2.7)	20 ( 0.9)<	227 ( 1.8)	69 ( 1.1)>	235 ( 1.2)>
OREGON	12 ( 0.8)	208 ( 2.5)	21 ( 1.0)	220 ( 1.9)	67 ( 1.2)	231 ( 1.3)
PENNSYLVANIA†	11 ( 0.7)	215 ( 1.8)	17 ( 1.0)<	222 ( 2.3)	72 ( 1.1)>	230 ( 1.2)
RHODE ISLAND	12 ( 0.8)	208 ( 2.8)	18 ( 0.9)<	216 ( 2.8)	71 ( 1.1)>	225 ( 1.3)>
SOUTH CAROLINA†	16 ( 0.8)	201 ( 2.1)	18 ( 0.8)	207 ( 1.9)	66 ( 1.1)	219 ( 1.4)
TENNESSEE	11 ( 0.7)<	212 ( 2.1)>	21 ( 1.0)	213 ( 2.0)	68 ( 1.2)>	223 ( 1.5)>
TEXAS	14 ( 1.0)	218 ( 2.0)>	19 ( 1.2)	223 ( 2.3)	66 ( 1.6)	234 ( 1.4)>
UTAH	9 ( 0.7)	216 ( 2.2)	19 ( 0.9)<	225 ( 1.6)	72 ( 1.1)>	231 ( 1.1)
VERMONT†	8 ( 0.8)	210 ( 2.7)	17 ( 0.9)	219 ( 2.1)	75 ( 1.2)	231 ( 1.1)
VIRGINIA	11 ( 0.7)<	213 ( 2.4)	16 ( 0.7)<	219 ( 2.0)	73 ( 0.9)>	226 ( 1.4)
WASHINGTON	13 ( 0.7)	215 ( 2.5)	20 ( 1.0)	222 ( 1.9)	67 ( 1.1)	230 ( 1.1)
WEST VIRGINIA	13 ( 0.9)	215 ( 2.2)>	18 ( 0.8)<	222 ( 2.1)	69 ( 1.0)>	227 ( 1.0)>
WISCONSIN	11 ( 0.8)	218 ( 1.6)	20 ( 1.0)	229 ( 1.6)	68 ( 1.3)	236 ( 1.1)
WYOMING	12 ( 0.8)	214 ( 2.2)	19 ( 0.9)<	219 ( 2.1)<	69 ( 1.1)	227 ( 1.5)
<b>Other Jurisdictions</b>						
DDESS	12 ( 0.9)	221 ( 2.5)	18 ( 1.0)	222 ( 3.1)	70 ( 1.0)	227 ( 1.4)
DoDDS	13 ( 0.7)	215 ( 1.6)	18 ( 0.7)	220 ( 1.5)	69 ( 1.0)	227 ( 0.8)
GUAM	18 ( 1.2)	182 ( 3.8)	25 ( 1.3)	189 ( 3.4)	57 ( 1.3)	195 ( 2.2)

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).  
 > (<) The value for the students was significantly higher (lower) than in the 1992 assessment at about the 95% confidence level using appropriate multiple comparison procedures.  
 SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 7.7**

**1996 Mathematics Assessment**



POPULATION:

1996 Grade 4 Public School Students

REPORTED STATISTICS:

Percentage of Students and Average Mathematics Scale Score

STUDENTS' REPORTS ON:

Views on the Nature of Mathematics

*To what degree do you agree with the statement "Learning mathematics is mostly memorizing facts?"*

Disagree	Undecided	Agree
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JURISDICTIONS	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )
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Nation	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )
NATION	21 ( 0.9 )	233 ( 1.6 )	25 ( 0.6 )	226 ( 1.3 )	55 ( 0.9 )	220 ( 1.0 )
NORTHEAST	25 ( 1.9 )	239 ( 2.7 )	26 ( 1.2 )	231 ( 3.2 )	49 ( 2.5 )	221 ( 2.8 )
SOUTHEAST	18 ( 1.3 )	227 ( 3.9 )	25 ( 1.2 )	220 ( 2.4 )	57 ( 1.6 )	213 ( 2.6 )
CENTRAL	21 ( 2.3 )	240 ( 4.0 )	25 ( 1.7 )	232 ( 1.9 )	53 ( 2.2 )	227 ( 1.7 )
WEST	19 ( 1.2 )	227 ( 2.5 )	23 ( 0.9 )	223 ( 3.0 )	58 ( 1.2 )	218 ( 2.0 )
<b>States</b>						
ALABAMA	18 ( 0.9 )	220 ( 2.5 )	22 ( 0.8 )	213 ( 1.8 )	60 ( 1.2 )	210 ( 1.2 )
ALASKA†	18 ( 1.0 )	232 ( 2.2 )	28 ( 1.1 )	227 ( 1.7 )	54 ( 1.5 )	222 ( 1.5 )
ARIZONA	17 ( 1.1 )	226 ( 3.2 )	24 ( 0.9 )	220 ( 2.7 )	59 ( 1.5 )	217 ( 1.4 )
ARKANSAS†	18 ( 1.1 )	222 ( 2.6 )	27 ( 1.0 )	219 ( 2.1 )	54 ( 1.6 )	213 ( 1.4 )
CALIFORNIA	15 ( 0.9 )	214 ( 3.0 )	25 ( 1.1 )	213 ( 2.5 )	60 ( 1.1 )	211 ( 1.8 )
COLORADO	18 ( 1.0 )	234 ( 2.2 )	27 ( 0.8 )	228 ( 1.6 )	55 ( 1.2 )	224 ( 1.1 )
CONNECTICUT	26 ( 1.1 )	244 ( 1.6 )	27 ( 1.1 )	235 ( 2.0 )	47 ( 1.8 )	225 ( 1.2 )
DELAWARE	18 ( 1.3 )	228 ( 2.1 )	26 ( 1.1 )	220 ( 1.8 )	55 ( 1.2 )	212 ( 1.2 )
DISTRICT OF COLUMBIA	16 ( 0.8 )	193 ( 2.0 )	22 ( 0.8 )	188 ( 2.4 )	62 ( 0.9 )	189 ( 1.4 )
FLORIDA	16 ( 0.7 )	222 ( 2.5 )	24 ( 0.9 )	218 ( 1.7 )	59 ( 1.1 )	216 ( 1.1 )
GEORGIA	18 ( 1.0 )	224 ( 2.8 )	26 ( 0.9 )	218 ( 2.0 )	56 ( 1.2 )	214 ( 1.3 )
HAWAII	13 ( 0.6 )	217 ( 3.9 )	25 ( 1.0 )	220 ( 2.3 )	63 ( 0.9 )	215 ( 1.3 )
INDIANA	20 ( 1.2 )	236 ( 1.9 )	25 ( 1.1 )	232 ( 1.5 )	55 ( 1.3 )	226 ( 1.1 )
IOWA†	19 ( 0.9 )	236 ( 1.9 )	28 ( 1.0 )	232 ( 1.4 )	53 ( 1.3 )	226 ( 1.2 )
KENTUCKY	16 ( 0.8 )	227 ( 2.3 )	28 ( 1.0 )	224 ( 1.6 )	55 ( 0.9 )	218 ( 1.0 )
LOUISIANA	18 ( 0.8 )	213 ( 2.4 )	22 ( 1.0 )	214 ( 1.5 )	60 ( 1.3 )	208 ( 1.1 )
MAINE	22 ( 1.4 )	242 ( 1.8 )	31 ( 1.1 )	235 ( 1.9 )	47 ( 1.4 )	227 ( 1.0 )
MARYLAND	21 ( 1.1 )	235 ( 2.3 )	27 ( 0.8 )	226 ( 2.0 )	52 ( 1.2 )	215 ( 1.4 )
MASSACHUSETTS	24 ( 1.5 )	239 ( 2.3 )	26 ( 1.0 )	232 ( 1.7 )	50 ( 1.4 )	224 ( 1.2 )
MICHIGAN†	21 ( 1.1 )	233 ( 2.6 )	26 ( 0.9 )	229 ( 1.7 )	53 ( 1.4 )	224 ( 1.3 )
MINNESOTA	22 ( 1.1 )	242 ( 1.8 )	30 ( 1.1 )	234 ( 1.5 )	48 ( 1.4 )	229 ( 1.1 )
MISSISSIPPI	18 ( 0.9 )	214 ( 2.4 )	23 ( 1.0 )	209 ( 1.5 )	59 ( 1.1 )	208 ( 1.2 )
MISSOURI	17 ( 0.9 )	231 ( 1.9 )	25 ( 0.9 )	228 ( 1.6 )	59 ( 1.3 )	222 ( 1.3 )
MONTANA†	17 ( 0.9 )	232 ( 2.2 )	28 ( 1.0 )	230 ( 2.1 )	55 ( 1.5 )	226 ( 1.2 )
NEBRASKA	20 ( 1.0 )	234 ( 2.1 )	28 ( 1.0 )	232 ( 1.4 )	52 ( 1.2 )	224 ( 1.3 )
NEVADA†	15 ( 0.8 )	225 ( 3.0 )	25 ( 1.1 )	219 ( 2.1 )	60 ( 1.2 )	218 ( 1.1 )
NEW JERSEY†	23 ( 1.0 )	237 ( 2.4 )	24 ( 1.0 )	234 ( 1.8 )	53 ( 1.5 )	222 ( 1.4 )
NEW MEXICO	16 ( 0.8 )	220 ( 3.0 )	24 ( 0.9 )	217 ( 2.0 )	60 ( 1.2 )	213 ( 1.5 )
NEW YORK†	18 ( 0.9 )	233 ( 2.1 )	25 ( 1.0 )	229 ( 1.7 )	57 ( 1.2 )	219 ( 1.3 )
NORTH CAROLINA	23 ( 1.2 )	232 ( 2.4 )	24 ( 0.8 )	231 ( 1.8 )	53 ( 1.3 )	220 ( 1.0 )
NORTH DAKOTA	19 ( 1.0 )	238 ( 2.0 )	28 ( 1.1 )	233 ( 1.6 )	52 ( 1.1 )	228 ( 1.3 )
OREGON	20 ( 1.1 )	232 ( 2.0 )	27 ( 0.9 )	227 ( 1.9 )	53 ( 1.3 )	222 ( 1.2 )
PENNSYLVANIA†	19 ( 1.0 )	233 ( 2.5 )	26 ( 1.2 )	230 ( 1.7 )	54 ( 1.4 )	223 ( 1.2 )
RHODE ISLAND	20 ( 1.1 )	231 ( 2.1 )	27 ( 1.1 )	224 ( 2.1 )	54 ( 1.5 )	217 ( 1.5 )
SOUTH CAROLINA†	18 ( 1.1 )	217 ( 2.7 )	24 ( 0.8 )	216 ( 2.0 )	58 ( 1.3 )	212 ( 1.3 )
TENNESSEE	17 ( 1.0 )	229 ( 2.2 )	27 ( 1.1 )	220 ( 2.0 )	56 ( 1.4 )	216 ( 1.5 )
TEXAS	23 ( 1.3 )	237 ( 2.0 )	25 ( 1.1 )	233 ( 1.9 )	52 ( 1.4 )	224 ( 1.3 )
UTAH	17 ( 0.9 )	233 ( 2.2 )	28 ( 1.0 )	231 ( 1.5 )	55 ( 1.3 )	225 ( 1.0 )
VERMONT†	23 ( 0.9 )	237 ( 2.0 )	29 ( 0.9 )	227 ( 2.1 )	48 ( 1.2 )	223 ( 1.1 )
VIRGINIA	18 ( 0.9 )	233 ( 2.3 )	24 ( 1.0 )	229 ( 1.6 )	59 ( 1.3 )	218 ( 1.3 )
WASHINGTON	16 ( 0.8 )	233 ( 2.1 )	30 ( 0.8 )	229 ( 1.3 )	55 ( 1.1 )	223 ( 1.4 )
WEST VIRGINIA	19 ( 1.0 )	228 ( 2.2 )	24 ( 1.2 )	228 ( 1.7 )	57 ( 1.3 )	221 ( 1.0 )
WISCONSIN	20 ( 1.0 )	240 ( 1.5 )	29 ( 1.1 )	235 ( 1.4 )	51 ( 1.4 )	228 ( 0.9 )
WYOMING	16 ( 0.7 )	230 ( 1.9 )	24 ( 0.8 )	225 ( 2.3 )	59 ( 1.0 )	222 ( 1.4 )
<b>Other Jurisdictions</b>						
DDESS	18 ( 1.5 )	230 ( 3.7 )	24 ( 1.6 )	229 ( 2.3 )	57 ( 1.5 )	222 ( 1.1 )
DoDDS	23 ( 0.7 )	233 ( 1.7 )	27 ( 1.0 )	227 ( 1.3 )	50 ( 0.9 )	218 ( 0.9 )
GUAM	10 ( 1.0 )	185 ( 4.6 )	21 ( 1.2 )	192 ( 3.5 )	68 ( 1.3 )	192 ( 1.7 )

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 7.8**

**1996 Mathematics Assessment**



POPULATION:

1996 Grade 4 Public School Students

REPORTED STATISTICS:

Percentage of Students and Average Mathematics Scale Score

STUDENTS' REPORTS ON:

Views on the Nature of Mathematics

To what degree do you agree with the statement "There is only one correct way to solve a mathematics problem?"

	Disagree		Undecided		Agree	
JURISDICTIONS	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )
<b>Nation</b>						
NATION	63 ( 0.9)	231 ( 1.0)	20 ( 0.7)	219 ( 1.7)	17 ( 0.6)	205 ( 1.6)
NORTHEAST	70 ( 1.4)	234 ( 1.9)	18 ( 1.4)	221 ( 4.6)	13 ( 1.1)	204 ( 5.3)
SOUTHEAST	56 ( 1.9)	224 ( 2.6)	23 ( 1.4)	214 ( 3.4)	21 ( 1.8)	201 ( 2.4)
CENTRAL	66 ( 2.0)	236 ( 2.2)	19 ( 1.8)	227 ( 2.5)	15 ( 1.4)	213 ( 1.9)
WEST	61 ( 1.9)	228 ( 1.7)	20 ( 1.3)	216 ( 3.1)	19 ( 1.0)	202 ( 3.4)
<b>States</b>						
ALABAMA	58 ( 1.3)	219 ( 1.2)	21 ( 0.9)	210 ( 2.0)	22 ( 1.2)	197 ( 1.4)
ALASKA†	58 ( 1.3)	232 ( 1.1)	25 ( 1.2)	220 ( 2.4)	18 ( 1.0)	210 ( 2.2)
ARIZONA	57 ( 1.5)	227 ( 1.6)	22 ( 0.8)	214 ( 2.0)	21 ( 1.1)	203 ( 2.0)
ARKANSAS†	60 ( 1.6)	223 ( 1.3)	22 ( 1.3)	212 ( 2.0)	18 ( 1.2)	200 ( 2.4)
CALIFORNIA	53 ( 1.9)	220 ( 1.7)	26 ( 1.4)	206 ( 2.7)	22 ( 1.4)	195 ( 2.7)
COLORADO	60 ( 1.6)	233 ( 1.1)	24 ( 1.1)	221 ( 1.5)	16 ( 0.9)	211 ( 1.8)
CONNECTICUT	68 ( 1.0)	238 ( 1.2)	19 ( 0.8)	226 ( 1.8)	13 ( 0.8)	213 ( 2.0)
DELAWARE	65 ( 1.2)	225 ( 1.0)	20 ( 1.1)	209 ( 1.5)	14 ( 1.1)	192 ( 2.4)
DISTRICT OF COLUMBIA	51 ( 0.9)	201 ( 1.1)	18 ( 0.8)	183 ( 3.1)	31 ( 0.8)	174 ( 1.8)
FLORIDA	56 ( 1.4)	225 ( 1.1)	21 ( 0.9)	213 ( 2.0)	22 ( 1.1)	200 ( 2.0)
GEORGIA	62 ( 1.6)	224 ( 1.4)	19 ( 1.0)	210 ( 2.3)	19 ( 1.1)	200 ( 1.7)
HAWAII	50 ( 1.1)	227 ( 1.6)	26 ( 0.8)	213 ( 1.8)	24 ( 1.0)	198 ( 2.4)
INDIANA	67 ( 1.4)	234 ( 1.1)	19 ( 1.0)	226 ( 1.6)	14 ( 0.8)	213 ( 2.2)
IOWA†	62 ( 1.3)	234 ( 1.0)	25 ( 1.0)	227 ( 1.8)	12 ( 0.8)	214 ( 2.3)
KENTUCKY	59 ( 1.2)	226 ( 1.1)	23 ( 0.7)	218 ( 1.7)	17 ( 1.0)	207 ( 1.7)
LOUISIANA	55 ( 1.4)	216 ( 1.3)	22 ( 0.8)	207 ( 1.6)	23 ( 1.0)	197 ( 1.3)
MAINE	68 ( 1.4)	237 ( 1.2)	20 ( 1.2)	229 ( 1.8)	12 ( 0.8)	215 ( 2.1)
MARYLAND	63 ( 1.2)	230 ( 1.7)	21 ( 1.0)	215 ( 2.0)	16 ( 0.8)	200 ( 1.9)
MASSACHUSETTS	69 ( 1.2)	234 ( 1.4)	19 ( 0.8)	225 ( 1.6)	12 ( 0.9)	211 ( 2.2)
MICHIGAN†	66 ( 1.4)	233 ( 1.4)	20 ( 0.8)	221 ( 1.6)	14 ( 0.9)	207 ( 2.2)
MINNESOTA	68 ( 1.3)	238 ( 1.2)	20 ( 0.8)	230 ( 1.5)	12 ( 0.9)	212 ( 2.5)
MISSISSIPPI	57 ( 1.2)	216 ( 1.3)	21 ( 0.9)	206 ( 1.5)	22 ( 0.9)	196 ( 1.6)
MISSOURI	62 ( 1.5)	229 ( 1.1)	22 ( 0.8)	225 ( 1.5)	17 ( 1.0)	209 ( 1.8)
MONTANA†	61 ( 1.8)	233 ( 1.2)	24 ( 1.2)	227 ( 1.7)	15 ( 1.4)	213 ( 2.5)
NEBRASKA	63 ( 1.3)	234 ( 1.1)	21 ( 1.0)	225 ( 2.3)	15 ( 0.9)	210 ( 1.9)
NEVADA†	64 ( 1.3)	225 ( 1.2)	21 ( 1.0)	212 ( 2.2)	15 ( 1.0)	200 ( 2.6)
NEW JERSEY†	69 ( 1.4)	234 ( 1.3)	17 ( 1.1)	222 ( 2.2)	13 ( 0.9)	206 ( 2.9)
NEW MEXICO	53 ( 1.6)	223 ( 1.5)	25 ( 1.2)	209 ( 3.2)	22 ( 1.2)	201 ( 1.8)
NEW YORK†	61 ( 1.6)	231 ( 1.2)	20 ( 1.0)	222 ( 1.7)	19 ( 1.0)	204 ( 1.9)
NORTH CAROLINA	66 ( 1.4)	232 ( 1.1)	18 ( 0.9)	222 ( 1.7)	16 ( 1.0)	202 ( 1.7)
NORTH DAKOTA	60 ( 1.2)	234 ( 1.1)	25 ( 0.9)	232 ( 1.6)	15 ( 0.8)	219 ( 2.3)
OREGON	62 ( 1.4)	230 ( 1.4)	24 ( 1.2)	221 ( 1.8)	14 ( 0.8)	209 ( 2.7)
PENNSYLVANIA†	65 ( 1.5)	231 ( 1.3)	20 ( 1.1)	224 ( 1.5)	14 ( 1.0)	210 ( 1.5)
RHODE ISLAND	63 ( 1.2)	227 ( 1.1)	22 ( 1.0)	216 ( 2.4)	15 ( 0.9)	204 ( 2.7)
SOUTH CAROLINA†	60 ( 1.5)	220 ( 1.5)	19 ( 0.9)	210 ( 1.6)	21 ( 1.0)	197 ( 1.2)
TENNESSEE	53 ( 1.3)	226 ( 1.4)	27 ( 1.1)	217 ( 1.9)	20 ( 0.9)	205 ( 2.0)
TEXAS	65 ( 1.6)	234 ( 1.3)	19 ( 1.1)	225 ( 1.9)	16 ( 1.2)	215 ( 2.6)
UTAH	61 ( 1.4)	233 ( 1.0)	23 ( 0.9)	226 ( 1.7)	16 ( 1.1)	212 ( 2.3)
VERMONT†	64 ( 1.4)	231 ( 1.1)	23 ( 1.0)	226 ( 1.9)	12 ( 0.9)	206 ( 3.1)
VIRGINIA	61 ( 1.2)	229 ( 1.3)	21 ( 0.9)	223 ( 1.7)	18 ( 1.1)	205 ( 1.9)
WASHINGTON	61 ( 1.1)	232 ( 1.1)	24 ( 1.0)	221 ( 1.9)	15 ( 0.8)	212 ( 1.9)
WEST VIRGINIA	65 ( 1.3)	229 ( 1.0)	19 ( 0.9)	221 ( 1.7)	16 ( 1.1)	208 ( 1.8)
WISCONSIN	66 ( 1.4)	236 ( 1.0)	22 ( 1.0)	230 ( 1.2)	12 ( 0.7)	213 ( 2.2)
WYOMING	60 ( 1.1)	229 ( 1.1)	23 ( 0.8)	222 ( 1.9)	17 ( 0.9)	208 ( 2.7)
<b>Other Jurisdictions</b>						
DDESS	64 ( 1.6)	229 ( 1.4)	22 ( 1.2)	222 ( 2.1)	14 ( 1.2)	212 ( 1.8)
DoDDS	71 ( 0.9)	228 ( 0.9)	17 ( 0.7)	219 ( 1.6)	12 ( 0.6)	206 ( 1.7)
GUAM	38 ( 1.5)	202 ( 2.4)	30 ( 1.2)	189 ( 2.8)	32 ( 1.3)	180 ( 2.4)

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).  
 SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 7.9**

**1992 Mathematics Assessment**



POPULATION:

1992 Grade 8 Public School Students

REPORTED STATISTICS:

Percentage of Students and Average Mathematics Scale Score

STUDENTS' REPORTS ON:

Discussing Studies at Home

How often do you discuss things you have studied in school with someone at home?	Never or Hardly Ever		Once or Twice a Month		Once or Twice a Week		Almost Every Day	
	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )
<b>JURISDICTIONS</b>								
<b>Nation</b>								
NATION	23 ( 0.6 )	257 ( 1.2 )	10 ( 0.4 )	267 ( 1.8 )	28 ( 0.6 )	271 ( 1.1 )	39 ( 0.9 )	272 ( 1.5 )
NORTHEAST	22 ( 1.4 )	253 ( 3.4 )	10 ( 0.9 )	270 ( 4.2 )	26 ( 1.3 )	271 ( 3.0 )	41 ( 2.0 )	275 ( 4.2 )
SOUTHEAST	25 ( 1.1 )	253 ( 2.0 )	10 ( 0.6 )	261 ( 3.0 )	28 ( 1.0 )	264 ( 1.8 )	37 ( 1.0 )	261 ( 1.8 )
CENTRAL	23 ( 1.3 )	267 ( 2.4 )	10 ( 0.9 )	272 ( 2.5 )	27 ( 1.4 )	278 ( 2.0 )	39 ( 2.0 )	277 ( 2.7 )
WEST	21 ( 1.2 )	255 ( 2.6 )	9 ( 0.6 )	266 ( 3.5 )	28 ( 1.5 )	272 ( 2.6 )	41 ( 2.1 )	274 ( 2.4 )
<b>States</b>								
ALABAMA	24 ( 0.8 )	246 ( 1.9 )	10 ( 0.6 )	256 ( 3.0 )	29 ( 0.9 )	256 ( 2.2 )	37 ( 1.0 )	254 ( 1.9 )
ALASKA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
ARIZONA	23 ( 1.0 )	257 ( 1.9 )	10 ( 0.6 )	266 ( 2.2 )	27 ( 1.1 )	268 ( 1.6 )	39 ( 1.4 )	271 ( 1.5 )
ARKANSAS	27 ( 1.0 )	250 ( 1.7 )	9 ( 0.6 )	255 ( 2.3 )	26 ( 0.9 )	262 ( 1.7 )	38 ( 1.0 )	259 ( 1.5 )
CALIFORNIA	20 ( 0.8 )	252 ( 2.1 )	10 ( 0.6 )	261 ( 2.5 )	30 ( 1.0 )	263 ( 2.1 )	40 ( 1.1 )	269 ( 1.8 )
COLORADO	18 ( 0.8 )	264 ( 1.7 )	8 ( 0.5 )	267 ( 2.8 )	28 ( 0.9 )	276 ( 1.4 )	46 ( 1.1 )	276 ( 1.2 )
CONNECTICUT	21 ( 0.9 )	263 ( 1.7 )	10 ( 0.5 )	279 ( 2.2 )	30 ( 1.0 )	277 ( 1.7 )	39 ( 1.0 )	278 ( 1.5 )
DELAWARE	24 ( 1.0 )	253 ( 2.0 )	10 ( 0.6 )	268 ( 2.7 )	30 ( 1.2 )	266 ( 1.7 )	37 ( 1.1 )	268 ( 1.5 )
DISTRICT OF COLUMBIA	18 ( 1.1 )	230 ( 3.1 )	8 ( 0.5 )	239 ( 3.2 )	29 ( 1.1 )	238 ( 1.6 )	44 ( 1.1 )	237 ( 1.6 )
FLORIDA	23 ( 1.0 )	255 ( 1.8 )	10 ( 0.7 )	263 ( 2.8 )	28 ( 0.9 )	262 ( 1.9 )	39 ( 1.1 )	264 ( 1.8 )
GEORGIA	22 ( 1.0 )	252 ( 1.8 )	10 ( 0.7 )	263 ( 2.8 )	30 ( 1.1 )	262 ( 1.5 )	38 ( 1.2 )	263 ( 1.5 )
HAWAII	28 ( 0.9 )	252 ( 1.4 )	12 ( 0.7 )	259 ( 2.6 )	29 ( 0.8 )	261 ( 1.8 )	31 ( 0.8 )	264 ( 1.5 )
INDIANA	21 ( 0.8 )	259 ( 1.9 )	10 ( 0.5 )	274 ( 1.9 )	29 ( 0.9 )	273 ( 1.7 )	40 ( 1.0 )	273 ( 1.5 )
IOWA	20 ( 0.9 )	273 ( 1.9 )	11 ( 0.6 )	284 ( 1.8 )	29 ( 0.9 )	287 ( 1.1 )	39 ( 1.1 )	286 ( 1.3 )
KENTUCKY	23 ( 0.8 )	255 ( 1.8 )	9 ( 0.6 )	264 ( 2.8 )	29 ( 0.9 )	264 ( 1.2 )	39 ( 1.2 )	267 ( 1.5 )
LOUISIANA	22 ( 1.0 )	249 ( 1.9 )	10 ( 0.7 )	254 ( 2.8 )	29 ( 1.0 )	252 ( 1.9 )	39 ( 1.1 )	251 ( 2.0 )
MAINE	19 ( 0.9 )	270 ( 1.9 )	12 ( 0.7 )	279 ( 1.4 )	28 ( 0.9 )	280 ( 1.2 )	41 ( 1.1 )	283 ( 1.4 )
MARYLAND	20 ( 1.1 )	261 ( 1.9 )	10 ( 0.8 )	270 ( 2.7 )	29 ( 1.0 )	266 ( 1.8 )	41 ( 1.2 )	268 ( 1.7 )
MASSACHUSETTS	20 ( 1.0 )	262 ( 1.9 )	11 ( 0.7 )	271 ( 2.4 )	27 ( 1.0 )	276 ( 1.5 )	43 ( 1.2 )	277 ( 1.3 )
MICHIGAN	20 ( 0.8 )	264 ( 1.9 )	10 ( 0.5 )	273 ( 2.3 )	28 ( 1.0 )	268 ( 2.0 )	41 ( 1.2 )	268 ( 1.8 )
MINNESOTA	20 ( 1.1 )	276 ( 1.7 )	11 ( 0.7 )	283 ( 2.5 )	31 ( 1.1 )	283 ( 1.4 )	39 ( 1.2 )	286 ( 1.3 )
MISSISSIPPI	23 ( 1.0 )	241 ( 1.7 )	7 ( 0.6 )	256 ( 2.8 )	30 ( 1.1 )	249 ( 1.7 )	40 ( 1.2 )	248 ( 1.6 )
MISSOURI	22 ( 1.1 )	264 ( 1.4 )	11 ( 0.5 )	272 ( 1.9 )	26 ( 0.9 )	274 ( 1.6 )	41 ( 1.1 )	275 ( 1.5 )
MONTANA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
NEBRASKA	21 ( 1.2 )	269 ( 2.0 )	10 ( 0.7 )	279 ( 2.4 )	29 ( 1.1 )	281 ( 1.5 )	40 ( 1.3 )	280 ( 1.4 )
NEW MEXICO	23 ( 0.8 )	256 ( 1.5 )	10 ( 0.7 )	259 ( 2.0 )	27 ( 0.9 )	260 ( 1.4 )	39 ( 1.3 )	263 ( 1.4 )
NEW YORK	19 ( 0.9 )	255 ( 2.8 )	9 ( 0.8 )	271 ( 3.5 )	28 ( 1.0 )	269 ( 2.7 )	43 ( 1.5 )	272 ( 2.2 )
NORTH CAROLINA	22 ( 0.8 )	252 ( 1.6 )	9 ( 0.6 )	259 ( 2.7 )	30 ( 0.9 )	259 ( 1.5 )	40 ( 1.1 )	263 ( 1.5 )
NORTH DAKOTA	20 ( 0.9 )	277 ( 1.6 )	14 ( 0.8 )	287 ( 2.2 )	30 ( 0.9 )	284 ( 1.6 )	35 ( 1.0 )	285 ( 1.4 )
OREGON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
RHODE ISLAND	24 ( 1.1 )	262 ( 1.5 )	9 ( 0.7 )	264 ( 2.3 )	27 ( 1.0 )	268 ( 1.4 )	39 ( 1.2 )	270 ( 1.3 )
SOUTH CAROLINA	21 ( 0.9 )	255 ( 1.4 )	8 ( 0.5 )	266 ( 2.3 )	28 ( 0.8 )	261 ( 1.5 )	44 ( 1.0 )	264 ( 1.3 )
TENNESSEE	20 ( 0.9 )	254 ( 2.6 )	9 ( 0.7 )	259 ( 2.5 )	32 ( 1.2 )	262 ( 1.8 )	39 ( 1.0 )	260 ( 1.5 )
TEXAS	22 ( 1.0 )	255 ( 1.8 )	9 ( 0.6 )	269 ( 2.7 )	28 ( 0.9 )	268 ( 1.9 )	41 ( 1.2 )	269 ( 1.7 )
UTAH	17 ( 0.9 )	266 ( 1.7 )	10 ( 0.6 )	272 ( 1.9 )	29 ( 1.1 )	278 ( 1.3 )	45 ( 1.1 )	277 ( 1.1 )
VERMONT	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
VIRGINIA	20 ( 1.0 )	258 ( 1.5 )	9 ( 0.6 )	269 ( 2.4 )	28 ( 0.9 )	269 ( 1.8 )	43 ( 0.9 )	273 ( 1.3 )
WASHINGTON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
WEST VIRGINIA	25 ( 0.8 )	251 ( 1.4 )	10 ( 0.6 )	257 ( 2.2 )	26 ( 0.9 )	264 ( 1.3 )	38 ( 1.0 )	263 ( 1.2 )
WISCONSIN	21 ( 1.2 )	272 ( 2.4 )	11 ( 0.7 )	275 ( 1.9 )	32 ( 0.8 )	279 ( 1.5 )	37 ( 1.3 )	282 ( 2.1 )
WYOMING	21 ( 0.8 )	265 ( 1.8 )	10 ( 0.5 )	276 ( 2.2 )	27 ( 0.9 )	278 ( 1.1 )	43 ( 0.8 )	279 ( 1.1 )
<b>Other Jurisdictions</b>								
DDESS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
DoDDS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
GUAM	34 ( 1.1 )	235 ( 2.0 )	10 ( 0.8 )	244 ( 4.8 )	30 ( 0.9 )	243 ( 1.6 )	26 ( 1.0 )	245 ( 2.4 )

— State or other jurisdiction did not participate in the NAEP assessment year presented in this table.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.



**TABLE 7.9** (continued)

**1996 Mathematics Assessment**



POPULATION:

1996 Grade 8 Public School Students

REPORTED STATISTICS:

Percentage of Students and Average Mathematics Scale Score

STUDENTS' REPORTS ON:

Discussing Studies at Home

*How often do you discuss things you have studied in school with someone at home?*

Never or Hardly Ever

Once or Twice a Month

Once or Twice a Week

Almost Every Day

JURISDICTIONS	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )
<b>Nation</b>								
NATION	21 ( 1.0)	263 ( 1.8)>	10 ( 0.4)	271 ( 2.6)	29 ( 0.8)	275 ( 1.5)	40 ( 1.0)	274 ( 1.2)
NORTHEAST	22 ( 3.3)	270 ( 4.7)	9 ( 1.1)	284 ( 6.4)	28 ( 3.1)	280 ( 4.9)	41 ( 3.0)	278 ( 2.8)
SOUTHEAST	23 ( 1.2)	257 ( 2.7)	10 ( 1.0)	264 ( 5.2)	29 ( 1.0)	266 ( 3.3)	37 ( 1.7)	269 ( 3.1)
CENTRAL	19 ( 2.1)	269 ( 4.0)	12 ( 1.0)	274 ( 7.2)	31 ( 1.4)	283 ( 3.5)	38 ( 2.1)	276 ( 3.7)
WEST	21 ( 1.4)	260 ( 3.1)	9 ( 0.6)	267 ( 3.7)	28 ( 0.9)	271 ( 3.0)	42 ( 1.3)	274 ( 2.2)
<b>States</b>								
ALABAMA	22 ( 1.1)	252 ( 2.2)	8 ( 0.7)	257 ( 3.2)	29 ( 1.0)	259 ( 2.3)	41 ( 1.3)	261 ( 2.7)
ALASKA†	19 ( 1.5)	261 ( 4.1)	10 ( 0.7)	280 ( 3.7)	27 ( 1.3)	284 ( 2.2)	44 ( 1.5)	285 ( 1.9)
ARIZONA	18 ( 0.9)<	259 ( 2.0)	11 ( 0.8)	269 ( 1.9)	30 ( 1.0)	268 ( 1.9)	41 ( 1.3)	274 ( 1.7)
ARKANSAS†	24 ( 1.2)	252 ( 2.1)	10 ( 0.7)	265 ( 3.1)	28 ( 1.1)	266 ( 1.8)	38 ( 1.1)	266 ( 2.0)
CALIFORNIA	19 ( 1.1)	253 ( 2.3)	10 ( 0.6)	267 ( 2.7)	30 ( 1.1)	267 ( 2.5)	42 ( 1.0)	267 ( 2.1)
COLORADO	16 ( 0.8)	267 ( 2.0)	10 ( 0.7)	275 ( 2.4)	30 ( 0.9)	278 ( 1.5)	44 ( 1.1)	279 ( 1.3)
CONNECTICUT	18 ( 0.8)	267 ( 1.7)	10 ( 0.6)	276 ( 2.2)	31 ( 0.8)	281 ( 1.5)	41 ( 1.1)	286 ( 1.3)>
DELAWARE	21 ( 1.1)	257 ( 2.1)	10 ( 0.8)	269 ( 2.3)	29 ( 1.0)	272 ( 1.9)	40 ( 1.3)	269 ( 1.8)
DISTRICT OF COLUMBIA	17 ( 0.9)	226 ( 2.4)	8 ( 0.6)	235 ( 4.5)	30 ( 1.5)	236 ( 2.8)	45 ( 1.5)	237 ( 1.5)
FLORIDA	20 ( 1.0)	255 ( 2.5)	11 ( 0.5)	267 ( 2.8)	30 ( 1.0)	268 ( 2.2)	39 ( 1.0)	267 ( 2.2)
GEORGIA	21 ( 0.9)	254 ( 1.9)	10 ( 0.6)	267 ( 3.2)	31 ( 1.0)	265 ( 2.1)	38 ( 1.3)	266 ( 2.2)
HAWAII	23 ( 0.9)<	253 ( 2.4)	14 ( 0.7)	263 ( 2.7)	31 ( 1.1)	266 ( 1.9)	32 ( 1.2)	269 ( 1.6)
INDIANA	22 ( 1.1)	269 ( 2.3)>	10 ( 0.6)	271 ( 2.6)	28 ( 1.2)	277 ( 2.0)	40 ( 1.5)	279 ( 1.7)
IOWA†	21 ( 1.2)	278 ( 2.0)	11 ( 0.7)	284 ( 2.2)	31 ( 1.1)	286 ( 1.6)	38 ( 1.2)	287 ( 1.6)
KENTUCKY	22 ( 1.1)	259 ( 1.8)	10 ( 0.6)	269 ( 2.1)	28 ( 0.9)	268 ( 1.4)	40 ( 1.4)	272 ( 1.6)
LOUISIANA	24 ( 1.0)	248 ( 1.9)	9 ( 0.7)	259 ( 2.3)	28 ( 1.0)	257 ( 2.0)	38 ( 1.0)	253 ( 1.7)
MAINE	19 ( 1.1)	274 ( 2.5)	10 ( 0.7)	282 ( 2.8)	30 ( 1.0)	288 ( 1.7)>	41 ( 1.1)	288 ( 1.4)
MARYLAND†	18 ( 1.0)	264 ( 2.7)	10 ( 0.7)	269 ( 3.8)	32 ( 1.2)	276 ( 2.4)>	41 ( 1.2)	272 ( 2.3)
MASSACHUSETTS	18 ( 1.0)	267 ( 2.5)	10 ( 0.7)	275 ( 2.7)	30 ( 1.2)	279 ( 2.0)	41 ( 1.5)	284 ( 2.0)
MICHIGAN†	20 ( 1.2)	270 ( 2.3)	10 ( 0.7)	278 ( 3.0)	29 ( 1.0)	279 ( 2.4)>	41 ( 1.1)	279 ( 2.0)>
MINNESOTA	18 ( 0.9)	271 ( 2.2)	12 ( 0.6)	284 ( 2.7)	31 ( 1.0)	286 ( 1.7)	39 ( 1.2)	290 ( 1.8)
MISSISSIPPI	24 ( 1.0)	246 ( 2.1)	9 ( 0.7)	250 ( 2.6)	27 ( 1.1)	254 ( 1.5)	40 ( 1.2)	252 ( 1.5)
MISSOURI	21 ( 1.0)	264 ( 1.9)	10 ( 0.7)	273 ( 2.2)	29 ( 1.1)	277 ( 2.1)	40 ( 1.3)	276 ( 1.6)
MONTANA†	19 ( 1.0)	275 ( 2.5)	10 ( 0.8)	281 ( 3.3)	29 ( 1.2)	286 ( 1.6)	42 ( 1.5)	286 ( 2.0)
NEBRASKA	19 ( 0.8)	273 ( 1.9)	9 ( 0.6)	279 ( 2.6)	29 ( 0.7)	285 ( 1.4)	43 ( 1.1)	287 ( 1.3)>
NEW MEXICO	21 ( 0.9)	253 ( 2.1)	9 ( 0.6)	258 ( 3.0)	28 ( 0.8)	264 ( 1.9)	42 ( 1.0)	267 ( 1.4)
NEW YORK†	17 ( 0.8)	263 ( 2.5)	9 ( 0.6)	272 ( 3.4)	30 ( 1.1)	274 ( 2.0)	43 ( 1.2)	274 ( 1.9)
NORTH CAROLINA	20 ( 1.1)	259 ( 2.2)	9 ( 0.7)	273 ( 2.5)>	28 ( 0.9)	270 ( 2.0)>	43 ( 1.2)	271 ( 1.6)>
NORTH DAKOTA	22 ( 0.7)	276 ( 1.7)	11 ( 0.7)	285 ( 2.0)	31 ( 0.9)	287 ( 1.4)	36 ( 1.1)	288 ( 1.4)
OREGON	19 ( 0.9)	266 ( 2.0)	10 ( 0.7)	276 ( 2.5)	31 ( 1.1)	282 ( 1.7)	40 ( 1.0)	281 ( 1.7)
RHODE ISLAND	23 ( 0.9)	259 ( 1.6)	10 ( 0.7)	268 ( 2.8)	29 ( 0.9)	272 ( 1.6)	39 ( 1.3)	275 ( 1.6)
SOUTH CAROLINA†	21 ( 1.4)	258 ( 2.2)	7 ( 0.6)	262 ( 2.6)	29 ( 1.1)	263 ( 1.9)	42 ( 1.2)	262 ( 2.0)
TENNESSEE	19 ( 1.0)	255 ( 2.0)	12 ( 0.8)	267 ( 2.5)	35 ( 0.9)	265 ( 1.8)	34 ( 1.1)<	267 ( 1.8)
TEXAS	22 ( 1.3)	261 ( 1.9)	10 ( 0.5)	272 ( 2.5)	27 ( 1.0)	273 ( 2.0)	40 ( 1.2)	276 ( 1.7)
UTAH	15 ( 0.7)	271 ( 2.1)	9 ( 0.7)	273 ( 2.3)	30 ( 0.9)	279 ( 1.6)	46 ( 1.2)	280 ( 1.2)
VERMONT†	17 ( 1.1)	264 ( 2.6)	9 ( 0.7)	279 ( 3.0)	31 ( 1.2)	283 ( 1.5)	43 ( 1.4)	284 ( 1.3)
VIRGINIA	22 ( 1.1)	262 ( 1.8)	9 ( 0.7)	270 ( 2.9)	29 ( 0.9)	272 ( 1.8)	41 ( 1.2)	275 ( 1.8)
WASHINGTON	20 ( 1.1)	268 ( 2.1)	10 ( 0.8)	272 ( 2.4)	28 ( 0.9)	281 ( 1.9)	42 ( 1.3)	280 ( 1.7)
WEST VIRGINIA	23 ( 0.9)	259 ( 1.8)>	10 ( 0.6)	264 ( 2.9)	30 ( 1.1)	266 ( 1.5)	38 ( 1.1)	269 ( 1.7)
WISCONSIN†	22 ( 1.1)	276 ( 1.7)	10 ( 0.6)	281 ( 2.4)	32 ( 0.9)	284 ( 1.8)	36 ( 1.1)	288 ( 1.9)
WYOMING	20 ( 0.7)	265 ( 1.9)	9 ( 0.6)	275 ( 2.6)	28 ( 0.9)	277 ( 1.7)	43 ( 1.0)	279 ( 1.1)
<b>Other Jurisdictions</b>								
DDESS	22 ( 1.5)	265 ( 4.8)	8 ( 1.1)	... ( ... )	29 ( 1.8)	270 ( 5.2)	41 ( 2.1)	274 ( 2.4)
DoDDS	21 ( 0.9)	270 ( 2.0)	8 ( 0.8)	274 ( 4.2)	27 ( 0.9)	276 ( 1.7)	44 ( 1.0)	277 ( 1.4)
GUAM	24 ( 1.3)<	235 ( 3.2)	12 ( 1.1)	245 ( 4.7)	33 ( 1.5)	242 ( 3.4)	32 ( 1.6)	250 ( 2.6)

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).

... Characteristics of the sample do not permit a reliable estimate.

> (<) The value for the students was significantly higher (lower) than in the 1992 assessment at about the 95% confidence level using appropriate multiple comparison procedures.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 7.10**

**1990 Mathematics Assessment**



POPULATION: **1990 Grade 8 Public School Students**  
 REPORTED STATISTICS: **Percentage of Students and Average Mathematics Scale Score**  
 STUDENTS' REPORTS ON: **Literacy Materials in the Home**

*How many of the following types of reading materials are in your home: more than 25 books; an encyclopedia; a newspaper; magazines?*

	Zero to Two		Three		Four	
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JURISDICTIONS	PCT ( SE )		SS ( SE )		PCT ( SE )		SS ( SE )		PCT ( SE )		SS ( SE )	
<b>Nation</b>												
NATION	21 ( 1.0)	244 ( 2.1)	30 ( 1.0)	259 ( 1.6)	48 ( 1.3)	272 ( 1.5)						
NORTHEAST	13 ( 2.0)	253 ( 4.1)	31 ( 2.7)	265 ( 3.1)	56 ( 3.7)	277 ( 4.2)						
SOUTHEAST	26 ( 2.3)	236 ( 3.3)	29 ( 2.4)	250 ( 4.6)	46 ( 2.7)	267 ( 2.8)						
CENTRAL	19 ( 2.1)	250 ( 3.6)	31 ( 2.2)	265 ( 3.0)	50 ( 1.8)	271 ( 1.7)						
WEST	24 ( 1.6)	244 ( 4.3)	31 ( 1.4)	257 ( 2.3)	45 ( 1.9)	273 ( 3.1)						
<b>States</b>												
ALABAMA	22 ( 1.1)	239 ( 1.7)	32 ( 0.8)	251 ( 1.4)	46 ( 1.4)	261 ( 1.1)						
ALASKA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )						
ARIZONA	27 ( 1.3)	245 ( 1.8)	33 ( 1.0)	259 ( 1.6)	40 ( 1.4)	270 ( 1.6)						
ARKANSAS	23 ( 0.7)	245 ( 1.6)	31 ( 1.0)	254 ( 1.5)	47 ( 1.2)	264 ( 1.2)						
CALIFORNIA	32 ( 1.2)	241 ( 1.4)	31 ( 1.0)	257 ( 1.6)	37 ( 1.4)	269 ( 1.7)						
COLORADO	15 ( 0.7)	249 ( 1.6)	32 ( 0.8)	264 ( 1.4)	53 ( 1.0)	275 ( 0.9)						
CONNECTICUT	14 ( 0.9)	245 ( 2.3)	30 ( 1.0)	264 ( 1.5)	56 ( 1.3)	280 ( 1.0)						
DELAWARE	17 ( 0.7)	246 ( 2.0)	31 ( 0.9)	255 ( 1.6)	52 ( 1.0)	269 ( 1.4)						
DISTRICT OF COLUMBIA	24 ( 0.9)	224 ( 1.4)	34 ( 1.2)	228 ( 1.2)	42 ( 1.0)	239 ( 1.4)						
FLORIDA	27 ( 1.2)	240 ( 1.7)	33 ( 0.9)	255 ( 1.6)	40 ( 1.4)	266 ( 1.4)						
GEORGIA	20 ( 0.9)	241 ( 1.7)	32 ( 1.1)	254 ( 1.6)	48 ( 1.3)	270 ( 1.6)						
HAWAII	31 ( 1.1)	239 ( 1.4)	34 ( 1.0)	253 ( 1.5)	35 ( 0.8)	261 ( 1.2)						
INDIANA	16 ( 0.8)	253 ( 2.1)	30 ( 0.9)	264 ( 1.8)	54 ( 1.4)	274 ( 1.1)						
IOWA	12 ( 0.9)	262 ( 2.2)	29 ( 1.1)	275 ( 1.6)	59 ( 1.2)	283 ( 1.1)						
KENTUCKY	22 ( 1.2)	243 ( 2.1)	30 ( 1.0)	253 ( 1.5)	48 ( 1.4)	266 ( 1.2)						
LOUISIANA	24 ( 0.9)	238 ( 1.7)	33 ( 1.0)	243 ( 1.6)	43 ( 1.2)	254 ( 1.5)						
MAINE	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )						
MARYLAND	17 ( 0.8)	242 ( 2.1)	31 ( 0.9)	256 ( 1.7)	52 ( 1.2)	270 ( 1.5)						
MASSACHUSETTS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )						
MICHIGAN	16 ( 0.8)	249 ( 2.1)	33 ( 1.1)	261 ( 1.6)	50 ( 1.4)	272 ( 1.1)						
MINNESOTA	12 ( 0.7)	257 ( 2.2)	31 ( 0.7)	274 ( 1.5)	57 ( 1.0)	280 ( 1.0)						
MISSISSIPPI	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )						
MISSOURI	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )						
MONTANA	12 ( 0.7)	269 ( 2.2)	32 ( 1.2)	278 ( 1.9)	55 ( 1.0)	285 ( 1.1)						
NEBRASKA	12 ( 0.8)	255 ( 3.1)	28 ( 1.1)	271 ( 1.6)	60 ( 1.2)	282 ( 1.2)						
NEW MEXICO	28 ( 1.1)	244 ( 1.6)	31 ( 0.9)	257 ( 1.3)	40 ( 1.1)	266 ( 1.2)						
NEW YORK	21 ( 1.2)	243 ( 2.9)	29 ( 1.0)	256 ( 1.7)	50 ( 1.4)	271 ( 1.2)						
NORTH CAROLINA	22 ( 0.8)	234 ( 1.4)	32 ( 0.9)	246 ( 1.3)	46 ( 1.1)	261 ( 1.5)						
NORTH DAKOTA	10 ( 1.0)	259 ( 3.7)	30 ( 1.2)	280 ( 1.7)	60 ( 1.3)	285 ( 1.2)						
OREGON	18 ( 0.8)	260 ( 1.6)	30 ( 1.0)	269 ( 1.4)	52 ( 1.2)	277 ( 1.1)						
RHODE ISLAND	20 ( 0.9)	238 ( 1.5)	30 ( 0.9)	257 ( 1.3)	50 ( 0.9)	271 ( 0.9)						
SOUTH CAROLINA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )						
TENNESSEE	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )						
TEXAS	30 ( 1.3)	244 ( 2.0)	29 ( 1.0)	257 ( 1.7)	42 ( 1.1)	270 ( 1.5)						
UTAH	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )						
VERMONT	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )						
VIRGINIA	18 ( 0.9)	247 ( 1.6)	31 ( 1.1)	259 ( 1.6)	51 ( 1.2)	274 ( 2.2)						
WASHINGTON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )						
WEST VIRGINIA	20 ( 1.0)	243 ( 1.6)	32 ( 1.1)	256 ( 1.5)	47 ( 1.3)	262 ( 1.2)						
WISCONSIN	14 ( 0.8)	260 ( 2.3)	29 ( 1.0)	271 ( 1.6)	57 ( 1.1)	280 ( 1.3)						
WYOMING	14 ( 0.7)	260 ( 2.1)	32 ( 0.9)	270 ( 1.1)	54 ( 0.7)	277 ( 0.9)						
<b>Other Jurisdictions</b>												
DDESS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )						
DoDDS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )						
GUAM	36 ( 1.2)	221 ( 1.3)	37 ( 1.5)	235 ( 1.4)	27 ( 1.0)	243 ( 1.5)						

— State or other jurisdiction did not participate in the NAEP assessment year presented in this table.  
 SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.



**TABLE 7.10** (continued) **1992 Mathematics Assessment**



POPULATION: **1992 Grade 8 Public School Students**  
 REPORTED STATISTICS: **Percentage of Students and Average Mathematics Scale Score**  
 STUDENTS' REPORTS ON: **Literacy Materials in the Home**

How many of the following types of reading materials are in your home: more than 25 books; an encyclopedia; a newspaper; magazines?

Zero to Two	Three	Four
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JURISDICTIONS	Zero to Two		Three		Four	
	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )
<b>Nation</b>						
NATION	21 ( 0.7)	248 ( 1.2)	31 ( 0.7)	266 ( 1.3)»	48 ( 1.0)	276 ( 1.1)
NORTHEAST	19 ( 2.3)	247 ( 3.5)	32 ( 1.1)	268 ( 3.9)	49 ( 2.6)	276 ( 3.0)
SOUTHEAST	23 ( 1.1)	244 ( 2.4)	31 ( 1.1)	257 ( 1.8)	45 ( 1.3)	268 ( 1.5)
CENTRAL	16 ( 1.3)	254 ( 2.9)	31 ( 1.7)	271 ( 3.3)	54 ( 2.1)	281 ( 2.2)»
WEST	25 ( 1.6)	250 ( 2.3)	31 ( 1.6)	270 ( 2.4)»	44 ( 1.8)	277 ( 2.0)
<b>States</b>						
ALABAMA	24 ( 1.2)	238 ( 2.0)	35 ( 1.2)	250 ( 2.1)	40 ( 1.5)	263 ( 1.6)
ALASKA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
ARIZONA	29 ( 1.1)	251 ( 2.2)	33 ( 1.0)	267 ( 1.3)»	38 ( 1.4)	275 ( 1.3)»
ARKANSAS	24 ( 1.0)	244 ( 1.7)	32 ( 1.1)	254 ( 1.6)	44 ( 1.2)	265 ( 1.5)
CALIFORNIA	33 ( 1.4)	242 ( 2.2)	29 ( 0.9)	263 ( 2.0)»	38 ( 1.6)	276 ( 1.8)»
COLORADO	17 ( 0.9)	253 ( 1.8)	32 ( 0.9)	271 ( 1.4)»	51 ( 1.1)	280 ( 1.0)»
CONNECTICUT	18 ( 0.9)	251 ( 2.6)	28 ( 0.9)	270 ( 1.4)»	54 ( 1.1)	284 ( 1.0)»
DELAWARE	20 ( 1.0)	249 ( 1.9)	32 ( 1.3)	260 ( 1.8)	49 ( 1.4)	271 ( 1.2)
DISTRICT OF COLUMBIA	27 ( 1.1)	227 ( 2.1)	35 ( 1.4)	236 ( 1.7)»	38 ( 1.3)	241 ( 1.4)
FLORIDA	27 ( 1.1)	246 ( 1.8)	34 ( 1.1)	258 ( 1.7)	38 ( 1.4)	272 ( 1.6)»
GEORGIA	22 ( 1.0)	246 ( 2.2)	32 ( 0.9)	257 ( 1.4)	45 ( 1.2)	268 ( 1.5)
HAWAII	32 ( 1.0)	246 ( 1.5)»	32 ( 0.8)	259 ( 1.5)»	36 ( 1.0)	267 ( 1.4)»
INDIANA	18 ( 0.9)	253 ( 1.8)	29 ( 1.0)	269 ( 1.4)	53 ( 1.3)	277 ( 1.2)
IOWA	12 ( 0.8)	267 ( 2.2)	28 ( 0.9)	281 ( 1.3)»	60 ( 1.2)	288 ( 0.9)»
KENTUCKY	24 ( 0.9)	248 ( 1.6)	31 ( 1.0)	261 ( 1.3)»	45 ( 1.1)	271 ( 1.4)»
LOUISIANA	24 ( 1.2)	240 ( 2.4)	34 ( 0.9)	251 ( 1.9)»	42 ( 1.5)	255 ( 1.9)
MAINE	13 ( 0.7)	266 ( 1.8)	29 ( 1.0)	275 ( 1.4)	58 ( 1.4)	284 ( 1.1)
MARYLAND	16 ( 0.9)	248 ( 2.7)	31 ( 1.0)	260 ( 1.8)	52 ( 1.2)	274 ( 1.4)
MASSACHUSETTS	18 ( 1.1)	251 ( 2.2)	26 ( 0.9)	270 ( 1.5)	56 ( 1.2)	281 ( 1.2)
MICHIGAN	19 ( 0.9)	250 ( 1.7)	32 ( 0.9)	263 ( 1.5)	49 ( 1.2)	277 ( 1.6)»
MINNESOTA	11 ( 0.8)	269 ( 2.3)»	29 ( 1.1)	281 ( 1.2)»	59 ( 1.3)	286 ( 1.1)»
MISSISSIPPI	24 ( 0.9)	235 ( 1.9)	33 ( 0.9)	243 ( 1.7)	43 ( 1.1)	255 ( 1.4)
MISSOURI	17 ( 1.1)	254 ( 1.8)	32 ( 0.9)	269 ( 1.6)	51 ( 1.3)	278 ( 1.3)
MONTANA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
NEBRASKA	12 ( 0.8)	259 ( 2.1)	28 ( 1.2)	274 ( 1.6)	60 ( 1.6)	283 ( 1.1)
NEW MEXICO	27 ( 0.9)	249 ( 1.2)»	33 ( 0.9)	259 ( 1.2)	39 ( 1.0)	268 ( 1.4)
NEW YORK	20 ( 1.4)	245 ( 4.0)	31 ( 0.9)	262 ( 2.2)	49 ( 1.4)	278 ( 1.5)»
NORTH CAROLINA	20 ( 0.8)	240 ( 1.9)»	30 ( 0.9)	256 ( 1.8)»	50 ( 1.0)	267 ( 1.3)»
NORTH DAKOTA	10 ( 0.6)	273 ( 2.4)»	26 ( 1.3)	280 ( 1.7)	64 ( 1.3)	286 ( 1.3)
OREGON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
RHODE ISLAND	22 ( 0.8)	247 ( 1.9)»	28 ( 1.1)	262 ( 1.8)»	51 ( 1.1)	276 ( 1.0)»
SOUTH CAROLINA	19 ( 0.9)	244 ( 1.7)	33 ( 1.1)	257 ( 1.3)	49 ( 1.3)	270 ( 1.3)
TENNESSEE	22 ( 1.0)	243 ( 1.5)	32 ( 0.9)	258 ( 1.9)	46 ( 1.2)	267 ( 1.5)
TEXAS	30 ( 1.4)	250 ( 1.6)»	33 ( 0.9)	265 ( 1.6)»	38 ( 1.1)	277 ( 1.6)»
UTAH	14 ( 0.8)	260 ( 1.5)	29 ( 1.0)	273 ( 1.2)	57 ( 1.1)	279 ( 0.9)
VERMONT	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
VIRGINIA	19 ( 1.0)	250 ( 1.8)	31 ( 0.9)	265 ( 1.3)»	50 ( 1.2)	276 ( 1.4)
WASHINGTON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
WEST VIRGINIA	22 ( 1.1)	248 ( 1.3)»	31 ( 0.9)	256 ( 1.3)	46 ( 1.3)	267 ( 1.0)»
WISCONSIN	15 ( 1.1)	260 ( 3.4)	30 ( 1.0)	276 ( 1.6)»	55 ( 1.6)	284 ( 1.2)
WYOMING	17 ( 0.9)	264 ( 1.8)	34 ( 0.9)	274 ( 1.3)	49 ( 1.2)	280 ( 1.0)»
<b>Other Jurisdictions</b>						
DDESS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
DoDDS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
GUAM	39 ( 1.1)	226 ( 1.5)»	35 ( 1.1)	238 ( 1.7)	26 ( 1.0)	246 ( 2.3)

— State or other jurisdiction did not participate in the NAEP assessment year presented in this table.  
 » («) The value for the students was significantly higher (lower) than in the 1990 assessment at about the 95% confidence level using appropriate multiple comparison procedures.  
 SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 7.10** (continued) **1996 Mathematics Assessment**



POPULATION: **1996 Grade 8 Public School Students**  
 REPORTED STATISTICS: **Percentage of Students and Average Mathematics Scale Score**  
 STUDENTS' REPORTS ON: **Literacy Materials in the Home**

How many of the following types of reading materials are in your home: more than 25 books; an encyclopedia; a newspaper; magazines?

Zero to Two	Three	Four
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JURISDICTIONS	Zero to Two		Three		Four	
	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )
<b>Nation</b>						
NATION	21 ( 0.7)	254 ( 1.6)»	31 ( 0.9)	268 ( 1.2)»	47 ( 1.1)	281 ( 1.4)»
NORTHEAST	16 ( 1.7)	259 ( 4.2)	30 ( 1.8)	271 ( 3.6)	54 ( 2.3)	284 ( 4.3)
SOUTHEAST	23 ( 1.4)	249 ( 3.2)	32 ( 1.3)	261 ( 3.1)	45 ( 1.8)	273 ( 3.0)
CENTRAL	17 ( 1.7)	254 ( 6.3)	30 ( 2.5)	274 ( 3.5)	53 ( 2.7)	285 ( 2.1)»
WEST	27 ( 1.7)	254 ( 2.8)	32 ( 1.7)	268 ( 2.1)»	41 ( 2.5)	279 ( 2.4)
<b>States</b>						
ALABAMA	23 ( 1.2)	239 ( 2.7)	34 ( 1.2)	255 ( 2.3)	43 ( 1.6)	268 ( 2.4)»
ALASKA†	20 ( 1.6)	259 ( 3.7)	30 ( 1.4)	274 ( 2.7)	50 ( 1.6)	289 ( 2.3)
ARIZONA	29 ( 1.6)	253 ( 2.5)»	31 ( 1.1)	270 ( 1.3)»	41 ( 2.0)	278 ( 1.3)»
ARKANSAS†	23 ( 1.2)	249 ( 2.4)	30 ( 1.3)	262 ( 2.1)»	48 ( 1.1)	268 ( 1.6)»
CALIFORNIA	30 ( 1.5)	246 ( 2.1)	32 ( 0.9)	263 ( 2.1)»	39 ( 1.5)	276 ( 2.0)»
COLORADO	18 ( 1.1)	258 ( 1.9)»	30 ( 1.0)	272 ( 1.6)»	52 ( 1.5)	284 ( 1.2)»
CONNECTICUT	15 ( 1.2)	255 ( 2.1)»	27 ( 1.0)	274 ( 1.5)»	58 ( 1.4)	289 ( 1.2)»
DELAWARE	17 ( 0.9)	250 ( 2.5)	31 ( 1.2)	264 ( 1.9)»	52 ( 1.1)	274 ( 1.4)»
DISTRICT OF COLUMBIA	29 ( 1.2)	222 ( 2.2)	33 ( 1.1)	231 ( 2.4)	38 ( 1.3)	244 ( 1.7)
FLORIDA	27 ( 1.4)	247 ( 2.7)	33 ( 1.2)	266 ( 1.7)»	40 ( 1.5)	275 ( 2.1)»
GEORGIA	23 ( 1.0)	249 ( 1.8)»	32 ( 1.0)	259 ( 2.1)	45 ( 1.1)	273 ( 2.0)
HAWAII	30 ( 1.0)	251 ( 1.7)»	34 ( 1.1)	262 ( 1.8)»	36 ( 1.0)	273 ( 1.6)»
INDIANA	18 ( 1.2)	256 ( 1.9)	29 ( 1.0)	273 ( 1.9)»	53 ( 1.5)	284 ( 1.5)»
IOWA†	12 ( 0.8)	272 ( 2.4)»	28 ( 0.9)	280 ( 1.7)»	60 ( 1.3)	288 ( 1.4)»
KENTUCKY	22 ( 1.1)	252 ( 1.8)»	30 ( 0.8)	264 ( 1.4)»	47 ( 1.3)	276 ( 1.3)»
LOUISIANA	26 ( 1.1)	242 ( 1.8)	33 ( 1.0)	252 ( 2.0)»	41 ( 1.2)	260 ( 1.4)»
MAINE	13 ( 0.9)	270 ( 2.9)	29 ( 1.2)	283 ( 2.0)»	58 ( 1.3)	289 ( 1.3)»
MARYLAND†	17 ( 1.0)	250 ( 2.6)»	31 ( 1.2)	264 ( 2.4)»	52 ( 1.5)	281 ( 2.3)»
MASSACHUSETTS	17 ( 1.2)	256 ( 2.6)	25 ( 0.9)	271 ( 2.4)	58 ( 1.4)	287 ( 1.7)»
MICHIGAN†	19 ( 1.3)	255 ( 2.3)	29 ( 1.1)	274 ( 2.0)»	51 ( 1.7)	287 ( 1.6)»
MINNESOTA	13 ( 0.8)	267 ( 3.0)»	28 ( 1.0)	279 ( 1.8)	59 ( 1.3)	291 ( 1.3)»
MISSISSIPPI	24 ( 1.0)	240 ( 1.8)	34 ( 1.0)	250 ( 1.9)	42 ( 1.1)	257 ( 1.4)
MISSOURI	18 ( 1.0)	260 ( 1.8)	29 ( 0.9)	271 ( 1.7)	52 ( 1.2)	280 ( 1.4)
MONTANA†	16 ( 0.9)	265 ( 2.9)	30 ( 1.1)	281 ( 2.1)	55 ( 1.4)	289 ( 1.2)»
NEBRASKA	13 ( 0.9)	262 ( 2.6)	29 ( 0.9)	279 ( 1.3)»	58 ( 1.0)	290 ( 1.2)»
NEW MEXICO	31 ( 1.4)	247 ( 1.9)	31 ( 1.1)	263 ( 1.4)»	37 ( 1.5)	275 ( 1.3)»
NEW YORK†	22 ( 1.2)	254 ( 3.2)»	30 ( 1.4)	268 ( 2.4)»	48 ( 1.8)	280 ( 1.5)»
NORTH CAROLINA	18 ( 0.9)	253 ( 2.1)»	33 ( 1.0)	265 ( 1.8)»	48 ( 1.1)	276 ( 1.7)»
NORTH DAKOTA	11 ( 0.8)	266 ( 2.1)	29 ( 0.9)	281 ( 1.5)	60 ( 1.1)	290 ( 1.1)»
OREGON	21 ( 1.1)	263 ( 2.0)	30 ( 1.2)	274 ( 1.9)	49 ( 1.8)	286 ( 1.5)»
RHODE ISLAND	23 ( 0.8)	250 ( 1.8)»	27 ( 1.0)	266 ( 1.5)»	49 ( 1.1)	280 ( 1.3)»
SOUTH CAROLINA†	21 ( 1.0)	249 ( 2.0)	33 ( 1.1)	258 ( 1.7)	45 ( 1.4)	269 ( 1.8)
TENNESSEE	19 ( 0.9)	246 ( 2.5)	29 ( 1.1)	263 ( 1.7)	52 ( 1.3)	270 ( 1.5)
TEXAS	29 ( 1.7)	253 ( 1.9)»	30 ( 1.1)	272 ( 1.7)»	41 ( 2.0)	281 ( 1.8)»
UTAH	13 ( 1.0)	263 ( 2.6)	32 ( 1.0)	273 ( 1.2)	55 ( 1.4)	283 ( 1.1)»
VERMONT†	13 ( 0.9)	259 ( 2.4)	28 ( 1.0)	280 ( 1.5)	58 ( 1.2)	284 ( 1.3)
VIRGINIA	19 ( 1.2)	252 ( 2.3)	29 ( 1.0)	267 ( 1.8)»	52 ( 1.6)	278 ( 1.6)
WASHINGTON	21 ( 1.2)	260 ( 2.5)	31 ( 1.2)	275 ( 1.4)	49 ( 1.5)	285 ( 1.3)
WEST VIRGINIA	21 ( 1.0)	255 ( 1.8)»	31 ( 0.9)	262 ( 1.7)»	48 ( 1.3)	271 ( 1.3)»
WISCONSIN†	15 ( 1.0)	265 ( 2.7)	28 ( 1.1)	279 ( 2.0)»	56 ( 1.3)	290 ( 1.4)»
WYOMING	15 ( 0.7)	260 ( 2.6)	32 ( 1.0)	271 ( 1.8)	52 ( 1.0)	282 ( 0.9)»
<b>Other Jurisdictions</b>						
DDESS	15 ( 1.5)	262 ( 5.5)	34 ( 1.9)	266 ( 4.0)	50 ( 2.0)	273 ( 2.3)
DoDDS	17 ( 0.7)	268 ( 2.3)	35 ( 1.1)	275 ( 1.5)	48 ( 1.2)	278 ( 1.2)
GUAM	37 ( 1.5)	231 ( 3.1)»	31 ( 1.3)	235 ( 4.3)	33 ( 1.6)	253 ( 2.6)»

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).  
 » (») The value for the students was significantly higher (lower) than in the 1990 assessment at about the 95% confidence level using appropriate multiple comparison procedures.  
 > (<) The value for the students was significantly higher (lower) than in the 1992 assessment at about the 95% confidence level using appropriate multiple comparison procedures.  
 SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 7.11**

**1990 Mathematics Assessment**



POPULATION:

1990 Grade 8 Public School Students

REPORTED STATISTICS:

Percentage of Students and Average Mathematics Scale Score

STUDENTS' REPORTS ON:

Television Viewing Habits

How much television do you usually watch each day?	One Hour or Less		Two to Three Hours		Four to Five Hours		Six Hours or More	
	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )
<b>JURISDICTIONS</b>								
<b>Nation</b>								
NATION	12 ( 0.8)	269 ( 2.4)	43 ( 1.1)	267 ( 1.5)	28 ( 1.1)	262 ( 1.6)	16 ( 1.0)	245 ( 2.0)
NORTHEAST	12 ( 1.3)	278 ( 4.5)	45 ( 3.2)	275 ( 3.0)	28 ( 2.6)	267 ( 4.5)	15 ( 3.3)	254 ( 5.5)!
SOUTHEAST	12 ( 1.3)	261 ( 6.2)	42 ( 1.9)	260 ( 2.8)	28 ( 1.6)	254 ( 3.4)	18 ( 1.4)	238 ( 3.1)
CENTRAL	11 ( 1.6)	270 ( 3.4)	48 ( 2.7)	272 ( 2.9)	27 ( 3.0)	261 ( 3.2)	14 ( 1.6)	246 ( 3.9)
WEST	14 ( 1.8)	268 ( 4.3)	40 ( 1.8)	262 ( 2.8)	29 ( 1.7)	264 ( 2.6)	16 ( 2.0)	245 ( 3.2)
<b>States</b>								
ALABAMA	10 ( 0.5)	257 ( 2.5)	39 ( 1.1)	257 ( 1.6)	34 ( 0.9)	253 ( 1.3)	18 ( 0.9)	240 ( 2.1)
ALASKA	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)
ARIZONA	15 ( 0.8)	265 ( 2.5)	48 ( 0.9)	263 ( 1.4)	25 ( 0.9)	257 ( 1.7)	12 ( 0.6)	245 ( 2.2)
ARKANSAS	8 ( 0.5)	255 ( 3.1)	38 ( 1.1)	261 ( 1.3)	33 ( 1.1)	258 ( 1.0)	20 ( 0.9)	245 ( 1.8)
CALIFORNIA	16 ( 0.9)	266 ( 2.4)	47 ( 1.1)	259 ( 1.4)	26 ( 1.0)	251 ( 1.5)	11 ( 0.7)	245 ( 3.1)
COLORADO	17 ( 0.8)	276 ( 1.9)	48 ( 1.0)	270 ( 1.1)	25 ( 0.9)	263 ( 1.3)	9 ( 0.7)	249 ( 2.3)
CONNECTICUT	16 ( 1.1)	281 ( 2.4)	47 ( 1.0)	274 ( 1.3)	25 ( 1.0)	266 ( 1.6)	12 ( 0.8)	247 ( 2.5)
DELAWARE	9 ( 0.7)	271 ( 3.8)	41 ( 1.1)	267 ( 1.6)	31 ( 1.0)	259 ( 1.5)	18 ( 0.9)	243 ( 2.6)
DISTRICT OF COLUMBIA	8 ( 0.7)	235 ( 6.9)	28 ( 0.9)	231 ( 1.7)	31 ( 1.2)	235 ( 1.6)	33 ( 1.1)	228 ( 1.3)
FLORIDA	12 ( 0.7)	259 ( 2.7)	40 ( 1.1)	260 ( 1.6)	29 ( 0.9)	256 ( 1.4)	19 ( 1.0)	240 ( 2.3)
GEORGIA	12 ( 0.7)	266 ( 3.4)	41 ( 1.0)	264 ( 1.5)	30 ( 0.8)	258 ( 1.8)	17 ( 0.9)	243 ( 1.8)
HAWAII	10 ( 0.6)	254 ( 2.8)	37 ( 0.9)	257 ( 1.3)	31 ( 0.8)	252 ( 1.4)	23 ( 0.8)	239 ( 1.6)
INDIANA	13 ( 0.7)	274 ( 2.0)	48 ( 1.0)	272 ( 1.3)	28 ( 0.9)	263 ( 1.6)	11 ( 0.7)	251 ( 2.4)
IOWA	14 ( 1.0)	284 ( 2.2)	50 ( 1.1)	281 ( 1.3)	28 ( 1.2)	275 ( 1.4)	8 ( 0.7)	262 ( 2.5)
KENTUCKY	10 ( 0.6)	262 ( 4.1)	46 ( 0.9)	261 ( 1.4)	30 ( 1.0)	256 ( 1.7)	14 ( 0.7)	244 ( 2.0)
LOUISIANA	10 ( 0.7)	248 ( 2.9)	40 ( 1.2)	252 ( 1.6)	31 ( 1.1)	246 ( 1.4)	19 ( 1.1)	236 ( 2.0)
MAINE	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)
MARYLAND	11 ( 0.8)	276 ( 4.1)	41 ( 1.1)	268 ( 1.6)	30 ( 1.0)	258 ( 1.6)	19 ( 0.9)	240 ( 1.8)
MASSACHUSETTS	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)
MICHIGAN	13 ( 0.9)	273 ( 2.3)	46 ( 1.0)	271 ( 1.3)	27 ( 0.9)	261 ( 1.4)	14 ( 0.9)	244 ( 2.8)
MINNESOTA	15 ( 0.8)	280 ( 2.0)	53 ( 0.9)	278 ( 1.1)	25 ( 0.7)	271 ( 1.5)	7 ( 0.5)	260 ( 2.7)
MISSISSIPPI	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)
MISSOURI	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)
MONTANA	21 ( 0.9)	289 ( 1.9)	54 ( 0.8)	281 ( 1.1)	20 ( 1.1)	275 ( 2.0)	6 ( 0.6)	262 ( 4.0)
NEBRASKA	14 ( 0.7)	281 ( 2.3)	51 ( 1.3)	281 ( 1.2)	27 ( 1.2)	271 ( 1.4)	9 ( 0.5)	254 ( 2.8)
NEW MEXICO	14 ( 0.6)	261 ( 2.0)	48 ( 1.4)	261 ( 1.3)	27 ( 1.2)	253 ( 1.3)	11 ( 0.7)	243 ( 1.7)
NEW YORK	12 ( 0.6)	271 ( 2.9)	42 ( 1.0)	269 ( 1.5)	29 ( 0.9)	257 ( 1.7)	17 ( 1.0)	243 ( 2.9)
NORTH CAROLINA	10 ( 0.6)	259 ( 3.7)	37 ( 0.9)	257 ( 1.4)	32 ( 1.0)	249 ( 1.3)	21 ( 1.0)	236 ( 1.8)
NORTH DAKOTA	14 ( 0.9)	289 ( 2.4)	53 ( 1.2)	282 ( 1.2)	26 ( 1.3)	279 ( 2.5)	6 ( 0.7)	264 ( 3.5)
OREGON	18 ( 0.9)	279 ( 1.9)	49 ( 1.0)	275 ( 1.1)	24 ( 0.8)	266 ( 1.6)	9 ( 0.6)	252 ( 2.6)
RHODE ISLAND	13 ( 0.8)	270 ( 2.2)	47 ( 1.1)	266 ( 1.1)	29 ( 1.0)	257 ( 1.1)	12 ( 0.5)	238 ( 2.0)
SOUTH CAROLINA	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)
TENNESSEE	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)
TEXAS	13 ( 0.7)	261 ( 3.0)	43 ( 1.3)	263 ( 1.6)	30 ( 0.8)	258 ( 1.5)	15 ( 0.9)	243 ( 2.2)
UTAH	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)
VERMONT	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)
VIRGINIA	13 ( 0.8)	278 ( 3.6)	43 ( 1.2)	271 ( 2.0)	29 ( 1.1)	258 ( 1.5)	16 ( 0.9)	248 ( 2.0)
WASHINGTON	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)
WEST VIRGINIA	9 ( 0.6)	261 ( 2.5)	45 ( 1.0)	261 ( 1.2)	30 ( 0.8)	254 ( 1.4)	16 ( 0.7)	243 ( 1.8)
WISCONSIN	16 ( 0.8)	283 ( 2.3)	51 ( 1.1)	279 ( 1.2)	25 ( 0.9)	269 ( 1.7)	8 ( 0.7)	250 ( 2.8)
WYOMING	18 ( 1.0)	281 ( 1.5)	51 ( 1.1)	275 ( 0.9)	24 ( 0.8)	266 ( 1.2)	7 ( 0.6)	254 ( 2.8)
<b>Other Jurisdictions</b>								
DDESS	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)
DoDDS	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)	— ( —)
GUAM	19 ( 0.9)	218 ( 2.0)	38 ( 1.2)	236 ( 1.5)	23 ( 1.1)	239 ( 2.1)	20 ( 1.1)	230 ( 2.6)

— State or other jurisdiction did not participate in the NAEP assessment year presented in this table.

! Interpret with caution — the nature of the sample does not allow accurate determination of the variability of this statistic.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 7.11** (continued)

**1992 Mathematics Assessment**



POPULATION:

1992 Grade 8 Public School Students

REPORTED STATISTICS:

Percentage of Students and Average Mathematics Scale Score

STUDENTS' REPORTS ON:

Television Viewing Habits

How much television do you usually watch each day?	One Hour or Less		Two to Three Hours		Four to Five Hours		Six Hours or More	
	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )
<b>JURISDICTIONS</b>								
<b>Nation</b>								
NATION	15 ( 0.6)»	276 ( 2.2)	45 ( 0.6)	274 ( 1.1)»	26 ( 0.7)	261 ( 1.1)	13 ( 0.4)	243 ( 1.5)
NORTHEAST	15 ( 1.1)	279 ( 6.4)	43 ( 1.3)	277 ( 3.3)	28 ( 1.6)	261 ( 3.2)	14 ( 0.8)	242 ( 3.4)
SOUTHEAST	12 ( 0.9)	268 ( 2.9)	41 ( 1.3)	266 ( 2.0)	30 ( 0.9)	256 ( 1.1)	17 ( 1.2)	240 ( 2.8)
CENTRAL	15 ( 0.9)	280 ( 3.6)	50 ( 1.3)	279 ( 2.4)	24 ( 1.4)	270 ( 2.7)	11 ( 0.9)	250 ( 2.9)
WEST	18 ( 1.4)	278 ( 4.0)	47 ( 1.1)»	273 ( 1.9)»	23 ( 1.2)	259 ( 1.9)	12 ( 0.9)	244 ( 3.7)
<b>States</b>								
ALABAMA	10 ( 0.7)	256 ( 2.9)	39 ( 1.3)	259 ( 1.8)	31 ( 0.9)	251 ( 1.9)	20 ( 1.0)	237 ( 2.0)
ALASKA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
ARIZONA	17 ( 0.9)	271 ( 2.0)	46 ( 1.0)	269 ( 1.6)	27 ( 0.9)	262 ( 1.5)	9 ( 0.8)«	250 ( 2.1)
ARKANSAS	10 ( 0.7)	265 ( 2.4)»	39 ( 1.1)	264 ( 1.4)	31 ( 1.0)	256 ( 1.6)	20 ( 1.0)	238 ( 1.7)«
CALIFORNIA	17 ( 1.1)	273 ( 3.2)	49 ( 1.2)	264 ( 1.8)	24 ( 1.0)	256 ( 1.9)	10 ( 0.8)	238 ( 3.1)
COLORADO	21 ( 1.0)	280 ( 1.9)	50 ( 1.0)	275 ( 1.2)»	22 ( 0.9)	267 ( 1.4)	7 ( 0.6)	253 ( 2.7)
CONNECTICUT	16 ( 0.9)	285 ( 2.0)	52 ( 1.0)»	279 ( 1.1)»	22 ( 0.9)	267 ( 1.7)	11 ( 1.0)	245 ( 2.4)
DELAWARE	11 ( 0.8)	273 ( 3.1)	44 ( 0.9)	268 ( 1.3)	28 ( 1.2)	261 ( 1.8)	17 ( 1.1)	246 ( 2.0)
DISTRICT OF COLUMBIA	7 ( 0.6)	239 ( 3.1)	28 ( 1.1)	238 ( 1.8)»	33 ( 1.0)	237 ( 1.4)	31 ( 1.4)	230 ( 1.4)
FLORIDA	13 ( 0.9)	270 ( 2.7)»	45 ( 1.2)»	265 ( 1.6)	27 ( 1.1)	257 ( 1.8)	15 ( 1.1)	242 ( 2.2)
GEORGIA	12 ( 0.7)	267 ( 2.7)	41 ( 0.9)	266 ( 1.6)	29 ( 0.8)	257 ( 1.3)	18 ( 0.9)	245 ( 1.7)
HAWAII	11 ( 0.5)	260 ( 3.0)	38 ( 0.9)	262 ( 1.3)	28 ( 1.0)	261 ( 1.6)»	22 ( 0.8)	246 ( 1.5)»
INDIANA	15 ( 1.0)	281 ( 2.1)	49 ( 1.0)	274 ( 1.2)	26 ( 0.9)	263 ( 1.5)	9 ( 0.7)	251 ( 2.7)
IOWA	16 ( 0.9)	287 ( 2.0)	53 ( 1.2)	287 ( 1.1)»	24 ( 1.0)	278 ( 1.5)	7 ( 0.6)	266 ( 2.0)
KENTUCKY	12 ( 0.7)	270 ( 2.6)	48 ( 1.0)	268 ( 1.3)»	28 ( 1.0)	257 ( 1.5)	13 ( 0.8)	246 ( 1.8)
LOUISIANA	10 ( 0.6)	252 ( 3.7)	39 ( 1.1)	256 ( 1.9)	32 ( 1.2)	250 ( 1.9)	20 ( 1.0)	237 ( 2.1)
MAINE	18 ( 0.9)	284 ( 1.9)	53 ( 1.1)	281 ( 1.1)	21 ( 1.0)	274 ( 1.4)	8 ( 0.6)	264 ( 2.7)
MARYLAND	11 ( 0.7)	280 ( 2.6)	46 ( 1.2)»	272 ( 1.7)	26 ( 1.1)	261 ( 1.4)	17 ( 0.9)	243 ( 1.8)
MASSACHUSETTS	18 ( 1.0)	284 ( 1.9)	52 ( 1.1)	277 ( 1.4)	22 ( 0.9)	263 ( 1.4)	8 ( 0.7)	247 ( 2.5)
MICHIGAN	12 ( 0.8)	279 ( 2.8)	50 ( 1.1)»	274 ( 1.5)	25 ( 1.0)	263 ( 1.7)	13 ( 0.7)	241 ( 2.1)
MINNESOTA	18 ( 0.8)	289 ( 1.5)»	57 ( 1.0)»	285 ( 1.2)»	20 ( 0.8)«	276 ( 1.5)	5 ( 0.6)	262 ( 3.8)
MISSISSIPPI	10 ( 0.5)	245 ( 2.9)	40 ( 1.0)	255 ( 1.6)	29 ( 1.0)	247 ( 1.4)	21 ( 1.0)	231 ( 2.0)
MISSOURI	12 ( 0.7)	280 ( 2.5)	49 ( 1.0)	275 ( 1.2)	28 ( 1.0)	267 ( 1.3)	12 ( 0.7)	256 ( 3.2)
MONTANA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
NEBRASKA	14 ( 1.0)	283 ( 2.4)	53 ( 1.3)	281 ( 1.2)	25 ( 1.2)	276 ( 1.5)	8 ( 0.6)	256 ( 3.2)
NEW MEXICO	16 ( 0.9)	266 ( 1.8)	47 ( 1.0)	262 ( 1.0)	26 ( 0.8)	257 ( 1.3)	11 ( 0.7)	247 ( 2.2)
NEW YORK	15 ( 0.8)»	279 ( 3.0)	45 ( 1.4)	275 ( 1.9)	26 ( 1.0)	261 ( 2.4)	15 ( 1.1)	242 ( 3.3)
NORTH CAROLINA	12 ( 0.8)	264 ( 2.7)	42 ( 1.0)»	265 ( 1.5)»	29 ( 0.9)	256 ( 1.4)»	16 ( 0.8)«	242 ( 2.0)
NORTH DAKOTA	17 ( 0.9)	289 ( 1.4)	58 ( 1.0)»	286 ( 1.3)	21 ( 1.0)«	275 ( 1.7)	5 ( 0.5)	266 ( 3.1)
OREGON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
RHODE ISLAND	14 ( 0.8)	274 ( 2.2)	52 ( 1.2)»	271 ( 1.0)»	25 ( 0.9)	258 ( 1.5)	9 ( 0.7)«	248 ( 2.4)»
SOUTH CAROLINA	12 ( 0.7)	270 ( 2.3)	41 ( 1.1)	269 ( 1.3)	30 ( 0.9)	256 ( 1.2)	17 ( 0.9)	242 ( 1.4)
TENNESSEE	11 ( 0.9)	266 ( 4.0)	47 ( 1.0)	263 ( 1.4)	28 ( 1.0)	256 ( 1.6)	14 ( 1.0)	245 ( 2.3)
TEXAS	15 ( 0.9)	275 ( 2.6)»	46 ( 1.1)	270 ( 1.5)»	27 ( 0.9)	259 ( 1.4)	12 ( 0.8)	246 ( 2.2)
UTAH	28 ( 1.1)	283 ( 1.3)	51 ( 1.1)	274 ( 1.0)	16 ( 0.9)	266 ( 1.5)	5 ( 0.5)	254 ( 3.0)
VERMONT	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
VIRGINIA	13 ( 0.8)	280 ( 2.1)	45 ( 1.2)	275 ( 1.3)	27 ( 0.9)	262 ( 1.3)	15 ( 1.0)	246 ( 1.7)
WASHINGTON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
WEST VIRGINIA	11 ( 0.7)	263 ( 2.2)	45 ( 1.3)	264 ( 1.2)	31 ( 1.1)	257 ( 1.4)	13 ( 0.7)	245 ( 1.6)
WISCONSIN	19 ( 1.7)	287 ( 3.4)	52 ( 0.9)	281 ( 1.2)	22 ( 1.5)	271 ( 1.9)	8 ( 0.7)	258 ( 2.6)
WYOMING	22 ( 0.9)»	279 ( 1.6)	50 ( 1.2)	278 ( 1.1)	20 ( 0.8)«	271 ( 1.4)	8 ( 0.6)	257 ( 2.0)
<b>Other Jurisdictions</b>								
DDESS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
DoDDS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
GUAM	22 ( 0.8)	223 ( 2.3)	38 ( 1.2)	240 ( 1.9)	20 ( 1.0)	248 ( 2.3)»	20 ( 0.9)	231 ( 2.6)

— State or other jurisdiction did not participate in the NAEP assessment year presented in this table.

» ( « ) The value for the students was significantly higher (lower) than in the 1990 assessment at about the 95% confidence level using appropriate multiple comparison procedures.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 7.11** (continued)

**1996 Mathematics Assessment**



POPULATION:

1996 Grade 8 Public School Students

REPORTED STATISTICS:

Percentage of Students and Average Mathematics Scale Score

STUDENTS' REPORTS ON:

Television Viewing Habits

How much television do you usually watch each day?	One Hour or Less		Two to Three Hours		Four to Five Hours		Six Hours or More	
	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )
<b>JURISDICTIONS</b>								
<b>Nation</b>								
NATION	17 ( 0.6)»	277 ( 2.7)	45 ( 0.9)	276 ( 1.1)»	24 ( 0.7)«	268 ( 1.4)»»	14 ( 0.6)	252 ( 1.4)»»
NORTHEAST	17 ( 1.8)	275 (10.3)	42 ( 2.3)	284 ( 3.4)	25 ( 2.3)	274 ( 2.8)	16 ( 1.7)	257 ( 3.6)
SOUTHEAST	13 ( 1.0)	272 ( 4.6)	45 ( 2.3)	270 ( 2.8)	24 ( 1.5)	262 ( 3.4)	18 ( 1.3)	245 ( 2.4)
CENTRAL	17 ( 1.3)	281 ( 5.1)	48 ( 1.6)	283 ( 2.5)	22 ( 1.3)	270 ( 4.4)	13 ( 1.2)	254 ( 4.6)
WEST	20 ( 1.4)	277 ( 3.3)	46 ( 1.4)	270 ( 2.0)	23 ( 1.1)	266 ( 2.6)	11 ( 0.9)	253 ( 3.0)
<b>States</b>								
ALABAMA	12 ( 0.8)	262 ( 5.0)	38 ( 1.2)	265 ( 2.3)»	27 ( 1.0)««	258 ( 2.3)	23 ( 1.3)»	240 ( 2.0)
ALASKA†	27 ( 1.6)	286 ( 3.3)	48 ( 1.6)	280 ( 2.0)	17 ( 1.3)	270 ( 3.6)	8 ( 0.8)	258 ( 3.8)
ARIZONA	21 ( 1.1)»»	272 ( 2.5)	47 ( 1.2)	272 ( 1.4)»	22 ( 1.0)«	266 ( 1.7)»	10 ( 0.7)	251 ( 3.2)
ARKANSAS†	12 ( 0.8)»	264 ( 3.8)	42 ( 1.4)	270 ( 1.6)»»	28 ( 1.3)«	261 ( 1.8)	18 ( 1.0)	245 ( 1.9)
CALIFORNIA	18 ( 1.0)	274 ( 2.8)	45 ( 1.3)«	266 ( 2.0)»	24 ( 0.9)	259 ( 2.3)»	13 ( 0.9)»	245 ( 3.1)
COLORADO	21 ( 1.0)»	284 ( 2.0)»	50 ( 1.1)	279 ( 1.2)»	20 ( 0.9)«	269 ( 1.8)»	9 ( 0.7)	254 ( 2.6)
CONNECTICUT	19 ( 0.9)»	293 ( 1.7)»»	46 ( 1.1)«	284 ( 1.4)»	21 ( 0.9)«	273 ( 1.7)»»	13 ( 0.8)	256 ( 2.3)»»
DELAWARE	12 ( 0.7)	280 ( 3.2)	42 ( 1.0)	274 ( 1.4)»»	28 ( 1.0)«	263 ( 1.5)	19 ( 0.9)	249 ( 2.3)
DISTRICT OF COLUMBIA	9 ( 0.9)	245 ( 7.0)	26 ( 1.0)	237 ( 2.4)	30 ( 1.1)	234 ( 1.6)	35 ( 1.1)	226 ( 2.2)
FLORIDA	14 ( 0.8)	271 ( 3.8)»	42 ( 1.3)	271 ( 1.7)»	27 ( 0.8)	262 ( 1.8)»	17 ( 1.2)	243 ( 3.2)
GEORGIA	15 ( 0.8)»»	270 ( 3.6)	38 ( 1.4)	272 ( 2.0)»	27 ( 1.1)«	258 ( 1.6)	21 ( 1.2)»	246 ( 1.6)
HAWAII	16 ( 0.8)»»	257 ( 3.0)	41 ( 1.3)	266 ( 1.5)»	27 ( 1.1)«	264 ( 1.5)»	16 ( 1.1)««	253 ( 2.2)»»
INDIANA	16 ( 1.1)	283 ( 2.5)»	48 ( 1.2)	280 ( 1.6)»»	23 ( 1.2)«	274 ( 1.8)»»	13 ( 0.9)»»	253 ( 2.1)
IOWA†	18 ( 0.9)»	288 ( 2.1)	51 ( 1.2)	287 ( 1.5)»	21 ( 0.9)«	278 ( 1.5)	9 ( 0.8)»	272 ( 2.8)»
KENTUCKY	12 ( 0.7)»	272 ( 2.5)	43 ( 1.0)««	272 ( 1.5)»	28 ( 1.0)	263 ( 1.1)»»	16 ( 0.8)»	254 ( 1.9)»»
LOUISIANA	11 ( 0.7)	257 ( 2.8)»	34 ( 1.2)««	258 ( 2.1)»	28 ( 0.9)	255 ( 1.5)»	27 ( 1.0)»»	242 ( 1.7)
MAINE	23 ( 1.1)»	292 ( 1.9)»	50 ( 1.3)	286 ( 1.6)	19 ( 1.1)	278 ( 2.1)	8 ( 0.8)	268 ( 3.5)
MARYLAND†	11 ( 0.9)	294 ( 4.5)»	41 ( 1.3)	278 ( 2.3)»	28 ( 1.2)	264 ( 1.9)»	20 ( 1.2)	250 ( 2.2)»
MASSACHUSETTS	20 ( 1.5)	289 ( 2.7)	49 ( 1.1)	282 ( 1.7)	22 ( 1.1)	269 ( 2.1)	9 ( 0.9)	254 ( 2.9)
MICHIGAN†	16 ( 1.1)	288 ( 2.5)»	47 ( 1.3)	282 ( 1.8)»»	24 ( 1.1)	272 ( 2.1)»»	13 ( 1.1)	255 ( 3.0)»»
MINNESOTA	22 ( 1.1)»»	295 ( 2.2)»	52 ( 1.3)«	286 ( 1.2)»	18 ( 0.8)«	278 ( 2.1)»	8 ( 0.9)	255 ( 4.1)
MISSISSIPPI	10 ( 0.7)	254 ( 2.9)	33 ( 1.1)«	257 ( 1.6)	28 ( 1.2)	253 ( 1.4)»	29 ( 1.3)»	239 ( 1.6)»
MISSOURI	15 ( 0.8)»	281 ( 2.3)	46 ( 1.0)	278 ( 1.6)	24 ( 0.9)	272 ( 1.8)	15 ( 0.9)»	253 ( 2.3)
MONTANA†	23 ( 1.1)	290 ( 2.2)	53 ( 1.1)	286 ( 1.4)»	18 ( 1.2)	274 ( 2.6)	6 ( 0.6)	260 ( 3.2)
NEBRASKA	19 ( 0.8)»»	289 ( 2.2)»	50 ( 1.0)	287 ( 1.2)»»	22 ( 0.8)«	277 ( 1.6)»	9 ( 0.7)	261 ( 2.5)
NEW MEXICO	19 ( 0.9)»	267 ( 2.7)	48 ( 1.1)	266 ( 1.6)»	22 ( 0.9)««	258 ( 1.7)»	11 ( 0.8)	249 ( 2.2)
NEW YORK†	14 ( 1.1)	282 ( 3.2)»	46 ( 1.4)	278 ( 1.5)»	25 ( 1.2)	266 ( 2.3)»	14 ( 1.0)	247 ( 3.2)
NORTH CAROLINA	15 ( 0.8)»	279 ( 2.5)»»	44 ( 1.0)»	273 ( 1.6)»»	25 ( 1.0)««	264 ( 2.1)»»	16 ( 0.7)«	251 ( 2.2)»»
NORTH DAKOTA	19 ( 0.8)»	290 ( 1.8)	54 ( 1.1)	286 ( 1.2)»	19 ( 0.8)«	281 ( 1.6)»	8 ( 0.6)»	266 ( 3.3)
OREGON	24 ( 1.3)»	286 ( 2.0)»	47 ( 1.1)	278 ( 1.7)	19 ( 0.8)«	274 ( 1.9)»	11 ( 1.1)	257 ( 2.5)
RHODE ISLAND	16 ( 0.8)»	277 ( 2.0)»	49 ( 1.0)	274 ( 1.4)»	24 ( 1.0)«	262 ( 2.0)	11 ( 0.7)	254 ( 2.7)»
SOUTH CAROLINA†	13 ( 0.7)	270 ( 3.3)	37 ( 1.1)«	267 ( 1.9)	27 ( 0.9)«	261 ( 2.1)	24 ( 1.2)»	247 ( 1.8)
TENNESSEE	11 ( 0.7)	271 ( 3.5)	43 ( 1.3)	270 ( 1.7)»	28 ( 1.0)	261 ( 1.5)	18 ( 0.9)»	245 ( 2.3)
TEXAS	16 ( 0.9)»	279 ( 2.8)»	43 ( 1.2)	273 ( 1.8)»	25 ( 0.8)«	269 ( 1.9)»»	16 ( 1.0)»	254 ( 2.1)»»
UTAH	34 ( 1.1)»	283 ( 1.5)	48 ( 0.9)	277 ( 1.2)	13 ( 0.6)	269 ( 1.8)	5 ( 0.5)	251 ( 3.7)
VERMONT†	24 ( 1.2)	288 ( 1.8)	49 ( 1.3)	283 ( 1.0)	18 ( 1.0)	269 ( 2.1)	9 ( 0.7)	258 ( 3.6)
VIRGINIA	13 ( 0.8)	282 ( 2.7)	42 ( 1.1)	277 ( 1.7)»	26 ( 0.8)	267 ( 1.9)»	19 ( 1.2)»	252 ( 2.3)
WASHINGTON	22 ( 1.1)	286 ( 2.2)	49 ( 1.1)	278 ( 1.2)	20 ( 1.1)	273 ( 2.2)	9 ( 0.7)	254 ( 3.0)
WEST VIRGINIA	13 ( 0.6)»	268 ( 2.5)	45 ( 1.1)	270 ( 1.1)»»	27 ( 1.1)«	263 ( 1.5)»»	16 ( 0.9)	252 ( 2.2)»
WISCONSIN†	19 ( 0.9)»	290 ( 2.0)»	52 ( 1.3)	287 ( 1.5)»»	19 ( 0.9)«	276 ( 2.5)»	9 ( 0.9)	260 ( 3.8)
WYOMING	23 ( 0.8)»	280 ( 1.5)	50 ( 1.0)	276 ( 1.2)	17 ( 0.8)«	271 ( 1.7)	9 ( 0.7)	263 ( 3.0)»
<b>Other Jurisdictions</b>								
DDESS	10 ( 1.2)	... ( ... )	38 ( 1.9)	275 ( 3.4)	31 ( 1.6)	268 ( 2.7)	21 ( 1.5)	251 ( 4.5)
DoDDS	15 ( 0.8)	284 ( 2.5)	42 ( 1.0)	280 ( 1.3)	28 ( 1.1)	271 ( 1.3)	15 ( 0.9)	258 ( 2.5)
GUAM	21 ( 1.4)	229 ( 3.8)»	41 ( 1.6)	242 ( 2.2)»	22 ( 1.3)	246 ( 3.3)	17 ( 1.3)	235 ( 5.2)

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).

... Characteristics of the sample do not permit a reliable estimate.

» («) The value for the students was significantly higher (lower) than in the 1990 assessment at about the 95% confidence level using appropriate multiple comparison procedures.

> (<) The value for the students was significantly higher (lower) than in the 1992 assessment at about the 95% confidence level using appropriate multiple comparison procedures.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 7.12**

**1992 Mathematics Assessment**



POPULATION:

1992 Grade 8 Public School Students

REPORTED STATISTICS:

Percentage of Students and Average Mathematics Scale Score

SCHOOLS' REPORTS ON:

Parental Support

*How would you characterize parental support for student achievement within your school?*

**Somewhat to Very Negative**

**Somewhat Positive**

**Very Positive**

**JURISDICTIONS**

PCT ( SE )

SS ( SE )

PCT ( SE )

SS ( SE )

PCT ( SE )

SS ( SE )

**Nation**

NATION	10 ( 2.3)	258 ( 2.4)!	62 ( 3.2)	265 ( 1.2)	28 ( 3.0)	276 ( 2.1)
NORTHEAST	6 ( 2.3)	... ( ... )	67 ( 7.8)	265 ( 3.0)	27 ( 7.5)	279 ( 5.8)!
SOUTHEAST	11 ( 6.3)	253 ( 5.9)!	61 ( 6.1)	255 ( 1.8)	28 ( 4.6)	272 ( 3.2)
CENTRAL	14 ( 4.8)	... ( ... )	61 ( 7.9)	273 ( 2.8)	25 ( 7.9)	279 ( 2.3)!
WEST	9 ( 3.6)	257 ( 5.3)!	60 ( 4.8)	266 ( 2.5)	31 ( 5.1)	277 ( 4.1)

**States**

ALABAMA	23 ( 4.4)	245 ( 3.5)	65 ( 4.7)	252 ( 2.1)	12 ( 3.4)	266 ( 5.5)!
ALASKA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
ARIZONA	9 ( 2.7)	256 ( 3.3)!	56 ( 5.5)	262 ( 1.8)	35 ( 5.4)	272 ( 2.3)
ARKANSAS	16 ( 4.3)	248 ( 3.5)!	67 ( 5.4)	258 ( 1.5)	17 ( 3.4)	262 ( 3.3)
CALIFORNIA	9 ( 2.8)	240 ( 4.2)!	58 ( 4.4)	259 ( 2.2)	33 ( 4.1)	272 ( 3.0)
COLORADO	9 ( 2.6)	259 ( 4.4)!	49 ( 4.6)	270 ( 1.8)	42 ( 4.6)	277 ( 1.5)
CONNECTICUT	9 ( 2.9)	261 ( 5.1)!	51 ( 4.9)	270 ( 2.6)	41 ( 4.4)	282 ( 2.9)
DELAWARE	0 ( ... )	... ( ... )	63 ( 0.3)	261 ( 1.3)	37 ( 0.3)	266 ( 1.3)
DISTRICT OF COLUMBIA	21 ( 0.5)	231 ( 2.0)	51 ( 0.4)	226 ( 1.3)	28 ( 0.7)	243 ( 1.2)
FLORIDA	6 ( 2.8)	261 ( 4.3)!	64 ( 5.3)	256 ( 2.0)	29 ( 4.8)	269 ( 2.9)
GEORGIA	18 ( 4.6)	256 ( 3.3)!	56 ( 5.5)	257 ( 1.9)	25 ( 4.7)	268 ( 3.2)
HAWAII	11 ( 0.2)	257 ( 2.1)	59 ( 0.3)	255 ( 1.0)	29 ( 0.3)	264 ( 1.8)
INDIANA	13 ( 3.6)	256 ( 4.7)!	58 ( 4.5)	270 ( 1.7)	30 ( 5.2)	276 ( 2.2)
IOWA	6 ( 2.4)	270 ( 4.9)!	59 ( 4.9)	283 ( 1.2)	35 ( 4.9)	287 ( 1.8)
KENTUCKY	18 ( 3.8)	256 ( 2.4)!	63 ( 4.7)	261 ( 1.4)	18 ( 4.0)	273 ( 2.9)!
LOUISIANA	19 ( 4.2)	244 ( 3.2)!	66 ( 5.2)	248 ( 2.0)	15 ( 3.8)	266 ( 5.3)!
MAINE	9 ( 2.2)	282 ( 4.1)!	65 ( 5.3)	276 ( 1.0)	27 ( 5.0)	283 ( 2.5)
MARYLAND	13 ( 3.0)	248 ( 4.3)!	52 ( 4.6)	262 ( 2.1)	35 ( 4.7)	275 ( 3.0)
MASSACHUSETTS	5 ( 2.6)	... ( ... )	63 ( 4.4)	269 ( 1.7)	32 ( 3.8)	285 ( 1.7)
MICHIGAN	10 ( 3.0)	268 ( 2.0)!	65 ( 4.8)	263 ( 1.8)	25 ( 4.1)	278 ( 4.3)
MINNESOTA	1 ( ... )	... ( ... )	63 ( 4.7)	281 ( 1.2)	36 ( 4.6)	284 ( 1.8)
MISSISSIPPI	16 ( 3.5)	244 ( 3.2)!	71 ( 3.9)	245 ( 1.6)	13 ( 3.0)	258 ( 3.3)!
MISSOURI	12 ( 3.6)	260 ( 5.3)!	67 ( 4.9)	272 ( 1.3)	20 ( 4.2)	275 ( 2.4)!
MONTANA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
NEBRASKA	6 ( 2.7)	273 ( 6.7)!	54 ( 4.7)	277 ( 1.5)	40 ( 4.6)	280 ( 1.5)
NEW MEXICO	13 ( 3.0)	251 ( 2.2)!	53 ( 4.4)	258 ( 1.5)	34 ( 4.1)	266 ( 1.3)
NEW YORK	10 ( 3.3)	250 ( 8.0)!	62 ( 4.8)	264 ( 2.9)	28 ( 4.5)	280 ( 3.1)
NORTH CAROLINA	12 ( 3.5)	249 ( 4.0)!	70 ( 4.6)	258 ( 1.4)	18 ( 3.3)	265 ( 3.0)
NORTH DAKOTA	6 ( 1.7)	279 ( 3.1)!	53 ( 4.5)	280 ( 1.4)	41 ( 4.6)	287 ( 1.4)
OREGON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
RHODE ISLAND	7 ( 0.1)	242 ( 1.9)	60 ( 0.2)	267 ( 0.9)	33 ( 0.2)	271 ( 1.4)
SOUTH CAROLINA	16 ( 3.5)	252 ( 3.0)!	61 ( 5.0)	259 ( 1.4)	23 ( 3.9)	272 ( 2.0)
TENNESSEE	15 ( 3.3)	256 ( 2.0)!	66 ( 4.7)	258 ( 1.7)	19 ( 4.2)	265 ( 4.1)!
TEXAS	16 ( 2.7)	252 ( 3.2)	59 ( 5.1)	263 ( 1.7)	25 ( 4.5)	275 ( 4.3)
UTAH	10 ( 3.7)	268 ( 2.2)!	48 ( 4.5)	273 ( 1.0)	41 ( 4.2)	278 ( 1.2)
VERMONT	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
VIRGINIA	11 ( 3.0)	259 ( 4.3)!	57 ( 4.8)	264 ( 1.7)	32 ( 4.7)	278 ( 2.3)
WASHINGTON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
WEST VIRGINIA	16 ( 3.8)	255 ( 1.6)!	62 ( 4.8)	258 ( 1.4)	22 ( 3.8)	264 ( 2.4)
WISCONSIN	8 ( 2.3)	253 ( 5.2)!	60 ( 5.8)	278 ( 1.9)	32 ( 5.2)	284 ( 2.4)
WYOMING	2 ( 1.3)	... ( ... )	73 ( 3.7)	275 ( 1.1)	25 ( 3.4)	275 ( 1.4)

**Other Jurisdictions**

DDESS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
DoDDS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
GUAM	87 ( 0.3)	237 ( 1.3)	13 ( 0.3)	216 ( 3.4)	0 ( ... )	... ( ... )

— State or other jurisdiction did not participate in the NAEP assessment year presented in this table.

... Characteristics of the sample do not permit a reliable estimate.

! Interpret with caution — the nature of the sample does not allow accurate determination of the variability of this statistic.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.



**TABLE 7.12** (continued) **1996 Mathematics Assessment**



POPULATION: **1996 Grade 8 Public School Students**  
 REPORTED STATISTICS: **Percentage of Students and Average Mathematics Scale Score**  
 SCHOOLS' REPORTS ON: **Parental Support**

*How would you characterize parental support for student achievement within your school?*

**Somewhat to Very Negative**

**Somewhat Positive**

**Very Positive**

**JURISDICTIONS**

PCT ( SE )

SS ( SE )

PCT ( SE )

SS ( SE )

PCT ( SE )

SS ( SE )

**Nation**

NATION	7 ( 2.3)	271 ( 3.4)!	57 ( 4.8)	268 ( 1.5)	35 ( 4.5)	277 ( 2.7)
NORTHEAST	13 ( 6.8)	... ( ... )	54 ( 9.9)	277 ( 3.1)	34 ( 9.9)	277 (11.4)!
SOUTHEAST	4 ( ... )	... ( ... )	61 ( 5.7)	258 ( 2.8)	35 ( 6.4)	279 ( 3.5)!
CENTRAL	7 ( 4.5)	... ( ... )	58 (12.2)	272 ( 3.9)!	35 (10.1)	285 ( 4.1)!
WEST	6 ( 2.7)	269 ( 6.3)!	57 ( 8.9)	269 ( 3.0)	37 ( 8.0)	270 ( 4.7)!

**States**

ALABAMA	14 ( 3.9)	235 ( 5.7)!	68 ( 4.7)	259 ( 2.0)	18 ( 2.9)	271 ( 7.7)
ALASKA†	6 ( 2.7)	250 (13.8)!	48 ( 3.0)	279 ( 2.5)	46 ( 2.6)	282 ( 3.4)
ARIZONA	4 ( 1.4)	257 ( 3.0)!	50 ( 5.9)	262 ( 2.1)	46 ( 5.9)	277 ( 1.5)
ARKANSAS†	10 ( 3.4)	252 ( 5.2)!	61 ( 5.8)	262 ( 1.5)	29 ( 5.6)	267 ( 4.5)
CALIFORNIA	9 ( 3.4)	250 ( 5.3)!	54 ( 5.1)	256 ( 2.5)	37 ( 5.3)	274 ( 3.5)
COLORADO	8 ( 2.2)	261 ( 1.8)!	44 ( 4.5)	270 ( 1.9)	48 ( 4.4)	283 ( 1.9)
CONNECTICUT	3 ( 1.2)	... ( ... )	61 ( 4.6)	274 ( 1.8)	37 ( 4.5)	291 ( 2.4)
DELAWARE	3 ( 0.1)	... ( ... )	66 ( 0.5)>	266 ( 1.3)>	31 ( 0.4)<	268 ( 1.9)
DISTRICT OF COLUMBIA	18 ( 0.4)<	216 ( 4.5)	52 ( 0.8)	228 ( 1.8)	29 ( 0.7)	251 ( 2.5)
FLORIDA	10 ( 3.7)	247 (10.1)!	56 ( 5.4)	261 ( 2.1)	34 ( 4.7)	272 ( 4.0)
GEORGIA	10 ( 3.4)	240 ( 4.5)!	62 ( 5.7)	260 ( 2.4)	28 ( 5.2)	274 ( 3.5)
HAWAII	4 ( 0.1)<	... ( ... )	84 ( 0.3)>	262 ( 1.1)>	12 ( 0.3)<	273 ( 1.9)>
INDIANA	6 ( 2.5)	267 ( 9.1)!	52 ( 6.0)	273 ( 2.4)	42 ( 5.6)	281 ( 2.3)
IOWA†	2 ( 1.5)	... ( ... )	68 ( 4.6)	282 ( 1.6)	30 ( 4.4)	288 ( 2.3)
KENTUCKY	10 ( 3.3)	267 ( 3.4)!	69 ( 5.3)	265 ( 1.3)	21 ( 4.5)	274 ( 3.9)!
LOUISIANA	24 ( 5.4)	245 ( 4.3)!	56 ( 6.0)	254 ( 2.1)	20 ( 4.2)	259 ( 4.3)!
MAINE	8 ( 2.8)	274 ( 3.9)!	71 ( 3.6)	283 ( 1.2)>	21 ( 3.2)	290 ( 2.3)
MARYLAND†	5 ( 2.4)	... ( ... )	66 ( 6.4)	266 ( 2.3)	29 ( 6.3)	282 ( 5.9)!
MASSACHUSETTS	4 ( 2.3)	... ( ... )	61 ( 5.5)	271 ( 2.3)	35 ( 5.2)	293 ( 2.7)
MICHIGAN†	5 ( 2.7)	... ( ... )	61 ( 5.6)	272 ( 2.5)	33 ( 5.4)	286 ( 4.0)
MINNESOTA	5 ( 2.1)	277 ( 6.0)!	46 ( 5.7)	283 ( 1.5)	50 ( 5.4)	288 ( 2.5)
MISSISSIPPI	14 ( 3.4)	243 ( 3.9)!	66 ( 4.8)	250 ( 1.7)	19 ( 3.8)	256 ( 3.1)!
MISSOURI	9 ( 3.1)	253 ( 8.2)!	68 ( 4.7)	272 ( 1.6)	24 ( 4.1)	280 ( 3.5)
MONTANA†	3 ( 1.8)	... ( ... )	61 ( 4.6)	283 ( 1.5)	36 ( 4.1)	285 ( 2.1)
NEBRASKA	3 ( 1.4)	281 ( 5.3)!	58 ( 3.5)	280 ( 1.5)	39 ( 3.3)	286 ( 1.2)
NEW MEXICO	12 ( 2.2)	257 ( 4.6)	54 ( 3.9)	260 ( 1.9)	34 ( 3.6)	271 ( 2.4)
NEW YORK†	4 ( 2.2)	... ( ... )	65 ( 6.2)	269 ( 3.2)	31 ( 6.0)	274 ( 4.2)!
NORTH CAROLINA	10 ( 3.2)	254 ( 5.4)!	72 ( 4.7)	268 ( 1.5)>	18 ( 4.1)	274 ( 3.2)!
NORTH DAKOTA	2 ( 0.8)	... ( ... )	53 ( 2.7)	284 ( 1.4)	45 ( 2.6)	284 ( 1.3)
OREGON	12 ( 3.8)	266 ( 3.2)!	53 ( 4.9)	273 ( 1.8)	35 ( 5.0)	284 ( 2.7)
RHODE ISLAND	7 ( 0.3)	... ( ... )	67 ( 0.5)>	267 ( 1.2)	27 ( 0.4)<	273 ( 1.4)
SOUTH CAROLINA†	11 ( 3.5)	251 ( 2.8)!	65 ( 5.7)	261 ( 2.2)	24 ( 4.9)	267 ( 4.0)!
TENNESSEE	7 ( 2.7)	248 ( 6.8)!	70 ( 5.2)	261 ( 1.7)	23 ( 4.3)	277 ( 3.8)
TEXAS	7 ( 2.8)	254 ( 7.0)!	61 ( 5.5)	267 ( 2.0)	32 ( 5.4)	285 ( 2.9)
UTAH	5 ( 1.5)	... ( ... )	56 ( 2.9)	276 ( 1.2)	39 ( 3.5)	280 ( 1.3)
VERMONT†	6 ( 1.9)	274 ( 3.0)!	61 ( 3.1)	276 ( 1.1)	33 ( 2.6)	284 ( 1.5)
VIRGINIA	1 ( ... )	... ( ... )	62 ( 4.3)	264 ( 1.9)	37 ( 4.4)	281 ( 2.4)
WASHINGTON	13 ( 3.9)	263 ( 4.1)!	46 ( 4.2)	274 ( 2.0)	41 ( 5.0)	280 ( 2.6)
WEST VIRGINIA	13 ( 3.0)	257 ( 2.5)!	64 ( 4.5)	264 ( 1.4)>	23 ( 4.0)	269 ( 2.5)
WISCONSIN†	6 ( 2.6)	272 ( 5.9)!	59 ( 5.8)	280 ( 2.3)	35 ( 5.9)	289 ( 2.5)
WYOMING	7 ( 1.0)	269 ( 4.4)	72 ( 1.2)	276 ( 1.0)	21 ( 0.5)	273 ( 1.6)

**Other Jurisdictions**

DDESS	0 ( ... )	... ( ... )	55 ( 1.6)	265 ( 4.0)	45 ( 1.6)	274 ( 3.5)
DoDDS	1 ( 0.1)	... ( ... )	69 ( 0.4)	274 ( 1.3)	30 ( 0.4)	277 ( 1.9)
GUAM	42 ( 0.9)<	243 ( 2.5)	58 ( 0.9)>	231 ( 2.4)>	0 ( ... )	... ( ... )

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).  
 ... Characteristics of the sample do not permit a reliable estimate.  
 > (<) The value for the students was significantly higher (lower) than in the 1992 assessment at about the 95% confidence level using appropriate multiple comparison procedures.  
 ! Interpret with caution — the nature of the sample does not allow accurate determination of the variability of this statistic.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 7.13**

**1992 Mathematics Assessment**



POPULATION:

1992 Grade 8 Public School Students

REPORTED STATISTICS:

Percentage of Students and Average Mathematics Scale Score

STUDENTS' REPORTS ON:

Mobility

*Within the past two years, how many times have you changed schools because you changed where you lived?*

	None		One		Two		Three or More	
JURISDICTIONS	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )
<b>Nation</b>								
NATION	78 ( 0.7 )	271 ( 1.0 )	14 ( 0.5 )	262 ( 1.8 )	5 ( 0.4 )	250 ( 2.9 )	4 ( 0.3 )	245 ( 2.3 )
NORTHEAST	81 ( 1.3 )	272 ( 3.0 )	13 ( 1.1 )	258 ( 4.6 )	3 ( 0.7 )	... ( ... )	2 ( 0.5 )	... ( ... )
SOUTHEAST	76 ( 1.5 )	262 ( 1.4 )	14 ( 0.8 )	258 ( 2.6 )	6 ( 1.1 )	246 ( 4.8 )	4 ( 0.6 )	241 ( 3.5 )
CENTRAL	82 ( 0.7 )	277 ( 2.1 )	12 ( 0.6 )	266 ( 3.8 )	3 ( 0.6 )	... ( ... )	3 ( 0.7 )	... ( ... )
WEST	74 ( 1.5 )	271 ( 2.1 )	16 ( 1.0 )	264 ( 3.3 )	5 ( 0.5 )	254 ( 5.8 )	5 ( 0.6 )	249 ( 3.4 )
<b>States</b>								
ALABAMA	77 ( 0.8 )	254 ( 1.7 )	14 ( 0.8 )	250 ( 2.5 )	5 ( 0.4 )	250 ( 4.2 )	4 ( 0.5 )	243 ( 4.0 )
ALASKA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
ARIZONA	71 ( 1.2 )	268 ( 1.2 )	17 ( 0.9 )	262 ( 2.3 )	7 ( 0.5 )	258 ( 4.3 )	5 ( 0.5 )	259 ( 3.2 )
ARKANSAS	76 ( 1.0 )	259 ( 1.2 )	14 ( 0.7 )	249 ( 2.3 )	6 ( 0.6 )	248 ( 3.0 )	5 ( 0.5 )	250 ( 4.0 )
CALIFORNIA	73 ( 1.5 )	266 ( 1.7 )	17 ( 1.1 )	256 ( 2.6 )	5 ( 0.5 )	252 ( 3.4 )	5 ( 0.6 )	241 ( 4.1 )
COLORADO	74 ( 0.7 )	276 ( 1.0 )	15 ( 0.6 )	265 ( 2.1 )	5 ( 0.4 )	265 ( 2.4 )	5 ( 0.4 )	254 ( 3.1 )
CONNECTICUT	81 ( 1.0 )	278 ( 1.0 )	13 ( 0.8 )	265 ( 2.3 )	3 ( 0.3 )	252 ( 4.3 )	3 ( 0.4 )	... ( ... )
DELAWARE	74 ( 0.9 )	267 ( 1.0 )	16 ( 0.8 )	256 ( 2.8 )	5 ( 0.5 )	248 ( 4.2 )	4 ( 0.4 )	251 ( 4.9 )
DISTRICT OF COLUMBIA	75 ( 1.2 )	239 ( 1.2 )	16 ( 1.1 )	229 ( 2.4 )	5 ( 0.6 )	225 ( 3.9 )	4 ( 0.4 )	221 ( 5.9 )
FLORIDA	69 ( 1.2 )	263 ( 1.5 )	19 ( 0.8 )	258 ( 2.2 )	7 ( 0.6 )	254 ( 3.4 )	5 ( 0.5 )	252 ( 3.2 )
GEORGIA	76 ( 1.1 )	262 ( 1.3 )	15 ( 0.9 )	255 ( 2.1 )	6 ( 0.5 )	257 ( 3.7 )	4 ( 0.4 )	248 ( 3.6 )
HAWAII	74 ( 1.0 )	261 ( 1.0 )	16 ( 0.7 )	255 ( 2.1 )	5 ( 0.5 )	246 ( 4.6 )	5 ( 0.4 )	243 ( 4.4 )
INDIANA	81 ( 0.9 )	272 ( 1.2 )	12 ( 0.6 )	266 ( 2.5 )	4 ( 0.4 )	259 ( 4.0 )	3 ( 0.3 )	253 ( 4.5 )
IOWA	86 ( 0.7 )	285 ( 1.0 )	10 ( 0.6 )	280 ( 2.1 )	2 ( 0.4 )	267 ( 4.3 )	2 ( 0.3 )	... ( ... )
KENTUCKY	80 ( 0.8 )	264 ( 1.2 )	12 ( 0.7 )	259 ( 2.0 )	4 ( 0.4 )	253 ( 3.2 )	3 ( 0.4 )	246 ( 3.8 )
LOUISIANA	77 ( 1.1 )	252 ( 1.7 )	14 ( 0.8 )	246 ( 2.5 )	5 ( 0.4 )	246 ( 4.2 )	4 ( 0.4 )	245 ( 3.5 )
MAINE	86 ( 0.8 )	280 ( 0.9 )	9 ( 0.6 )	274 ( 2.4 )	3 ( 0.3 )	269 ( 4.3 )	2 ( 0.3 )	... ( ... )
MARYLAND	78 ( 1.4 )	268 ( 1.4 )	14 ( 0.9 )	261 ( 2.7 )	5 ( 0.5 )	254 ( 3.9 )	3 ( 0.4 )	246 ( 4.5 )
MASSACHUSETTS	86 ( 0.7 )	275 ( 1.1 )	10 ( 0.6 )	263 ( 2.4 )	2 ( 0.3 )	... ( ... )	2 ( 0.3 )	... ( ... )
MICHIGAN	80 ( 1.0 )	271 ( 1.5 )	13 ( 0.8 )	258 ( 2.3 )	4 ( 0.3 )	254 ( 3.8 )	4 ( 0.4 )	246 ( 4.3 )
MINNESOTA	85 ( 0.8 )	285 ( 0.9 )	10 ( 0.7 )	275 ( 2.3 )	2 ( 0.4 )	... ( ... )	2 ( 0.3 )	... ( ... )
MISSISSIPPI	79 ( 0.9 )	248 ( 1.3 )	13 ( 0.8 )	241 ( 2.3 )	5 ( 0.5 )	247 ( 3.3 )	3 ( 0.4 )	247 ( 4.3 )
MISSOURI	79 ( 0.8 )	274 ( 1.1 )	13 ( 0.7 )	268 ( 2.6 )	4 ( 0.4 )	253 ( 3.7 )	4 ( 0.3 )	257 ( 2.8 )
MONTANA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
NEBRASKA	82 ( 1.0 )	280 ( 1.2 )	12 ( 0.7 )	273 ( 1.9 )	3 ( 0.5 )	267 ( 5.0 )	3 ( 0.4 )	253 ( 4.2 )
NEW MEXICO	75 ( 0.9 )	262 ( 0.9 )	15 ( 0.7 )	258 ( 2.0 )	5 ( 0.4 )	253 ( 3.2 )	4 ( 0.4 )	250 ( 3.2 )
NEW YORK	83 ( 0.9 )	270 ( 1.9 )	12 ( 0.8 )	259 ( 3.6 )	3 ( 0.5 )	... ( ... )	2 ( 0.3 )	... ( ... )
NORTH CAROLINA	78 ( 1.0 )	261 ( 1.2 )	13 ( 0.7 )	255 ( 2.0 )	4 ( 0.4 )	249 ( 3.4 )	5 ( 0.5 )	245 ( 3.5 )
NORTH DAKOTA	86 ( 0.9 )	285 ( 1.2 )	11 ( 0.7 )	277 ( 1.9 )	2 ( 0.3 )	... ( ... )	1 ( 0.3 )	... ( ... )
OREGON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
RHODE ISLAND	81 ( 1.3 )	268 ( 0.8 )	13 ( 1.1 )	261 ( 2.1 )	3 ( 0.4 )	253 ( 5.0 )	2 ( 0.3 )	... ( ... )
SOUTH CAROLINA	78 ( 1.0 )	262 ( 1.0 )	14 ( 0.8 )	259 ( 2.1 )	5 ( 0.5 )	254 ( 3.5 )	4 ( 0.4 )	252 ( 3.6 )
TENNESSEE	79 ( 1.0 )	262 ( 1.5 )	12 ( 0.8 )	250 ( 2.4 )	5 ( 0.5 )	248 ( 3.2 )	4 ( 0.4 )	251 ( 3.1 )
TEXAS	74 ( 0.9 )	268 ( 1.4 )	16 ( 0.5 )	261 ( 2.2 )	6 ( 0.5 )	252 ( 3.5 )	4 ( 0.5 )	249 ( 3.3 )
UTAH	80 ( 0.8 )	276 ( 0.7 )	12 ( 0.6 )	270 ( 2.1 )	4 ( 0.4 )	271 ( 3.2 )	4 ( 0.4 )	257 ( 3.9 )
VERMONT	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
VIRGINIA	75 ( 1.2 )	270 ( 1.3 )	15 ( 0.8 )	265 ( 2.2 )	6 ( 0.6 )	261 ( 3.3 )	4 ( 0.4 )	260 ( 3.1 )
WASHINGTON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
WEST VIRGINIA	85 ( 0.7 )	261 ( 1.1 )	10 ( 0.7 )	254 ( 2.5 )	3 ( 0.3 )	249 ( 3.3 )	3 ( 0.3 )	249 ( 3.8 )
WISCONSIN	84 ( 0.8 )	280 ( 1.4 )	11 ( 0.7 )	277 ( 2.6 )	2 ( 0.4 )	259 ( 4.8 )	2 ( 0.3 )	249 ( 5.6 )
WYOMING	78 ( 0.9 )	277 ( 0.9 )	13 ( 0.7 )	273 ( 1.8 )	5 ( 0.5 )	270 ( 3.2 )	4 ( 0.4 )	258 ( 3.9 )
<b>Other Jurisdictions</b>								
DDESS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
DoDDS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
GUAM	69 ( 1.3 )	240 ( 1.2 )	17 ( 1.0 )	238 ( 2.1 )	7 ( 0.7 )	240 ( 4.7 )	7 ( 0.8 )	230 ( 4.5 )

— State or other jurisdiction did not participate in the NAEP assessment year presented in this table.

... Characteristics of the sample do not permit a reliable estimate.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.



**TABLE 7.13** (continued)

**1996 Mathematics Assessment**



POPULATION:

1996 Grade 8 Public School Students

REPORTED STATISTICS:

Percentage of Students and Average Mathematics Scale Score

STUDENTS' REPORTS ON:

Mobility

Within the past two years, how many times have you changed schools because you changed where you lived?

JURISDICTIONS	None		One		Two		Three or More	
	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )
<b>Nation</b>								
NATION	74 ( 0.7)<	276 ( 1.1)>	14 ( 0.5)	262 ( 2.0)	5 ( 0.4)	253 ( 2.7)	6 ( 0.3)>	254 ( 2.6)>
NORTHEAST	80 ( 1.2)	280 ( 3.7)	11 ( 0.8)	265 ( 5.2)	4 ( 0.5)	... ( ... )	5 ( 0.7)	... ( ... )
SOUTHEAST	72 ( 1.8)	268 ( 2.7)	14 ( 1.1)	259 ( 4.4)	7 ( 1.1)	249 ( 5.9)!	7 ( 0.6)	250 ( 5.1)
CENTRAL	80 ( 1.9)	280 ( 2.8)	11 ( 0.9)	267 ( 4.7)	3 ( 0.7)	... ( ... )	6 ( 0.7)	... ( ... )
WEST	68 ( 1.0)	275 ( 2.1)	18 ( 0.7)	261 ( 3.7)	7 ( 0.5)	253 ( 3.2)	8 ( 0.8)>	257 ( 3.7)
<b>States</b>								
ALABAMA	74 ( 1.1)	260 ( 2.3)	15 ( 0.7)	252 ( 2.8)	6 ( 0.6)	246 ( 3.8)	4 ( 0.3)	246 ( 4.1)
ALASKA†	67 ( 1.2)	284 ( 1.7)	18 ( 1.2)	279 ( 3.0)	6 ( 0.6)	256 ( 6.8)	9 ( 0.8)	259 ( 4.4)
ARIZONA	66 ( 1.1)<	272 ( 1.3)	19 ( 1.2)	269 ( 3.1)	7 ( 0.6)	258 ( 2.6)	8 ( 0.7)>	250 ( 3.2)
ARKANSAS†	74 ( 1.2)	265 ( 1.5)>	14 ( 0.9)	261 ( 2.6)>	6 ( 0.5)	250 ( 3.3)	6 ( 0.8)	246 ( 4.3)
CALIFORNIA	67 ( 1.3)<	270 ( 1.8)	17 ( 1.1)	257 ( 2.7)	8 ( 0.6)>	252 ( 3.8)	8 ( 0.8)>	243 ( 3.1)
COLORADO	67 ( 1.3)<	280 ( 1.3)	18 ( 1.0)>	275 ( 2.3)>	7 ( 0.5)	265 ( 2.6)	8 ( 0.8)>	261 ( 2.8)
CONNECTICUT	80 ( 1.0)	285 ( 1.1)>	11 ( 0.7)	267 ( 2.7)	4 ( 0.5)	257 ( 3.0)	4 ( 0.4)>	244 ( 3.4)
DELAWARE	72 ( 1.0)	271 ( 1.3)	17 ( 0.9)	262 ( 2.8)	6 ( 0.5)	253 ( 4.8)	5 ( 0.6)	245 ( 3.9)
DISTRICT OF COLUMBIA	68 ( 1.2)<	240 ( 1.3)	16 ( 1.0)	227 ( 3.6)	7 ( 0.6)	221 ( 4.0)	16 ( 0.7)	215 ( 4.3)
FLORIDA	67 ( 1.3)	270 ( 1.7)>	17 ( 0.8)	258 ( 2.7)	7 ( 0.6)	248 ( 3.1)	9 ( 0.7)>	249 ( 4.6)
GEORGIA	70 ( 1.1)<	267 ( 1.8)	17 ( 0.7)	260 ( 2.6)	7 ( 0.5)	251 ( 2.6)	7 ( 0.6)>	244 ( 4.2)
HAWAII	69 ( 0.9)<	266 ( 1.2)>	16 ( 0.8)	260 ( 2.6)	7 ( 0.6)>	257 ( 3.2)	7 ( 0.6)>	246 ( 3.5)
INDIANA	77 ( 1.2)<	280 ( 1.4)>	13 ( 0.8)	266 ( 2.5)	4 ( 0.5)	257 ( 4.2)	6 ( 0.6)>	251 ( 3.4)
IOWA†	83 ( 1.0)	287 ( 1.2)	11 ( 0.9)	273 ( 2.6)	3 ( 0.4)	... ( ... )	4 ( 0.5)>	269 ( 4.5)
KENTUCKY	79 ( 1.0)	270 ( 1.1)>	12 ( 0.8)	264 ( 2.9)	5 ( 0.4)	254 ( 4.3)	5 ( 0.3)	251 ( 3.9)
LOUISIANA	73 ( 1.1)<	256 ( 1.6)	15 ( 0.8)	248 ( 2.2)	6 ( 0.6)	240 ( 3.7)	7 ( 0.6)>	240 ( 2.4)
MAINE	83 ( 0.9)	286 ( 1.5)>	9 ( 0.7)	280 ( 2.7)	4 ( 0.4)	271 ( 5.2)	4 ( 0.3)>	270 ( 4.0)
MARYLAND†	71 ( 1.3)<	277 ( 1.9)>	16 ( 1.0)	263 ( 3.9)	6 ( 0.6)	250 ( 4.6)	7 ( 0.7)>	245 ( 3.5)
MASSACHUSETTS	82 ( 1.0)<	282 ( 1.6)>	12 ( 0.8)	266 ( 3.0)	3 ( 0.4)>	258 ( 5.0)	3 ( 0.4)	... ( ... )
MICHIGAN†	76 ( 1.1)<	282 ( 1.7)>	15 ( 0.9)	267 ( 2.9)	4 ( 0.5)	260 ( 4.7)	5 ( 0.5)>	252 ( 3.4)
MINNESOTA	82 ( 0.8)<	288 ( 1.3)	11 ( 0.7)	276 ( 2.6)	3 ( 0.4)	263 ( 5.9)	3 ( 0.5)	257 ( 5.1)
MISSISSIPPI	73 ( 1.1)<	252 ( 1.1)	15 ( 0.8)	247 ( 2.6)	5 ( 0.5)	245 ( 4.1)	6 ( 0.6)>	243 ( 2.8)
MISSOURI	74 ( 1.1)<	277 ( 1.3)	15 ( 0.8)	271 ( 2.4)	5 ( 0.5)	258 ( 3.5)	6 ( 0.5)>	256 ( 3.8)
MONTANA†	74 ( 1.2)	287 ( 1.3)	15 ( 1.0)	278 ( 3.1)	5 ( 0.7)	269 ( 4.3)	6 ( 0.5)	264 ( 4.2)
NEBRASKA	79 ( 0.9)	286 ( 1.1)>	12 ( 0.8)	274 ( 2.3)	4 ( 0.5)	267 ( 3.7)	4 ( 0.4)	261 ( 3.0)
NEW MEXICO	68 ( 1.3)<	266 ( 1.2)>	17 ( 0.9)	260 ( 2.4)	8 ( 0.7)>	251 ( 3.1)	7 ( 0.5)>	250 ( 2.8)
NEW YORK†	81 ( 1.2)	275 ( 1.6)	11 ( 0.9)	258 ( 3.2)	3 ( 0.5)	... ( ... )	5 ( 0.6)>	253 ( 4.5)
NORTH CAROLINA	73 ( 1.1)<	272 ( 1.4)>	15 ( 0.9)	262 ( 2.6)	5 ( 0.5)	254 ( 3.5)	6 ( 0.5)>	254 ( 3.2)
NORTH DAKOTA	82 ( 1.0)<	287 ( 1.0)	10 ( 0.6)	278 ( 3.0)	3 ( 0.4)	264 ( 4.7)	4 ( 0.5)>	269 ( 3.9)
OREGON	70 ( 1.3)	283 ( 1.5)	15 ( 0.9)	272 ( 1.8)	7 ( 0.5)	263 ( 4.1)	8 ( 0.6)	258 ( 2.8)
RHODE ISLAND	80 ( 1.0)	273 ( 1.0)>	12 ( 0.8)	262 ( 2.8)	4 ( 0.4)	254 ( 3.8)	4 ( 0.5)>	248 ( 6.0)
SOUTH CAROLINA†	75 ( 1.3)	264 ( 1.6)	15 ( 0.9)	254 ( 2.4)	5 ( 0.5)	256 ( 4.6)	6 ( 0.7)>	249 ( 3.6)
TENNESSEE	74 ( 1.2)<	267 ( 1.4)	14 ( 0.9)	255 ( 2.8)	5 ( 0.5)	253 ( 4.1)	6 ( 0.6)>	247 ( 3.9)
TEXAS	66 ( 1.4)<	275 ( 1.4)>	18 ( 1.1)	268 ( 3.0)	9 ( 0.6)>	256 ( 4.0)	8 ( 0.8)>	258 ( 3.0)
UTAH	76 ( 1.0)<	279 ( 1.1)	14 ( 0.7)	274 ( 1.8)	5 ( 0.6)	270 ( 4.0)	5 ( 0.4)	264 ( 3.4)
VERMONT†	81 ( 0.9)	283 ( 1.1)	11 ( 0.8)	269 ( 2.3)	3 ( 0.4)	264 ( 4.8)	5 ( 0.7)	254 ( 4.1)
VIRGINIA	73 ( 1.0)	273 ( 1.5)	15 ( 0.8)	271 ( 2.4)	5 ( 0.5)	251 ( 3.7)	6 ( 0.5)>	254 ( 4.4)
WASHINGTON	73 ( 1.1)	281 ( 1.3)	15 ( 0.9)	275 ( 2.0)	6 ( 0.6)	262 ( 3.0)	6 ( 0.7)	251 ( 4.3)
WEST VIRGINIA	80 ( 0.9)<	267 ( 1.1)>	10 ( 0.8)	259 ( 2.5)	4 ( 0.5)>	257 ( 3.5)	5 ( 0.4)>	247 ( 4.2)
WISCONSIN†	80 ( 1.1)<	286 ( 1.4)>	11 ( 0.7)	280 ( 2.6)	4 ( 0.4)	262 ( 4.9)	5 ( 0.6)>	258 ( 5.0)
WYOMING	75 ( 1.0)	279 ( 1.0)	14 ( 0.7)	268 ( 2.6)	6 ( 0.5)	261 ( 2.8)	5 ( 0.5)	258 ( 4.8)
<b>Other Jurisdictions</b>								
DDESS	42 ( 1.7)	275 ( 3.3)	27 ( 1.4)	268 ( 4.3)	14 ( 1.4)	265 ( 6.8)	17 ( 1.7)	262 ( 4.8)
DoDDS	38 ( 1.0)	279 ( 1.4)	34 ( 1.1)	280 ( 1.3)	12 ( 0.7)	264 ( 2.8)	16 ( 0.8)	264 ( 2.1)
GUAM	62 ( 1.9)<	246 ( 1.8)	19 ( 1.4)	242 ( 3.4)	10 ( 1.1)	231 ( 6.3)	9 ( 0.9)	224 ( 6.6)

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).

... Characteristics of the sample do not permit a reliable estimate.

> (<) The value for the students was significantly higher (lower) than in the 1992 assessment at about the 95% confidence level using appropriate multiple comparison procedures.

! Interpret with caution — the nature of the sample does not allow accurate determination of the variability of this statistic.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 7.14**

**1992 Mathematics Assessment**



POPULATION:

1992 Grade 8 Public School Students

REPORTED STATISTICS:

Percentage of Students and Average Mathematics Scale Score

STUDENTS' REPORTS ON:

Usefulness of Mathematics

To what degree do you agree with the statement "Mathematics is useful for solving everyday problems?"

JURISDICTIONS	Strongly Disagree		Disagree		Undecided		Agree		Strongly Agree	
	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )
<b>Nation</b>										
NATION	2 ( 0.2 )	246 ( 3.5 )	5 ( 0.4 )	262 ( 3.1 )	12 ( 0.5 )	267 ( 1.9 )	43 ( 0.7 )	270 ( 1.1 )	38 ( 0.7 )	269 ( 1.2 )
NORTHEAST	3 ( 0.5 )	...	5 ( 0.9 )	...	14 ( 0.9 )	272 ( 5.1 )	42 ( 2.0 )	273 ( 3.5 )	37 ( 2.2 )	269 ( 3.7 )
SOUTHEAST	3 ( 0.5 )	...	6 ( 0.8 )	253 ( 4.4 )	12 ( 0.9 )	255 ( 3.1 )	42 ( 1.2 )	262 ( 2.0 )	37 ( 1.0 )	260 ( 1.4 )
CENTRAL	1 ( 0.6 )	...	6 ( 1.0 )	268 ( 6.5 )	12 ( 1.0 )	275 ( 2.7 )	44 ( 1.8 )	276 ( 2.1 )	38 ( 1.4 )	275 ( 2.3 )
WEST	1 ( 0.2 )	...	5 ( 0.5 )	259 ( 5.5 )	11 ( 0.8 )	267 ( 3.6 )	44 ( 1.3 )	270 ( 2.2 )	39 ( 1.2 )	270 ( 2.6 )
<b>States</b>										
ALABAMA	2 ( 0.3 )	...	5 ( 0.5 )	248 ( 3.5 )	13 ( 0.8 )	253 ( 2.5 )	40 ( 1.0 )	254 ( 1.9 )	40 ( 1.3 )	254 ( 2.1 )
ALASKA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
ARIZONA	1 ( 0.3 )	...	5 ( 0.4 )	258 ( 4.4 )	17 ( 0.9 )	264 ( 1.7 )	43 ( 1.4 )	268 ( 1.3 )	34 ( 1.3 )	267 ( 1.6 )
ARKANSAS	1 ( 0.2 )	...	4 ( 0.4 )	245 ( 3.3 )	13 ( 0.8 )	256 ( 2.1 )	43 ( 1.2 )	260 ( 1.4 )	38 ( 1.3 )	258 ( 1.4 )
CALIFORNIA	1 ( 0.2 )	...	6 ( 0.6 )	260 ( 4.2 )	14 ( 0.9 )	262 ( 2.5 )	40 ( 1.3 )	265 ( 1.9 )	39 ( 1.4 )	265 ( 2.1 )
COLORADO	2 ( 0.3 )	...	4 ( 0.3 )	257 ( 3.1 )	14 ( 0.7 )	268 ( 1.8 )	45 ( 1.0 )	276 ( 1.2 )	36 ( 1.1 )	275 ( 1.4 )
CONNECTICUT	2 ( 0.3 )	...	5 ( 0.4 )	270 ( 3.9 )	14 ( 0.7 )	269 ( 2.2 )	45 ( 0.9 )	277 ( 1.3 )	35 ( 1.1 )	276 ( 1.5 )
DELAWARE	1 ( 0.4 )	...	4 ( 0.5 )	256 ( 4.4 )	14 ( 0.9 )	266 ( 2.4 )	41 ( 1.1 )	267 ( 1.2 )	40 ( 1.5 )	262 ( 1.7 )
DISTRICT OF COLUMBIA	1 ( 0.3 )	...	4 ( 0.6 )	228 ( 7.1 )	12 ( 0.7 )	234 ( 3.3 )	40 ( 1.2 )	239 ( 1.3 )	42 ( 1.1 )	237 ( 1.6 )
FLORIDA	1 ( 0.2 )	...	6 ( 0.5 )	251 ( 3.0 )	14 ( 0.9 )	259 ( 2.0 )	42 ( 1.0 )	264 ( 1.9 )	36 ( 1.3 )	260 ( 1.8 )
GEORGIA	2 ( 0.3 )	...	5 ( 0.4 )	254 ( 3.5 )	10 ( 0.7 )	263 ( 2.6 )	41 ( 1.1 )	263 ( 1.5 )	42 ( 1.2 )	259 ( 1.4 )
HAWAII	2 ( 0.3 )	...	3 ( 0.3 )	258 ( 4.1 )	18 ( 0.7 )	256 ( 1.9 )	38 ( 1.1 )	261 ( 1.5 )	39 ( 1.2 )	261 ( 1.2 )
INDIANA	2 ( 0.2 )	...	4 ( 0.4 )	261 ( 3.9 )	14 ( 0.8 )	266 ( 2.1 )	43 ( 1.2 )	273 ( 1.4 )	37 ( 1.2 )	272 ( 1.6 )
IOWA	1 ( 0.2 )	...	3 ( 0.3 )	275 ( 3.4 )	11 ( 0.8 )	280 ( 1.9 )	46 ( 1.1 )	285 ( 1.3 )	39 ( 1.1 )	285 ( 1.3 )
KENTUCKY	2 ( 0.3 )	...	4 ( 0.4 )	251 ( 3.2 )	12 ( 0.6 )	256 ( 2.3 )	45 ( 1.0 )	266 ( 1.4 )	38 ( 0.9 )	264 ( 1.4 )
LOUISIANA	2 ( 0.3 )	...	5 ( 0.4 )	250 ( 3.6 )	12 ( 0.7 )	252 ( 2.2 )	40 ( 1.1 )	254 ( 2.1 )	41 ( 1.3 )	249 ( 1.9 )
MAINE	1 ( 0.3 )	...	3 ( 0.4 )	266 ( 5.0 )	12 ( 0.9 )	274 ( 2.5 )	44 ( 1.2 )	282 ( 1.3 )	39 ( 0.9 )	279 ( 1.3 )
MARYLAND	1 ( 0.2 )	...	5 ( 0.6 )	255 ( 3.5 )	14 ( 0.8 )	265 ( 2.4 )	43 ( 1.1 )	269 ( 1.5 )	37 ( 1.2 )	267 ( 1.8 )
MASSACHUSETTS	2 ( 0.3 )	...	5 ( 0.4 )	268 ( 2.8 )	14 ( 1.0 )	267 ( 2.7 )	45 ( 1.2 )	275 ( 1.4 )	34 ( 1.1 )	276 ( 1.7 )
MICHIGAN	1 ( 0.3 )	...	4 ( 0.5 )	259 ( 4.4 )	12 ( 0.6 )	263 ( 2.3 )	43 ( 1.1 )	271 ( 1.6 )	39 ( 1.1 )	269 ( 1.8 )
MINNESOTA	1 ( 0.2 )	...	4 ( 0.4 )	273 ( 4.6 )	13 ( 0.8 )	278 ( 2.2 )	48 ( 1.0 )	284 ( 1.5 )	34 ( 1.0 )	284 ( 1.2 )
MISSISSIPPI	2 ( 0.3 )	...	5 ( 0.5 )	242 ( 4.0 )	11 ( 0.7 )	246 ( 2.3 )	40 ( 0.9 )	250 ( 1.5 )	42 ( 1.2 )	247 ( 1.5 )
MISSOURI	1 ( 0.2 )	...	4 ( 0.4 )	268 ( 3.4 )	12 ( 0.7 )	264 ( 2.3 )	44 ( 1.0 )	275 ( 1.2 )	38 ( 1.3 )	272 ( 1.6 )
MONTANA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
NEBRASKA	1 ( 0.2 )	...	3 ( 0.4 )	...	12 ( 0.6 )	274 ( 2.8 )	46 ( 1.2 )	279 ( 1.2 )	39 ( 1.4 )	279 ( 1.6 )
NEW MEXICO	2 ( 0.3 )	...	4 ( 0.5 )	256 ( 4.1 )	14 ( 0.7 )	258 ( 2.0 )	44 ( 1.1 )	261 ( 1.0 )	35 ( 1.1 )	262 ( 1.4 )
NEW YORK	1 ( 0.2 )	...	6 ( 0.6 )	250 ( 5.1 )	14 ( 0.8 )	267 ( 2.8 )	45 ( 1.3 )	272 ( 2.1 )	34 ( 1.3 )	266 ( 2.3 )
NORTH CAROLINA	2 ( 0.3 )	...	4 ( 0.4 )	253 ( 3.2 )	11 ( 0.5 )	255 ( 2.3 )	44 ( 1.2 )	263 ( 1.5 )	39 ( 1.2 )	258 ( 1.3 )
NORTH DAKOTA	1 ( 0.1 )	...	3 ( 0.3 )	266 ( 3.7 )	11 ( 0.7 )	277 ( 2.2 )	48 ( 0.8 )	285 ( 1.3 )	38 ( 1.2 )	286 ( 1.5 )
OREGON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
RHODE ISLAND	2 ( 0.3 )	...	5 ( 0.7 )	262 ( 3.7 )	15 ( 0.8 )	267 ( 2.3 )	45 ( 1.3 )	268 ( 1.0 )	34 ( 1.0 )	266 ( 1.4 )
SOUTH CAROLINA	1 ( 0.2 )	...	4 ( 0.4 )	247 ( 4.2 )	10 ( 0.6 )	264 ( 2.1 )	42 ( 1.1 )	265 ( 1.2 )	43 ( 1.0 )	260 ( 1.2 )
TENNESSEE	1 ( 0.3 )	...	6 ( 0.4 )	256 ( 4.3 )	13 ( 0.8 )	261 ( 2.6 )	44 ( 1.0 )	261 ( 1.5 )	35 ( 1.1 )	258 ( 1.8 )
TEXAS	2 ( 0.2 )	...	3 ( 0.4 )	260 ( 4.4 )	11 ( 0.7 )	263 ( 2.6 )	42 ( 1.0 )	267 ( 1.7 )	42 ( 1.3 )	267 ( 1.6 )
UTAH	1 ( 0.2 )	...	5 ( 0.5 )	266 ( 3.1 )	13 ( 0.7 )	274 ( 2.1 )	45 ( 0.9 )	277 ( 1.0 )	35 ( 0.9 )	275 ( 1.2 )
VERMONT	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
VIRGINIA	1 ( 0.2 )	...	4 ( 0.4 )	266 ( 3.9 )	12 ( 0.9 )	271 ( 1.9 )	45 ( 0.9 )	271 ( 1.4 )	38 ( 1.0 )	268 ( 1.6 )
WASHINGTON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
WEST VIRGINIA	2 ( 0.3 )	...	5 ( 0.5 )	252 ( 2.4 )	16 ( 0.8 )	257 ( 2.1 )	43 ( 0.9 )	262 ( 1.3 )	34 ( 1.0 )	261 ( 1.3 )
WISCONSIN	1 ( 0.2 )	...	3 ( 0.3 )	268 ( 4.6 )	12 ( 0.8 )	272 ( 2.4 )	46 ( 1.2 )	279 ( 1.3 )	38 ( 1.3 )	280 ( 1.9 )
WYOMING	1 ( 0.2 )	...	4 ( 0.3 )	266 ( 4.0 )	13 ( 0.9 )	267 ( 1.9 )	44 ( 1.0 )	278 ( 1.1 )	37 ( 1.1 )	277 ( 1.2 )
<b>Other Jurisdictions</b>										
DDESS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
DoDDS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
GUAM	1 ( 0.3 )	...	4 ( 0.7 )	...	16 ( 1.0 )	236 ( 3.2 )	38 ( 1.5 )	240 ( 2.1 )	41 ( 1.3 )	244 ( 1.8 )

— State or other jurisdiction did not participate in the NAEP assessment year presented in this table.

... Characteristics of the sample do not permit a reliable estimate.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 7.14** (continued)

**1996 Mathematics Assessment**



POPULATION:

1996 Grade 8 Public School Students

REPORTED STATISTICS:

Percentage of Students and Average Mathematics Scale Score

STUDENTS' REPORTS ON:

Usefulness of Mathematics

To what degree do you agree with the statement "Mathematics is useful for solving everyday problems?"

JURISDICTIONS	Strongly Disagree		Disagree		Undecided		Agree		Strongly Agree	
	PCT ( SE)	SS ( SE)	PCT ( SE)	SS ( SE)	PCT ( SE)	SS ( SE)	PCT ( SE)	SS ( SE)	PCT ( SE)	SS ( SE)
<b>Nation</b>										
NATION	2 ( 0.2)	251 ( 4.3)	5 ( 0.4)	258 ( 2.8)	12 ( 0.6)	273 ( 2.9)	40 ( 0.8)<	274 ( 1.1)	41 ( 1.2)	272 ( 1.2)
NORTHEAST	2 ( 0.4)	...	5 ( 1.1)	...	11 ( 1.9)	279 (10.3)!	39 ( 1.7)	281 ( 2.2)	44 ( 2.8)	276 ( 3.1)
SOUTHEAST	2 ( 0.4)	...	6 ( 0.8)	252 ( 5.3)	9 ( 0.8)	264 ( 4.3)	40 ( 0.9)	268 ( 3.2)	42 ( 1.4)	265 ( 3.1)
CENTRAL	2 ( 0.5)	...	5 ( 0.7)	...	12 ( 1.2)	279 ( 6.2)	41 ( 2.1)	277 ( 2.9)	39 ( 2.4)	278 ( 3.2)
WEST	2 ( 0.5)	...	6 ( 0.5)	249 ( 4.7)	13 ( 0.8)	270 ( 3.8)	39 ( 1.4)	272 ( 2.3)	39 ( 2.0)	272 ( 2.2)
<b>States</b>										
ALABAMA	3 ( 0.4)>	237 ( 6.7)	8 ( 0.6)>	248 ( 4.1)	11 ( 0.7)	260 ( 3.4)	35 ( 1.2)<	260 ( 2.4)	43 ( 1.4)	258 ( 2.6)
ALASKA†	2 ( 0.5)	...	5 ( 0.6)	272 ( 5.0)	14 ( 1.0)	275 ( 3.8)	40 ( 1.6)	281 ( 2.5)	39 ( 1.5)	284 ( 2.0)
ARIZONA	2 ( 0.4)	...	6 ( 0.6)	260 ( 2.9)	11 ( 0.7)<	271 ( 2.4)	41 ( 1.2)	270 ( 1.7)	40 ( 1.3)>	271 ( 2.1)
ARKANSAS†	3 ( 0.6)	...	6 ( 0.6)	253 ( 3.5)	12 ( 0.8)	257 ( 2.3)	41 ( 1.4)	265 ( 2.0)	39 ( 1.5)	264 ( 2.0)
CALIFORNIA	2 ( 0.4)	...	5 ( 0.5)	265 ( 4.1)	12 ( 0.7)	259 ( 2.3)	39 ( 1.0)	265 ( 2.3)	42 ( 1.1)	266 ( 1.9)
COLORADO	2 ( 0.3)	...	6 ( 0.4)>	267 ( 2.8)	12 ( 0.7)	275 ( 2.5)	43 ( 1.3)	279 ( 1.3)	37 ( 1.2)	276 ( 1.5)
CONNECTICUT	3 ( 0.4)	260 ( 5.6)	6 ( 0.6)	271 ( 3.4)	12 ( 0.8)	273 ( 2.9)	41 ( 0.9)<	283 ( 1.5)>	39 ( 1.2)>	282 ( 1.4)>
DELAWARE	2 ( 0.3)	...	5 ( 0.5)	262 ( 4.3)	10 ( 0.8)<	260 ( 3.8)	39 ( 1.3)	272 ( 1.7)	44 ( 1.1)	267 ( 1.3)
DISTRICT OF COLUMBIA	2 ( 0.4)	...	7 ( 0.6)>	217 ( 4.8)	9 ( 0.7)<	230 ( 3.8)	36 ( 1.4)	235 ( 2.3)	46 ( 1.2)>	239 ( 1.8)
FLORIDA	2 ( 0.4)>	...	6 ( 0.5)	264 ( 3.0)>	11 ( 0.6)<	265 ( 2.8)	41 ( 1.2)	266 ( 2.3)	40 ( 1.1)	265 ( 1.8)
GEORGIA	2 ( 0.4)	...	6 ( 0.7)	251 ( 3.4)	11 ( 0.6)	264 ( 3.3)	38 ( 1.0)	268 ( 2.0)	43 ( 1.2)	262 ( 1.7)
HAWAII	2 ( 0.4)	...	5 ( 0.4)>	253 ( 4.6)	14 ( 0.8)<	256 ( 2.6)	41 ( 1.0)	264 ( 1.5)	37 ( 1.1)	266 ( 1.3)>
INDIANA	2 ( 0.3)	...	6 ( 0.5)>	264 ( 5.0)	12 ( 0.8)	278 ( 3.7)	43 ( 1.0)	279 ( 1.7)	38 ( 1.4)	276 ( 1.6)
IOWA†	2 ( 0.3)	...	4 ( 0.5)>	278 ( 3.1)	11 ( 0.7)	278 ( 2.5)	43 ( 1.4)	286 ( 1.5)	40 ( 1.4)	285 ( 1.3)
KENTUCKY	2 ( 0.2)	...	5 ( 0.5)	258 ( 3.7)	10 ( 0.6)<	264 ( 2.2)	42 ( 1.0)	270 ( 1.3)	42 ( 1.0)>	268 ( 1.3)
LOUISIANA	3 ( 0.4)	239 ( 5.2)	7 ( 0.6)	242 ( 3.6)	12 ( 0.5)	252 ( 2.8)	35 ( 1.1)<	257 ( 1.8)	44 ( 1.4)	254 ( 1.5)
MAINE	3 ( 0.4)>	...	4 ( 0.4)	273 ( 3.4)	12 ( 0.8)	278 ( 2.8)	41 ( 1.1)	286 ( 1.6)	40 ( 1.1)	288 ( 1.6)>
MARYLAND†	3 ( 0.4)>	...	6 ( 0.6)	259 ( 4.9)	11 ( 0.7)<	273 ( 3.6)	38 ( 1.3)<	275 ( 2.8)	42 ( 1.2)>	271 ( 2.3)
MASSACHUSETTS	2 ( 0.3)	...	6 ( 0.5)	274 ( 3.6)	11 ( 0.8)	282 ( 3.1)>	43 ( 1.1)	278 ( 2.1)	38 ( 1.3)	279 ( 1.7)
MICHIGAN†	3 ( 0.5)>	254 ( 6.6)	6 ( 0.7)	266 ( 3.4)	11 ( 0.8)	277 ( 3.0)>	39 ( 1.1)<	279 ( 1.8)>	41 ( 1.2)	279 ( 2.1)>
MINNESOTA	2 ( 0.5)>	...	5 ( 0.5)	274 ( 4.0)	11 ( 0.8)	280 ( 2.4)	45 ( 1.1)<	287 ( 1.5)	37 ( 1.3)	287 ( 1.6)
MISSISSIPPI	3 ( 0.4)	240 ( 3.6)	6 ( 0.5)	247 ( 3.0)	10 ( 0.8)	251 ( 2.4)	36 ( 1.1)<	255 ( 1.7)	45 ( 1.2)	248 ( 1.4)
MISSOURI	3 ( 0.4)>	252 ( 3.7)	6 ( 0.4)>	268 ( 3.0)	13 ( 0.8)	273 ( 2.5)	40 ( 1.1)<	276 ( 1.4)	38 ( 1.2)	273 ( 1.8)
MONTANA†	2 ( 0.4)	...	4 ( 0.5)	273 ( 4.9)	12 ( 0.9)	275 ( 3.0)	42 ( 1.2)	285 ( 1.6)	40 ( 1.6)	287 ( 1.7)
NEBRASKA	2 ( 0.2)>	...	4 ( 0.4)>	276 ( 3.3)	10 ( 0.6)	275 ( 2.4)	43 ( 1.0)	285 ( 1.5)>	41 ( 1.1)	285 ( 1.4)
NEW MEXICO	3 ( 0.4)	240 ( 7.4)	6 ( 0.5)>	265 ( 3.8)	12 ( 0.8)	253 ( 2.6)	42 ( 0.8)	265 ( 1.6)	37 ( 1.1)	265 ( 1.5)
NEW YORK†	2 ( 0.3)	...	6 ( 0.6)	265 ( 3.6)	13 ( 0.8)	273 ( 2.1)	39 ( 1.4)<	274 ( 1.9)	40 ( 1.3)>	270 ( 2.2)
NORTH CAROLINA	3 ( 0.3)	248 ( 6.8)	5 ( 0.5)	261 ( 4.7)	10 ( 0.6)	269 ( 3.2)>	37 ( 1.3)<	272 ( 1.8)>	46 ( 1.2)>	267 ( 1.6)>
NORTH DAKOTA	3 ( 0.3)>	263 ( 5.3)	4 ( 0.4)	275 ( 5.2)	10 ( 0.5)	282 ( 2.5)	45 ( 1.1)	285 ( 1.6)	38 ( 1.1)	287 ( 1.0)
OREGON	4 ( 0.5)	254 ( 6.2)	5 ( 0.5)	272 ( 3.9)	15 ( 1.0)	275 ( 2.7)	39 ( 1.1)	280 ( 1.4)	37 ( 1.2)	280 ( 1.9)
RHODE ISLAND	3 ( 0.4)	...	7 ( 0.6)	265 ( 2.8)	12 ( 0.7)	269 ( 2.4)	42 ( 1.2)	272 ( 1.4)	36 ( 1.2)	269 ( 2.0)
SOUTH CAROLINA†	2 ( 0.3)>	...	5 ( 0.5)	265 ( 5.1)	10 ( 0.6)	257 ( 2.9)	36 ( 1.2)<	265 ( 2.0)	47 ( 1.4)	259 ( 1.9)
TENNESSEE	2 ( 0.3)	...	5 ( 0.6)	258 ( 3.7)	13 ( 0.7)	262 ( 3.0)	38 ( 0.9)<	268 ( 1.5)>	42 ( 1.2)>	262 ( 1.6)
TEXAS	2 ( 0.4)	...	5 ( 0.5)	261 ( 3.3)	10 ( 0.6)	268 ( 2.5)	42 ( 1.0)	273 ( 1.6)	41 ( 1.1)	273 ( 1.7)
UTAH	2 ( 0.3)	...	6 ( 0.5)	274 ( 2.4)	13 ( 0.7)	277 ( 1.6)	42 ( 1.0)	279 ( 1.3)	36 ( 1.0)	278 ( 1.4)
VERMONT†	3 ( 0.3)	...	4 ( 0.5)	271 ( 5.6)	11 ( 0.7)	274 ( 2.7)	42 ( 1.3)	282 ( 1.4)	41 ( 1.4)	281 ( 1.5)
VIRGINIA	2 ( 0.3)>	...	6 ( 0.5)>	269 ( 4.4)	11 ( 0.7)	264 ( 2.6)	38 ( 1.1)<	274 ( 1.7)	42 ( 1.1)>	270 ( 1.7)
WASHINGTON	3 ( 0.3)	255 ( 5.2)	6 ( 0.5)	269 ( 3.5)	15 ( 0.8)	273 ( 2.4)	41 ( 1.1)	280 ( 1.4)	36 ( 1.1)	279 ( 1.8)
WEST VIRGINIA	3 ( 0.3)	249 ( 5.1)	6 ( 0.5)	261 ( 3.1)	12 ( 0.8)<	260 ( 2.1)	42 ( 1.2)	267 ( 1.3)	38 ( 1.2)>	267 ( 1.4)>
WISCONSIN†	1 ( 0.3)	...	5 ( 0.6)>	270 ( 3.3)	11 ( 0.7)	277 ( 2.7)	42 ( 1.1)	285 ( 1.4)>	40 ( 1.2)	286 ( 2.1)
WYOMING	2 ( 0.3)	...	5 ( 0.5)	266 ( 4.7)	13 ( 0.6)	268 ( 1.7)	42 ( 1.1)	276 ( 1.4)	38 ( 0.9)	280 ( 1.3)
<b>Other Jurisdictions</b>										
DDESS	2 ( 0.6)	...	5 ( 1.0)	...	9 ( 1.2)	...	39 ( 1.9)	272 ( 3.1)	45 ( 1.8)	269 ( 3.5)
DoDDS	2 ( 0.3)	...	5 ( 0.6)	268 ( 5.3)	12 ( 0.7)	278 ( 2.4)	40 ( 1.0)	276 ( 1.6)	40 ( 0.9)	275 ( 1.1)
GUAM	2 ( 0.6)	...	4 ( 0.6)	...	13 ( 1.4)	229 ( 4.2)	37 ( 1.9)	238 ( 3.0)	43 ( 1.9)	248 ( 2.6)

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).

... Characteristics of the sample do not permit a reliable estimate.

> (<) The value for the students was significantly higher (lower) than in the 1992 assessment at about the 95% confidence level using appropriate multiple comparison procedures.

! Interpret with caution — the nature of the sample does not allow accurate determination of the variability of this statistic.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 7.15**

**1996 Mathematics Assessment**



POPULATION:

1996 Grade 8 Public School Students

REPORTED STATISTICS:

Percentage of Students and Average Mathematics Scale Score

STUDENTS' REPORTS ON:

Views on the Nature of Mathematics

*To what degree do you agree with the statement "Learning mathematics is mostly memorizing facts?"*

**Strongly Disagree**

**Disagree**

**Undecided**

**Agree**

**Strongly Agree**

**JURISDICTIONS**

PCT ( SE)    SS ( SE)    PCT ( SE)    SS ( SE)    PCT ( SE)    SS ( SE)    PCT ( SE)    SS ( SE)    PCT ( SE)    SS ( SE)

**Nation**

NATION	7 ( 0.4)	282 ( 2.8)	22 ( 0.9)	283 ( 2.0)	28 ( 0.7)	274 ( 1.4)	30 ( 0.7)	265 ( 1.1)	12 ( 0.6)	255 ( 1.9)
NORTHEAST	10 ( 1.1)	285 ( 6.3)	27 ( 1.7)	289 ( 5.8)	24 ( 1.1)	280 ( 4.1)	28 ( 1.4)	269 ( 3.2)	11 ( 0.9)	258 ( 3.3)
SOUTHEAST	7 ( 0.8)	277 ( 5.2)	21 ( 1.3)	274 ( 3.7)	25 ( 1.5)	267 ( 4.5)	32 ( 0.9)	260 ( 3.1)	15 ( 1.4)	251 ( 3.1)
CENTRAL	7 ( 0.8)	289 ( 6.1)	25 ( 1.7)	286 ( 3.1)	30 ( 1.7)	279 ( 3.7)	27 ( 1.5)	269 ( 3.9)	10 ( 1.0)	257 ( 6.7)
WEST	6 ( 0.7)	280 ( 3.7)	19 ( 2.1)	281 ( 2.8)	31 ( 1.0)	271 ( 1.8)	32 ( 1.5)	263 ( 2.0)	12 ( 1.5)	256 ( 4.0)

**States**

ALABAMA	10 ( 0.9)	267 ( 5.3)	20 ( 1.1)	266 ( 2.9)	23 ( 0.9)	261 ( 2.3)	32 ( 1.2)	251 ( 2.1)	16 ( 0.9)	247 ( 3.1)
ALASKA†	10 ( 1.1)	281 ( 3.8)	23 ( 1.2)	289 ( 2.2)	33 ( 1.3)	281 ( 2.6)	26 ( 1.4)	274 ( 2.5)	8 ( 0.8)	266 ( 4.6)
ARIZONA	9 ( 0.8)	278 ( 3.2)	20 ( 1.1)	279 ( 1.9)	29 ( 1.2)	271 ( 1.7)	32 ( 1.1)	263 ( 1.6)	9 ( 0.9)	258 ( 2.9)
ARKANSAS†	7 ( 0.7)	263 ( 4.8)	22 ( 1.4)	272 ( 2.2)	28 ( 1.0)	264 ( 1.9)	31 ( 1.1)	257 ( 1.6)	12 ( 0.9)	254 ( 3.2)
CALIFORNIA	8 ( 0.8)	274 ( 4.5)	21 ( 1.1)	276 ( 2.9)	29 ( 1.2)	264 ( 2.2)	32 ( 1.1)	257 ( 2.0)	10 ( 0.7)	253 ( 2.7)
COLORADO	9 ( 0.6)	284 ( 2.7)	25 ( 0.9)	286 ( 1.7)	32 ( 1.0)	276 ( 1.5)	26 ( 1.1)	268 ( 1.9)	8 ( 0.6)	262 ( 3.2)
CONNECTICUT	15 ( 0.9)	291 ( 2.3)	33 ( 1.1)	290 ( 1.4)	27 ( 1.0)	276 ( 1.5)	20 ( 0.9)	268 ( 1.9)	7 ( 0.5)	258 ( 3.6)
DELAWARE	9 ( 0.7)	283 ( 3.9)	24 ( 1.1)	276 ( 2.4)	30 ( 1.3)	270 ( 1.6)	27 ( 1.3)	257 ( 1.9)	11 ( 0.7)	254 ( 2.6)
DISTRICT OF COLUMBIA	6 ( 0.6)	255 ( 5.7)	14 ( 0.9)	249 ( 3.6)	23 ( 1.1)	238 ( 1.9)	38 ( 1.1)	228 ( 1.5)	20 ( 1.1)	226 ( 2.7)
FLORIDA	9 ( 0.6)	274 ( 3.8)	21 ( 0.9)	276 ( 2.3)	27 ( 0.9)	267 ( 2.3)	30 ( 0.9)	260 ( 1.8)	13 ( 0.7)	251 ( 2.7)
GEORGIA	8 ( 0.6)	271 ( 3.3)	19 ( 1.1)	276 ( 3.1)	24 ( 1.1)	267 ( 2.0)	32 ( 1.3)	256 ( 1.8)	16 ( 0.9)	249 ( 2.3)
HAWAII	5 ( 0.4)	274 ( 5.2)	16 ( 0.6)	274 ( 2.6)	34 ( 1.0)	264 ( 1.5)	34 ( 1.1)	258 ( 1.8)	12 ( 0.7)	255 ( 2.5)
INDIANA	7 ( 0.6)	288 ( 3.2)	24 ( 0.8)	284 ( 2.1)	30 ( 0.8)	277 ( 1.9)	29 ( 0.9)	270 ( 1.7)	9 ( 0.7)	263 ( 3.1)
IOWA†	10 ( 0.7)	292 ( 2.5)	27 ( 1.2)	291 ( 1.5)	32 ( 1.1)	284 ( 1.7)	25 ( 0.8)	277 ( 2.0)	7 ( 0.6)	275 ( 2.5)
KENTUCKY	10 ( 0.6)	271 ( 2.9)	22 ( 1.0)	276 ( 2.1)	29 ( 1.1)	265 ( 1.5)	29 ( 1.0)	264 ( 1.5)	10 ( 0.7)	260 ( 2.3)
LOUISIANA	8 ( 0.5)	257 ( 3.2)	18 ( 1.0)	263 ( 2.4)	24 ( 0.7)	258 ( 2.0)	32 ( 1.0)	249 ( 1.8)	18 ( 0.9)	244 ( 1.9)
MAINE	14 ( 0.9)	288 ( 2.3)	31 ( 1.2)	291 ( 1.6)	28 ( 1.1)	282 ( 1.8)	21 ( 1.0)	277 ( 2.2)	6 ( 0.6)	276 ( 3.6)
MARYLAND†	8 ( 0.8)	281 ( 4.9)	22 ( 1.2)	287 ( 3.5)	29 ( 1.2)	273 ( 2.6)	29 ( 1.5)	261 ( 2.1)	11 ( 0.8)	251 ( 2.6)
MASSACHUSETTS	14 ( 0.8)	290 ( 2.5)	32 ( 1.3)	288 ( 2.0)	25 ( 0.8)	273 ( 1.8)	21 ( 0.9)	266 ( 2.8)	8 ( 0.7)	262 ( 3.5)
MICHIGAN†	11 ( 0.7)	287 ( 3.9)	26 ( 1.2)	290 ( 2.1)	30 ( 1.2)	274 ( 1.7)	24 ( 0.9)	270 ( 2.1)	10 ( 0.7)	260 ( 3.9)
MINNESOTA	11 ( 0.7)	294 ( 3.0)	29 ( 1.0)	292 ( 1.9)	30 ( 0.9)	284 ( 1.3)	25 ( 1.0)	276 ( 1.7)	5 ( 0.6)	266 ( 4.4)
MISSISSIPPI	10 ( 0.6)	255 ( 2.5)	19 ( 0.9)	262 ( 2.0)	22 ( 1.0)	257 ( 1.6)	31 ( 1.2)	245 ( 1.8)	18 ( 0.8)	239 ( 2.0)
MISSOURI	9 ( 0.7)	281 ( 2.9)	21 ( 0.8)	284 ( 2.0)	29 ( 1.0)	273 ( 1.7)	29 ( 1.0)	269 ( 1.7)	11 ( 0.7)	259 ( 2.6)
MONTANA†	11 ( 0.9)	292 ( 3.2)	28 ( 1.1)	293 ( 1.5)	32 ( 1.3)	282 ( 2.0)	23 ( 1.1)	273 ( 1.6)	6 ( 0.6)	265 ( 4.5)
NEBRASKA	8 ( 0.6)	290 ( 3.0)	28 ( 1.2)	292 ( 1.8)	30 ( 0.9)	281 ( 1.1)	27 ( 1.1)	277 ( 1.7)	7 ( 0.5)	272 ( 3.0)
NEW MEXICO	8 ( 0.6)	274 ( 3.1)	21 ( 1.0)	271 ( 1.8)	31 ( 1.1)	261 ( 1.9)	31 ( 0.8)	259 ( 2.0)	9 ( 0.8)	250 ( 3.0)
NEW YORK†	8 ( 0.7)	288 ( 3.1)	26 ( 1.2)	283 ( 1.9)	27 ( 1.3)	274 ( 2.0)	29 ( 1.5)	262 ( 2.5)	10 ( 0.7)	250 ( 3.8)
NORTH CAROLINA	8 ( 0.6)	277 ( 3.0)	21 ( 0.9)	280 ( 2.2)	27 ( 0.8)	280 ( 2.0)	32 ( 0.9)	264 ( 1.9)	12 ( 0.7)	253 ( 2.2)
NORTH DAKOTA	10 ( 0.6)	285 ( 2.8)	30 ( 0.8)	291 ( 1.2)	31 ( 1.0)	285 ( 1.4)	23 ( 0.9)	279 ( 1.9)	6 ( 0.5)	273 ( 3.0)
OREGON	11 ( 0.8)	284 ( 3.3)	24 ( 1.2)	286 ( 2.1)	30 ( 1.0)	279 ( 1.8)	27 ( 1.1)	271 ( 1.8)	8 ( 0.7)	261 ( 2.9)
RHODE ISLAND	12 ( 0.6)	280 ( 3.1)	28 ( 1.0)	281 ( 1.4)	28 ( 1.1)	266 ( 2.0)	23 ( 1.0)	260 ( 1.9)	9 ( 0.8)	256 ( 3.5)
SOUTH CAROLINA†	7 ( 0.6)	271 ( 3.8)	20 ( 0.9)	272 ( 2.6)	23 ( 0.9)	264 ( 1.8)	33 ( 1.2)	256 ( 2.1)	17 ( 1.0)	250 ( 2.3)
TENNESSEE	7 ( 0.6)	274 ( 4.5)	20 ( 1.0)	274 ( 2.5)	29 ( 0.9)	264 ( 1.9)	30 ( 1.1)	259 ( 1.7)	14 ( 0.8)	251 ( 2.6)
TEXAS	9 ( 0.8)	283 ( 3.3)	23 ( 1.0)	279 ( 2.0)	28 ( 1.0)	273 ( 1.7)	30 ( 1.1)	264 ( 1.7)	11 ( 0.7)	258 ( 3.0)
UTAH	7 ( 0.5)	284 ( 2.9)	23 ( 1.0)	284 ( 1.7)	32 ( 1.1)	278 ( 1.5)	29 ( 1.1)	272 ( 1.3)	8 ( 0.6)	272 ( 2.3)
VERMONT†	16 ( 0.9)	286 ( 1.8)	34 ( 1.1)	283 ( 1.7)	26 ( 1.1)	280 ( 1.8)	18 ( 1.0)	271 ( 2.0)	5 ( 0.5)	268 ( 3.3)
VIRGINIA	10 ( 0.6)	278 ( 3.4)	23 ( 0.9)	283 ( 2.2)	29 ( 0.9)	271 ( 1.9)	28 ( 1.0)	261 ( 2.0)	11 ( 0.7)	258 ( 2.8)
WASHINGTON	10 ( 0.6)	282 ( 3.5)	24 ( 0.9)	285 ( 2.0)	31 ( 0.9)	279 ( 1.4)	26 ( 1.0)	270 ( 1.6)	9 ( 0.7)	263 ( 2.8)
WEST VIRGINIA	9 ( 0.6)	267 ( 2.6)	24 ( 1.0)	272 ( 1.8)	29 ( 1.0)	268 ( 1.5)	28 ( 1.0)	260 ( 1.5)	10 ( 0.6)	256 ( 2.2)
WISCONSIN†	9 ( 0.6)	293 ( 3.1)	27 ( 1.1)	291 ( 1.8)	31 ( 1.0)	283 ( 1.8)	25 ( 1.0)	275 ( 1.6)	8 ( 0.7)	268 ( 3.1)
WYOMING	9 ( 0.6)	283 ( 3.4)	25 ( 0.9)	282 ( 1.7)	32 ( 1.0)	276 ( 1.6)	26 ( 1.1)	268 ( 1.3)	8 ( 0.6)	268 ( 3.1)

**Other Jurisdictions**

DDESS	9 ( 1.1)	... ( ... )	24 ( 1.9)	281 ( 3.4)	29 ( 1.6)	270 ( 3.7)	26 ( 1.8)	263 ( 5.2)	13 ( 1.3)	254 ( 5.7)
DoDDS	11 ( 0.7)	281 ( 2.4)	26 ( 1.0)	282 ( 2.0)	30 ( 0.9)	275 ( 1.5)	24 ( 0.9)	269 ( 2.6)	9 ( 0.7)	266 ( 2.6)
GUAM	4 ( 0.8)	... ( ... )	11 ( 1.0)	257 ( 6.7)	30 ( 1.5)	241 ( 3.3)	36 ( 1.6)	239 ( 2.8)	18 ( 1.3)	232 ( 4.4)

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).

... Characteristics of the sample do not permit a reliable estimate.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 7.16**

**1996 Mathematics Assessment**



POPULATION:

1996 Grade 8 Public School Students

REPORTED STATISTICS:

Percentage of Students and Average Mathematics Scale Score

STUDENTS' REPORTS ON:

Views on the Nature of Mathematics

*To what degree do you agree with the statement "There is only one correct way to solve a mathematics problem?"*

JURISDICTIONS	Strongly Disagree		Disagree		Undecided		Agree		Strongly Agree	
	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )	PCT ( SE )	SS ( SE )
<b>Nation</b>										
NATION	34 ( 0.9 )	279 ( 1.3 )	43 ( 0.7 )	273 ( 1.2 )	14 ( 0.6 )	263 ( 1.9 )	5 ( 0.4 )	243 ( 2.7 )	2 ( 0.2 )	245 ( 3.6 )
NORTHEAST	35 ( 1.4 )	285 ( 4.3 )	45 ( 1.4 )	277 ( 3.5 )	12 ( 0.8 )	270 ( 4.9 )	5 ( 0.9 )	... ( ... )	3 ( 0.5 )	... ( ... )
SOUTHEAST	33 ( 1.7 )	271 ( 3.4 )	43 ( 1.5 )	267 ( 2.9 )	15 ( 1.3 )	258 ( 3.4 )	6 ( 0.9 )	240 ( 5.6 )	3 ( 0.5 )	... ( ... )
CENTRAL	35 ( 2.1 )	282 ( 2.9 )	45 ( 1.5 )	279 ( 3.1 )	15 ( 1.6 )	268 ( 5.4 )	4 ( 0.7 )	... ( ... )	2 ( 0.3 )	... ( ... )
WEST	34 ( 1.7 )	278 ( 2.0 )	41 ( 1.3 )	271 ( 2.4 )	16 ( 1.2 )	261 ( 3.2 )	6 ( 0.8 )	237 ( 5.2 )	2 ( 0.4 )	... ( ... )
<b>States</b>										
ALABAMA	35 ( 1.3 )	262 ( 2.3 )	41 ( 1.2 )	261 ( 2.1 )	13 ( 0.8 )	249 ( 3.1 )	8 ( 0.6 )	239 ( 4.3 )	3 ( 0.4 )	232 ( 4.9 )
ALASKA†	36 ( 1.4 )	287 ( 2.5 )	39 ( 1.2 )	281 ( 1.7 )	16 ( 1.0 )	272 ( 3.0 )	7 ( 0.6 )	254 ( 7.0 )	2 ( 0.4 )	... ( ... )
ARIZONA	34 ( 1.2 )	275 ( 1.8 )	41 ( 1.2 )	272 ( 1.7 )	15 ( 0.9 )	262 ( 2.4 )	8 ( 0.6 )	250 ( 5.4 )	2 ( 0.4 )	... ( ... )
ARKANSAS†	34 ( 1.3 )	271 ( 2.1 )	43 ( 1.3 )	263 ( 1.5 )	14 ( 0.9 )	252 ( 2.7 )	6 ( 0.6 )	240 ( 4.5 )	3 ( 0.5 )	... ( ... )
CALIFORNIA	37 ( 1.3 )	271 ( 2.4 )	40 ( 1.1 )	266 ( 2.2 )	14 ( 0.8 )	259 ( 2.1 )	6 ( 0.6 )	233 ( 3.7 )	3 ( 0.5 )	... ( ... )
COLORADO	38 ( 1.2 )	282 ( 1.4 )	42 ( 1.1 )	277 ( 1.5 )	13 ( 0.7 )	269 ( 2.1 )	5 ( 0.6 )	256 ( 4.2 )	2 ( 0.3 )	... ( ... )
CONNECTICUT	39 ( 1.1 )	286 ( 1.4 )	42 ( 1.0 )	281 ( 1.4 )	13 ( 0.6 )	269 ( 2.1 )	4 ( 0.4 )	260 ( 3.0 )	2 ( 0.3 )	... ( ... )
DELAWARE	40 ( 1.2 )	273 ( 1.6 )	40 ( 1.2 )	269 ( 1.6 )	13 ( 0.7 )	260 ( 2.5 )	5 ( 0.6 )	249 ( 5.7 )	2 ( 0.4 )	... ( ... )
DISTRICT OF COLUMBIA	33 ( 1.3 )	245 ( 2.5 )	41 ( 1.1 )	235 ( 1.4 )	14 ( 0.9 )	226 ( 4.8 )	8 ( 0.7 )	207 ( 5.4 )	4 ( 0.6 )	... ( ... )
FLORIDA	34 ( 1.3 )	273 ( 2.2 )	40 ( 1.4 )	267 ( 1.7 )	15 ( 0.8 )	258 ( 2.6 )	7 ( 0.6 )	237 ( 4.7 )	3 ( 0.3 )	240 ( 4.8 )
GEORGIA	34 ( 1.1 )	271 ( 1.8 )	42 ( 1.1 )	264 ( 2.2 )	14 ( 0.7 )	258 ( 2.5 )	6 ( 0.6 )	239 ( 4.0 )	3 ( 0.5 )	233 ( 3.9 )
HAWAII	30 ( 0.9 )	272 ( 1.6 )	41 ( 1.0 )	268 ( 1.5 )	19 ( 1.0 )	253 ( 2.3 )	7 ( 0.5 )	234 ( 4.4 )	4 ( 0.6 )	233 ( 5.5 )
INDIANA	38 ( 1.1 )	281 ( 1.7 )	41 ( 1.1 )	278 ( 1.8 )	13 ( 0.9 )	267 ( 2.1 )	5 ( 0.6 )	257 ( 4.2 )	2 ( 0.4 )	... ( ... )
IOWA†	35 ( 1.3 )	288 ( 1.4 )	43 ( 1.2 )	286 ( 1.5 )	15 ( 0.9 )	274 ( 2.2 )	4 ( 0.5 )	274 ( 3.6 )	2 ( 0.4 )	... ( ... )
KENTUCKY	42 ( 1.0 )	271 ( 1.3 )	38 ( 1.2 )	268 ( 1.2 )	12 ( 0.7 )	262 ( 2.4 )	5 ( 0.5 )	246 ( 4.4 )	2 ( 0.2 )	... ( ... )
LOUISIANA	37 ( 1.3 )	258 ( 1.6 )	40 ( 1.2 )	255 ( 1.8 )	13 ( 0.7 )	250 ( 2.5 )	6 ( 0.6 )	234 ( 4.5 )	4 ( 0.4 )	233 ( 3.9 )
MAINE	42 ( 1.0 )	289 ( 1.6 )	40 ( 1.0 )	286 ( 1.4 )	12 ( 0.6 )	273 ( 2.5 )	3 ( 0.6 )	264 ( 6.0 )	2 ( 0.3 )	... ( ... )
MARYLAND†	39 ( 1.3 )	277 ( 2.8 )	39 ( 1.2 )	274 ( 2.3 )	14 ( 0.8 )	260 ( 3.0 )	6 ( 0.5 )	243 ( 4.7 )	3 ( 0.3 )	... ( ... )
MASSACHUSETTS	40 ( 1.4 )	284 ( 1.6 )	41 ( 1.2 )	279 ( 2.1 )	12 ( 0.9 )	269 ( 3.0 )	5 ( 0.6 )	254 ( 4.6 )	2 ( 0.3 )	... ( ... )
MICHIGAN†	41 ( 1.5 )	281 ( 1.9 )	40 ( 1.3 )	279 ( 2.2 )	11 ( 0.8 )	270 ( 2.7 )	5 ( 0.6 )	253 ( 4.4 )	3 ( 0.4 )	... ( ... )
MINNESOTA	35 ( 1.4 )	290 ( 1.8 )	44 ( 1.1 )	286 ( 1.2 )	14 ( 0.8 )	276 ( 2.7 )	5 ( 0.5 )	261 ( 4.1 )	2 ( 0.3 )	... ( ... )
MISSISSIPPI	37 ( 1.2 )	258 ( 1.4 )	38 ( 1.2 )	252 ( 1.4 )	12 ( 0.7 )	246 ( 2.0 )	7 ( 0.5 )	228 ( 3.0 )	5 ( 0.5 )	228 ( 3.3 )
MISSOURI	37 ( 1.3 )	279 ( 1.8 )	42 ( 1.0 )	275 ( 1.5 )	14 ( 0.8 )	267 ( 1.7 )	5 ( 0.4 )	254 ( 3.8 )	2 ( 0.3 )	... ( ... )
MONTANA†	38 ( 1.4 )	291 ( 1.6 )	45 ( 1.4 )	284 ( 1.8 )	11 ( 0.8 )	268 ( 3.3 )	4 ( 0.7 )	257 ( 5.6 )	2 ( 0.3 )	... ( ... )
NEBRASKA	34 ( 1.0 )	289 ( 1.3 )	44 ( 1.1 )	285 ( 1.3 )	14 ( 0.8 )	273 ( 2.3 )	5 ( 0.5 )	268 ( 3.5 )	2 ( 0.4 )	... ( ... )
NEW MEXICO	30 ( 1.1 )	269 ( 1.6 )	43 ( 1.2 )	268 ( 1.5 )	17 ( 0.9 )	254 ( 2.0 )	7 ( 0.6 )	234 ( 4.6 )	3 ( 0.4 )	246 ( 5.4 )
NEW YORK†	36 ( 1.3 )	279 ( 1.9 )	43 ( 1.5 )	272 ( 1.9 )	14 ( 1.2 )	268 ( 2.2 )	6 ( 0.7 )	238 ( 7.6 )	2 ( 0.4 )	... ( ... )
NORTH CAROLINA	38 ( 1.2 )	274 ( 1.5 )	42 ( 1.3 )	269 ( 1.7 )	13 ( 0.7 )	262 ( 2.3 )	5 ( 0.6 )	248 ( 4.7 )	3 ( 0.4 )	238 ( 6.8 )
NORTH DAKOTA	34 ( 1.2 )	287 ( 1.3 )	46 ( 1.1 )	288 ( 1.2 )	13 ( 0.8 )	276 ( 1.8 )	4 ( 0.4 )	263 ( 3.7 )	2 ( 0.3 )	... ( ... )
OREGON	42 ( 1.3 )	283 ( 1.8 )	39 ( 1.0 )	278 ( 1.6 )	13 ( 0.7 )	265 ( 2.5 )	4 ( 0.5 )	263 ( 3.5 )	2 ( 0.4 )	... ( ... )
RHODE ISLAND	35 ( 1.2 )	280 ( 1.3 )	44 ( 1.3 )	269 ( 1.4 )	12 ( 0.7 )	259 ( 2.3 )	5 ( 0.5 )	249 ( 5.1 )	3 ( 0.4 )	... ( ... )
SOUTH CAROLINA†	36 ( 1.3 )	266 ( 1.6 )	41 ( 1.0 )	265 ( 1.9 )	13 ( 0.7 )	253 ( 2.4 )	6 ( 0.5 )	235 ( 4.2 )	4 ( 0.4 )	232 ( 4.5 )
TENNESSEE	31 ( 1.2 )	270 ( 1.8 )	43 ( 1.0 )	266 ( 1.7 )	16 ( 1.0 )	256 ( 2.7 )	6 ( 0.6 )	245 ( 3.4 )	4 ( 0.4 )	237 ( 5.1 )
TEXAS	35 ( 1.4 )	280 ( 1.9 )	42 ( 1.2 )	271 ( 1.6 )	15 ( 1.1 )	261 ( 1.9 )	6 ( 0.5 )	250 ( 3.7 )	2 ( 0.4 )	... ( ... )
UTAH	31 ( 1.0 )	282 ( 1.6 )	45 ( 1.1 )	280 ( 1.4 )	16 ( 0.7 )	268 ( 1.7 )	6 ( 0.5 )	263 ( 3.1 )	2 ( 0.3 )	... ( ... )
VERMONT†	44 ( 1.2 )	283 ( 1.2 )	40 ( 1.4 )	281 ( 1.1 )	11 ( 0.7 )	266 ( 2.9 )	4 ( 0.5 )	269 ( 5.2 )	2 ( 0.3 )	... ( ... )
VIRGINIA	36 ( 1.0 )	276 ( 1.8 )	43 ( 1.2 )	270 ( 1.5 )	13 ( 0.7 )	265 ( 2.6 )	5 ( 0.5 )	252 ( 4.8 )	3 ( 0.4 )	... ( ... )
WASHINGTON	37 ( 1.0 )	285 ( 1.5 )	43 ( 0.9 )	278 ( 1.5 )	13 ( 0.7 )	267 ( 2.3 )	5 ( 0.5 )	252 ( 3.5 )	2 ( 0.3 )	... ( ... )
WEST VIRGINIA	33 ( 1.1 )	270 ( 1.3 )	43 ( 1.0 )	268 ( 1.2 )	15 ( 0.8 )	258 ( 2.3 )	7 ( 0.6 )	246 ( 3.4 )	3 ( 0.3 )	252 ( 4.0 )
WISCONSIN†	38 ( 1.2 )	289 ( 1.6 )	43 ( 1.0 )	284 ( 1.5 )	14 ( 0.8 )	273 ( 2.7 )	4 ( 0.4 )	262 ( 4.0 )	2 ( 0.4 )	... ( ... )
WYOMING	34 ( 1.0 )	281 ( 1.7 )	42 ( 1.1 )	277 ( 1.2 )	16 ( 0.8 )	266 ( 2.0 )	6 ( 0.5 )	255 ( 5.3 )	3 ( 0.4 )	267 ( 4.4 )
<b>Other Jurisdictions</b>										
DDESS	48 ( 2.1 )	273 ( 2.8 )	37 ( 1.9 )	272 ( 3.1 )	10 ( 1.3 )	... ( ... )	2 ( 0.6 )	... ( ... )	2 ( 0.7 )	... ( ... )
DoDDS	42 ( 1.1 )	279 ( 1.4 )	40 ( 1.0 )	275 ( 1.6 )	12 ( 0.7 )	267 ( 2.4 )	4 ( 0.4 )	261 ( 3.9 )	2 ( 0.3 )	... ( ... )
GUAM	27 ( 1.5 )	253 ( 3.1 )	35 ( 1.8 )	245 ( 2.5 )	25 ( 1.2 )	232 ( 2.7 )	9 ( 1.0 )	218 ( 6.0 )	4 ( 0.7 )	... ( ... )

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).

... Characteristics of the sample do not permit a reliable estimate.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.



## Chapter 8

### *Teacher Preparation*

#### *Overview*

Chapter 8 provides data from questionnaires completed by mathematics teachers regarding their background and training, including their experience, certification, undergraduate and graduate course work in mathematics, and involvement in pre-service education. Teachers were asked about their professional development activities in the use of technology and mathematics instruction techniques. Such data provide insight into the academic preparation of the instructors who teach mathematics to the students who were assessed.

The teachers' responses were linked to their students, and the data reported are the percentages of students taught by teachers with particular characteristics.

**TABLE 8.1**

**1992 Mathematics Assessment**

POPULATION: 1992 Grade 4 Public School Students  
 REPORTED STATISTICS: Percentage of Students  
 TEACHERS' REPORTS ON: Their Highest Academic Degree



What is the highest academic degree you hold?	Bachelor's Degree	Master's Degree	Educational Specialist's or Professional Diploma	Doctorate or Professional Degree
JURISDICTIONS	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )
<b>Nation</b>				
NATION	53 ( 2.4)	41 ( 2.4)	6 ( 1.2)	0 ( 0.3)
NORTHEAST	40 ( 6.1)	48 ( 5.4)	10 ( 2.7)	2 ( ... )
SOUTHEAST	51 ( 5.8)	40 ( 5.5)	8 ( 3.7)	0 ( ... )
CENTRAL	55 ( 4.2)	40 ( 4.9)	4 ( 2.1)	0 ( ... )
WEST	60 ( 3.6)	38 ( 3.5)	2 ( 1.0)	0 ( ... )
<b>States</b>				
ALABAMA	37 ( 3.0)	56 ( 3.2)	7 ( 1.8)	0 ( ... )
ALASKA	— ( — )	— ( — )	— ( — )	— ( — )
ARIZONA	60 ( 2.9)	34 ( 2.8)	6 ( 1.6)	0 ( ... )
ARKANSAS	70 ( 3.5)	29 ( 3.4)	2 ( 0.9)	0 ( ... )
CALIFORNIA	71 ( 3.1)	24 ( 3.1)	4 ( 1.2)	1 ( 0.4)
COLORADO	53 ( 3.1)	44 ( 3.4)	2 ( 0.8)	1 ( 0.5)
CONNECTICUT	15 ( 2.3)	62 ( 2.8)	23 ( 2.4)	0 ( ... )
DELAWARE	65 ( 1.0)	31 ( 1.0)	4 ( 0.3)	0 ( ... )
DISTRICT OF COLUMBIA	52 ( 1.0)	39 ( 1.0)	8 ( 0.4)	1 ( 0.2)
FLORIDA	69 ( 2.6)	28 ( 2.4)	3 ( 0.8)	1 ( ... )
GEORGIA	53 ( 3.0)	39 ( 3.2)	8 ( 1.8)	0 ( ... )
HAWAII	62 ( 2.9)	19 ( 2.1)	16 ( 1.7)	3 ( ... )
INDIANA	19 ( 2.4)	76 ( 2.9)	5 ( 1.7)	0 ( ... )
IOWA	76 ( 3.0)	22 ( 2.9)	3 ( 1.0)	0 ( ... )
KENTUCKY	21 ( 2.7)	55 ( 3.0)	24 ( 2.9)	0 ( ... )
LOUISIANA	68 ( 3.3)	25 ( 3.0)	6 ( 1.6)	0 ( ... )
MAINE	77 ( 3.4)	21 ( 3.2)	1 ( 0.6)	0 ( ... )
MARYLAND	48 ( 3.4)	44 ( 3.3)	8 ( 1.8)	0 ( ... )
MASSACHUSETTS	43 ( 3.0)	48 ( 3.2)	9 ( 2.1)	0 ( ... )
MICHIGAN	44 ( 3.5)	51 ( 3.6)	5 ( 1.4)	0 ( ... )
MINNESOTA	66 ( 3.4)	29 ( 3.2)	5 ( 0.9)	0 ( ... )
MISSISSIPPI	54 ( 3.3)	40 ( 3.1)	6 ( 1.8)	0 ( ... )
MISSOURI	56 ( 3.6)	40 ( 3.4)	4 ( 1.3)	0 ( ... )
MONTANA	— ( — )	— ( — )	— ( — )	— ( — )
NEBRASKA	66 ( 3.4)	29 ( 3.3)	4 ( 1.4)	1 ( ... )
NEVADA	— ( — )	— ( — )	— ( — )	— ( — )
NEW JERSEY	66 ( 3.9)	28 ( 3.8)	6 ( 1.8)	1 ( ... )
NEW MEXICO	60 ( 3.9)	38 ( 3.9)	2 ( 0.9)	0 ( ... )
NEW YORK	31 ( 3.4)	58 ( 3.4)	10 ( 1.7)	1 ( 0.5)
NORTH CAROLINA	77 ( 2.4)	22 ( 2.4)	1 ( 0.5)	0 ( ... )
NORTH DAKOTA	86 ( 3.2)	14 ( 2.9)	1 ( ... )	0 ( ... )
OREGON	— ( — )	— ( — )	— ( — )	— ( — )
PENNSYLVANIA	43 ( 3.2)	51 ( 3.3)	5 ( 1.5)	1 ( 0.5)
RHODE ISLAND	44 ( 2.8)	51 ( 3.0)	6 ( 1.5)	0 ( ... )
SOUTH CAROLINA	52 ( 2.9)	39 ( 2.6)	9 ( 2.0)	0 ( ... )
TENNESSEE	55 ( 3.0)	35 ( 3.1)	10 ( 1.9)	0 ( ... )
TEXAS	74 ( 2.6)	23 ( 2.6)	2 ( 0.7)	1 ( ... )
UTAH	79 ( 2.7)	18 ( 2.5)	2 ( 0.8)	1 ( ... )
VERMONT	— ( — )	— ( — )	— ( — )	— ( — )
VIRGINIA	72 ( 2.9)	27 ( 2.9)	1 ( 0.4)	0 ( ... )
WASHINGTON	— ( — )	— ( — )	— ( — )	— ( — )
WEST VIRGINIA	49 ( 3.0)	38 ( 2.9)	12 ( 2.3)	0 ( ... )
WISCONSIN	68 ( 3.3)	29 ( 3.1)	3 ( 1.0)	0 ( ... )
WYOMING	80 ( 2.9)	20 ( 2.9)	0 ( ... )	0 ( ... )
<b>Other Jurisdictions</b>				
DDESS	— ( — )	— ( — )	— ( — )	— ( — )
DoDDS	— ( — )	— ( — )	— ( — )	— ( — )
GUAM	67 ( 1.3)	31 ( 1.2)	2 ( 0.5)	0 ( ... )

— State or other jurisdiction did not participate in the NAEP assessment year presented in this table.  
 ... Characteristics of the sample do not permit a reliable estimate.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.



**TABLE 8.1** (continued)

**1996 Mathematics Assessment**



POPULATION: 1996 Grade 4 Public School Students  
 REPORTED STATISTICS: Percentage of Students  
 TEACHERS' REPORTS ON: Their Highest Academic Degree

What is the highest academic degree you hold?	Bachelor's Degree	Master's Degree	Educational Specialist's or Professional Diploma	Doctorate or Professional Degree
JURISDICTIONS	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )
<b>Nation</b>				
NATION	60 ( 2.8)	32 ( 2.3)<	8 ( 1.2)	0 ( 0.0)
NORTHEAST	45 ( 7.6)	45 ( 6.6)	10 ( 2.0)	0 ( ... )
SOUTHEAST	57 ( 6.6)	34 ( 5.5)	9 ( 3.2)	0 ( ... )
CENTRAL	57 ( 5.7)	34 ( 4.1)	9 ( 3.2)	0 ( ... )
WEST	73 ( 3.1)	22 ( 2.8)<	5 ( 1.5)	1 ( 0.1)
<b>States</b>				
ALABAMA	42 ( 3.1)	51 ( 3.1)	6 ( 1.6)	0 ( ... )
ALASKA†	65 ( 2.6)	32 ( 2.5)	2 ( 0.6)	1 ( 0.0)
ARIZONA	52 ( 3.5)	40 ( 3.4)	8 ( 1.9)	0 ( ... )
ARKANSAS†	58 ( 4.2)	39 ( 4.0)	4 ( 1.5)	0 ( ... )
CALIFORNIA	66 ( 2.7)	28 ( 2.7)	6 ( 2.0)	0 ( ... )
COLORADO	54 ( 4.0)	39 ( 3.8)	5 ( 1.3)	2 ( 1.0)
CONNECTICUT	19 ( 2.0)	63 ( 3.3)	18 ( 2.5)	0 ( ... )
DELAWARE	57 ( 1.0)<	39 ( 0.9)>	5 ( 0.6)	0 ( ... )
DISTRICT OF COLUMBIA	56 ( 0.8)>	36 ( 0.7)	6 ( 0.3)	2 ( 0.2)
FLORIDA	62 ( 2.6)	34 ( 2.6)	4 ( 0.9)	0 ( ... )
GEORGIA	52 ( 3.1)	39 ( 2.9)	8 ( 1.7)	0 ( ... )
HAWAII	62 ( 2.7)	18 ( 2.1)	17 ( 2.2)	3 ( ... )
INDIANA	18 ( 3.3)	74 ( 3.5)	8 ( 2.0)	1 ( ... )
IOWA†	80 ( 3.3)	19 ( 3.3)	1 ( ... )	0 ( ... )
KENTUCKY	23 ( 3.1)	51 ( 3.8)	26 ( 3.6)	1 ( ... )
LOUISIANA	60 ( 3.2)	30 ( 2.9)	10 ( 2.0)	0 ( ... )
MAINE	74 ( 2.9)	22 ( 3.0)	3 ( 0.8)	1 ( 0.8)
MARYLAND	47 ( 3.7)	45 ( 3.9)	8 ( 2.6)	0 ( ... )
MASSACHUSETTS	45 ( 3.0)	46 ( 2.7)	9 ( 1.8)	0 ( ... )
MICHIGAN†	42 ( 3.6)	52 ( 3.5)	6 ( 1.6)	1 ( 0.6)
MINNESOTA	52 ( 3.1)	43 ( 3.1)	5 ( 1.3)	0 ( ... )
MISSISSIPPI	57 ( 3.5)	38 ( 3.7)	4 ( 1.2)	0 ( ... )
MISSOURI	60 ( 3.5)	36 ( 3.3)	4 ( 1.0)	0 ( ... )
MONTANA†	74 ( 3.1)	22 ( 3.2)	3 ( 1.2)	1 ( ... )
NEBRASKA	65 ( 3.8)	30 ( 3.3)	5 ( 1.8)	0 ( ... )
NEVADA†	56 ( 3.0)	35 ( 2.9)	9 ( 1.8)	2 ( ... )
NEW JERSEY†	68 ( 3.0)	27 ( 2.3)	5 ( 1.8)	0 ( ... )
NEW MEXICO	58 ( 3.3)	37 ( 3.1)	4 ( 1.4)	1 ( 0.6)
NEW YORK†	28 ( 2.3)	60 ( 2.8)	10 ( 2.0)	1 ( 0.9)
NORTH CAROLINA	75 ( 2.7)	22 ( 2.3)	3 ( 1.3)	0 ( ... )
NORTH DAKOTA	83 ( 2.4)	17 ( 2.5)	0 ( 0.2)	0 ( ... )
OREGON	64 ( 2.6)	30 ( 2.5)	6 ( 1.6)	1 ( 0.4)
PENNSYLVANIA†	40 ( 3.6)	50 ( 3.4)	9 ( 2.0)	1 ( ... )
RHODE ISLAND	36 ( 3.2)	56 ( 3.4)	9 ( 1.6)	0 ( ... )
SOUTH CAROLINA†	49 ( 3.3)	46 ( 3.3)	6 ( 1.1)	0 ( ... )
TENNESSEE	53 ( 2.8)	35 ( 2.8)	12 ( 2.2)	0 ( ... )
TEXAS	69 ( 3.1)	28 ( 3.0)	2 ( 0.9)	1 ( ... )
UTAH	71 ( 3.2)	25 ( 3.1)	3 ( 1.0)	0 ( ... )
VERMONT†	58 ( 3.3)	39 ( 3.3)	3 ( 0.9)	0 ( ... )
VIRGINIA	68 ( 2.8)	29 ( 2.8)	2 ( 0.7)	1 ( 0.8)
WASHINGTON	57 ( 2.9)	39 ( 2.7)	3 ( 1.3)	0 ( ... )
WEST VIRGINIA	46 ( 3.7)	40 ( 3.7)	14 ( 2.8)	1 ( ... )
WISCONSIN	65 ( 3.5)	33 ( 3.6)	2 ( 1.0)	1 ( ... )
WYOMING	77 ( 2.9)	20 ( 2.8)	3 ( 1.0)	0 ( ... )
<b>Other Jurisdictions</b>				
DDESS	38 ( 1.2)	45 ( 1.1)	16 ( 1.0)	1 ( 0.1)
DoDDS	37 ( 1.9)	49 ( 1.7)	13 ( 1.5)	1 ( 0.0)
GUAM	77 ( 1.0)>	23 ( 1.0)<	0 ( 0.1)	0 ( ... )

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).  
 ... Characteristics of the sample do not permit a reliable estimate.  
 > (<) The value for the students was significantly higher (lower) than in the 1992 assessment at about the 95% confidence level using appropriate multiple comparison procedures.  
 SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 8.2**

**1996 Mathematics Assessment**



POPULATION: 1996 Grade 4 Public School Students  
 REPORTED STATISTICS: Percentage of Students  
 TEACHERS' REPORTS ON: Their Undergraduate Majors

What were your undergraduate major fields of study?

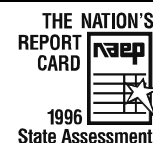
	Education	Mathematics	Mathematics Education	Special Education	ESL	Other
JURISDICTIONS	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )
<b>Nation</b>						
NATION	88 ( 1.5)	7 ( 1.4)	6 ( 1.2)	8 ( 1.5)	3 ( 0.9)	37 ( 2.5)
NORTHEAST	87 ( 4.0)	10 ( 3.8)	7 ( 3.2)	4 ( 2.0)	2 ( ... )	36 ( 5.1)
SOUTHEAST	94 ( 2.4)	5 ( 2.3)	4 ( 1.5)	3 ( 1.0)	1 ( ... )	26 ( 6.1)
CENTRAL	97 ( 1.7)	5 ( 2.3)	8 ( 2.6)	13 ( 4.2)	3 ( 2.0)	25 ( 4.8)
WEST	77 ( 3.2)	7 ( 2.6)	5 ( 1.9)	9 ( 2.6)	5 ( 2.0)	52 ( 3.9)
<b>States</b>						
ALABAMA	94 ( 1.8)	1 ( ... )	2 ( 0.8)	3 ( 0.9)	0 ( ... )	16 ( 2.3)
ALASKA†	85 ( 2.2)	5 ( 1.3)	4 ( 0.8)	10 ( 1.7)	2 ( 0.8)	48 ( 3.4)
ARIZONA	93 ( 1.7)	3 ( 0.9)	2 ( 0.8)	11 ( 1.6)	9 ( 2.0)	25 ( 2.8)
ARKANSAS†	96 ( 1.6)	3 ( 1.4)	4 ( 1.9)	7 ( 2.5)	1 ( ... )	19 ( 2.7)
CALIFORNIA	56 ( 3.6)	2 ( 0.9)	1 ( ... )	3 ( 1.3)	5 ( 1.6)	61 ( 3.4)
COLORADO	90 ( 1.6)	2 ( 0.9)	3 ( 1.0)	7 ( 1.6)	3 ( 0.9)	36 ( 2.8)
CONNECTICUT	79 ( 2.5)	2 ( 0.8)	2 ( 0.6)	5 ( 1.1)	0 ( ... )	37 ( 3.0)
DELAWARE	93 ( 0.6)	2 ( 0.2)	2 ( 0.3)	11 ( 0.5)	1 ( 0.1)	23 ( 0.9)
DISTRICT OF COLUMBIA	77 ( 0.5)	3 ( 0.3)	2 ( 0.0)	5 ( 0.3)	0 ( ... )	35 ( 0.7)
FLORIDA	93 ( 1.2)	2 ( 0.7)	2 ( 0.7)	5 ( 1.3)	2 ( 0.7)	25 ( 1.8)
GEORGIA	85 ( 2.2)	4 ( 0.9)	3 ( 0.9)	3 ( 1.0)	0 ( ... )	26 ( 2.8)
HAWAII	85 ( 1.8)	3 ( 1.3)	4 ( 1.2)	3 ( 1.0)	3 ( 1.1)	31 ( 2.7)
INDIANA	97 ( 1.0)	0 ( ... )	1 ( 0.5)	5 ( 1.3)	0 ( ... )	15 ( 2.8)
IOWA†	99 ( 0.4)	3 ( 1.5)	3 ( 1.1)	7 ( 1.9)	0 ( ... )	26 ( 3.4)
KENTUCKY	98 ( 1.1)	2 ( 0.9)	1 ( 0.6)	6 ( 1.4)	0 ( ... )	17 ( 2.7)
LOUISIANA	96 ( 1.5)	2 ( 1.1)	2 ( 0.9)	4 ( 1.4)	0 ( ... )	16 ( 2.3)
MAINE	84 ( 2.4)	3 ( 1.2)	3 ( 1.2)	6 ( 1.4)	1 ( 0.5)	37 ( 3.4)
MARYLAND	91 ( 2.2)	3 ( 1.0)	6 ( 1.7)	4 ( 1.3)	0 ( ... )	22 ( 2.8)
MASSACHUSETTS	82 ( 2.5)	1 ( 0.7)	2 ( 0.8)	5 ( 1.3)	1 ( 0.3)	38 ( 3.5)
MICHIGAN†	93 ( 1.6)	8 ( 2.2)	6 ( 1.6)	5 ( 1.3)	0 ( ... )	39 ( 3.1)
MINNESOTA	96 ( 1.0)	2 ( 1.1)	1 ( 0.8)	5 ( 1.3)	0 ( ... )	19 ( 2.1)
MISSISSIPPI	97 ( 1.1)	4 ( 1.3)	3 ( 1.0)	7 ( 2.3)	0 ( ... )	15 ( 2.1)
MISSOURI	98 ( 0.6)	3 ( 1.1)	2 ( 1.1)	9 ( 1.9)	0 ( ... )	23 ( 3.2)
MONTANA†	98 ( 0.9)	6 ( 1.6)	3 ( 1.1)	8 ( 1.7)	0 ( 0.1)	25 ( 2.8)
NEBRASKA	98 ( 0.6)	5 ( 1.9)	3 ( 1.5)	11 ( 2.0)	0 ( ... )	27 ( 3.9)
NEVADA†	89 ( 2.1)	4 ( 1.0)	2 ( 0.8)	11 ( 2.2)	2 ( 0.7)	33 ( 3.0)
NEW JERSEY†	91 ( 1.8)	2 ( 0.8)	1 ( 0.6)	4 ( 1.8)	0 ( ... )	32 ( 2.7)
NEW MEXICO	88 ( 1.9)	6 ( 1.7)	1 ( 0.5)	5 ( 1.3)	9 ( 1.8)	38 ( 2.7)
NEW YORK†	79 ( 2.5)	1 ( 0.6)	2 ( 0.7)	5 ( 1.0)	2 ( 0.8)	44 ( 2.9)
NORTH CAROLINA	94 ( 1.3)	6 ( 1.8)	2 ( 0.8)	2 ( 0.9)	0 ( ... )	24 ( 2.9)
NORTH DAKOTA	99 ( ... )	2 ( 0.9)	2 ( 0.5)	14 ( 2.2)	0 ( ... )	20 ( 3.0)
OREGON	91 ( 1.9)	4 ( 1.5)	3 ( 0.9)	7 ( 1.6)	1 ( 0.3)	35 ( 3.2)
PENNSYLVANIA†	94 ( 1.6)	3 ( 1.3)	2 ( 0.9)	4 ( 1.3)	0 ( ... )	19 ( 2.4)
RHODE ISLAND	89 ( 1.7)	4 ( 1.1)	1 ( 0.4)	13 ( 2.0)	4 ( 1.3)	38 ( 3.1)
SOUTH CAROLINA†	93 ( 1.8)	3 ( 1.3)	1 ( 0.5)	3 ( 0.9)	0 ( ... )	23 ( 3.4)
TENNESSEE	94 ( 1.2)	2 ( 0.9)	2 ( 0.7)	4 ( 0.9)	0 ( ... )	23 ( 2.6)
TEXAS	89 ( 1.9)	5 ( 1.4)	7 ( 2.0)	5 ( 1.5)	7 ( 2.0)	39 ( 3.5)
UTAH	95 ( 1.0)	3 ( 1.0)	3 ( 0.9)	7 ( 2.0)	2 ( 0.8)	37 ( 3.0)
VERMONT†	82 ( 2.7)	5 ( 1.0)	2 ( 0.8)	7 ( 1.7)	0 ( ... )	36 ( 3.0)
VIRGINIA	89 ( 2.2)	4 ( 1.5)	2 ( 0.7)	4 ( 1.1)	0 ( ... )	27 ( 3.0)
WASHINGTON	82 ( 2.2)	3 ( 1.1)	2 ( 0.9)	7 ( 1.6)	0 ( ... )	57 ( 2.9)
WEST VIRGINIA	99 ( 0.6)	2 ( 1.1)	4 ( 1.5)	8 ( 1.5)	0 ( ... )	25 ( 3.6)
WISCONSIN	96 ( 1.3)	3 ( 1.5)	4 ( 1.6)	7 ( 1.7)	1 ( ... )	23 ( 2.6)
WYOMING	98 ( 0.7)	4 ( 0.7)	1 ( 0.6)	8 ( 1.7)	0 ( ... )	28 ( 2.7)
<b>Other Jurisdictions</b>						
DDESS	96 ( 0.6)	3 ( 0.3)	6 ( 0.6)	9 ( 0.4)	4 ( 0.4)	32 ( 0.9)
DoDDS	88 ( 1.3)	5 ( 0.7)	5 ( 0.8)	9 ( 1.1)	2 ( 0.5)	46 ( 2.2)
GUAM	91 ( 0.8)	5 ( 0.7)	6 ( 0.7)	11 ( 0.8)	3 ( 0.7)	28 ( 1.4)

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).  
 ... Characteristics of the sample do not permit a reliable estimate.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 8.3**

**1996 Mathematics Assessment**



POPULATION: 1996 Grade 4 Public School Students  
 REPORTED STATISTICS: Percentage of Students  
 TEACHERS' REPORTS ON: Their Graduate Majors

What were your graduate major fields of study?	Education	Mathematics	Mathematics Education	Special Education	Bilingual
JURISDICTIONS	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )
<b>Nation</b>					
NATION	59 ( 2.7)	4 ( 1.0)	5 ( 1.3)	5 ( 1.2)	2 ( 0.6)
NORTHEAST	69 ( 5.4)	2 ( 0.7)	4 ( 1.6)	9 ( 4.0)	0 ( ... )
SOUTHEAST	54 ( 7.0)	5 ( 2.2)	2 ( 1.3)	1 ( 0.3)	1 ( ... )
CENTRAL	63 ( 5.5)	6 ( 3.0)	9 ( 3.7)	8 ( 2.6)	1 ( ... )
WEST	53 ( 4.2)	3 ( 1.2)	5 ( 2.2)	4 ( 1.7)	6 ( 1.5)
<b>States</b>					
ALABAMA	76 ( 2.8)	1 ( 0.8)	1 ( 0.7)	3 ( 1.0)	0 ( ... )
ALASKA†	61 ( 3.2)	2 ( 0.6)	6 ( 1.7)	11 ( 2.3)	3 ( 0.9)
ARIZONA	66 ( 2.3)	2 ( 1.0)	3 ( 0.9)	8 ( 1.4)	7 ( 1.6)
ARKANSAS†	55 ( 4.1)	1 ( ... )	2 ( 1.0)	4 ( 1.6)	0 ( ... )
CALIFORNIA	73 ( 3.2)	1 ( 0.6)	2 ( 0.8)	8 ( 2.0)	6 ( 1.7)
COLORADO	54 ( 3.4)	4 ( 1.3)	5 ( 1.4)	6 ( 1.4)	2 ( 0.8)
CONNECTICUT	76 ( 2.4)	1 ( 0.4)	1 ( 0.6)	8 ( 1.7)	0 ( ... )
DELAWARE	53 ( 1.1)	2 ( 0.3)	2 ( 0.3)	8 ( 0.5)	0 ( 0.1)
DISTRICT OF COLUMBIA	58 ( 0.9)	4 ( 0.4)	4 ( 0.3)	4 ( 0.3)	0 ( ... )
FLORIDA	51 ( 2.8)	1 ( 0.4)	2 ( 0.7)	3 ( 1.0)	2 ( 0.7)
GEORGIA	58 ( 3.0)	2 ( 1.0)	2 ( 0.8)	3 ( 0.8)	1 ( ... )
HAWAII	72 ( 2.4)	1 ( 0.9)	2 ( 0.7)	3 ( 0.7)	2 ( 0.9)
INDIANA	89 ( 2.3)	0 ( ... )	1 ( ... )	5 ( 1.3)	0 ( ... )
IOWA†	55 ( 3.8)	4 ( 1.1)	4 ( 1.8)	6 ( 1.6)	0 ( ... )
KENTUCKY	81 ( 3.0)	0 ( ... )	1 ( 0.3)	6 ( 1.7)	0 ( ... )
LOUISIANA	54 ( 2.9)	2 ( 1.0)	2 ( 1.1)	5 ( 1.7)	0 ( ... )
MAINE	35 ( 3.2)	1 ( 0.5)	1 ( 0.7)	5 ( 1.3)	0 ( ... )
MARYLAND	63 ( 3.1)	3 ( 1.5)	7 ( 2.1)	8 ( 1.8)	0 ( ... )
MASSACHUSETTS	63 ( 3.2)	1 ( 0.5)	2 ( 0.7)	8 ( 1.8)	0 ( ... )
MICHIGAN†	68 ( 3.5)	3 ( 1.1)	2 ( 0.8)	7 ( 1.6)	0 ( ... )
MINNESOTA	66 ( 3.3)	2 ( 1.0)	2 ( 0.8)	6 ( 1.5)	0 ( 0.0)
MISSISSIPPI	62 ( 3.3)	1 ( 0.4)	2 ( 1.2)	4 ( 1.5)	0 ( ... )
MISSOURI	60 ( 3.1)	0 ( ... )	3 ( 1.0)	5 ( 1.4)	0 ( ... )
MONTANA†	67 ( 3.4)	2 ( 0.7)	4 ( 1.3)	6 ( 1.3)	0 ( ... )
NEBRASKA	64 ( 3.2)	2 ( 0.9)	5 ( 2.8)	8 ( 1.8)	0 ( ... )
NEVADA†	57 ( 3.1)	5 ( 1.1)	3 ( 0.9)	8 ( 1.8)	2 ( 0.9)
NEW JERSEY†	34 ( 3.4)	1 ( 0.7)	2 ( 0.7)	5 ( 1.7)	1 ( 0.5)
NEW MEXICO	57 ( 3.7)	2 ( 0.8)	1 ( 0.7)	6 ( 1.1)	8 ( 1.8)
NEW YORK†	76 ( 2.3)	1 ( 0.6)	2 ( 0.9)	9 ( 1.5)	1 ( 0.3)
NORTH CAROLINA	37 ( 2.9)	1 ( ... )	0 ( ... )	2 ( 0.7)	0 ( ... )
NORTH DAKOTA	61 ( 3.8)	2 ( 0.9)	5 ( 1.6)	7 ( 1.6)	0 ( ... )
OREGON	76 ( 2.5)	1 ( 0.7)	5 ( 1.3)	8 ( 1.8)	1 ( 0.7)
PENNSYLVANIA†	77 ( 2.8)	0 ( ... )	3 ( 0.9)	6 ( 1.6)	0 ( ... )
RHODE ISLAND	69 ( 2.7)	1 ( 0.5)	1 ( 0.6)	15 ( 2.2)	1 ( 0.5)
SOUTH CAROLINA†	74 ( 2.6)	2 ( 0.9)	1 ( 0.5)	3 ( 1.0)	0 ( ... )
TENNESSEE	48 ( 3.0)	1 ( 0.5)	1 ( 0.4)	4 ( 1.6)	0 ( ... )
TEXAS	45 ( 3.7)	2 ( 0.6)	1 ( 0.5)	4 ( 1.1)	4 ( 1.4)
UTAH	59 ( 3.2)	2 ( 1.1)	3 ( 1.2)	4 ( 1.4)	1 ( 0.6)
VERMONT†	68 ( 3.3)	6 ( 1.8)	8 ( 2.1)	9 ( 1.9)	0 ( ... )
VIRGINIA	46 ( 2.5)	1 ( 0.4)	1 ( 0.6)	4 ( 1.3)	0 ( ... )
WASHINGTON	63 ( 3.0)	1 ( ... )	4 ( 1.1)	3 ( 1.1)	1 ( 0.4)
WEST VIRGINIA	71 ( 2.9)	2 ( 0.8)	4 ( 1.6)	13 ( 2.0)	0 ( ... )
WISCONSIN	63 ( 3.8)	1 ( 0.8)	2 ( 0.9)	3 ( 1.1)	0 ( ... )
WYOMING	62 ( 3.3)	4 ( 1.2)	6 ( 1.9)	7 ( 1.4)	0 ( 0.0)
<b>Other Jurisdictions</b>					
DDESS	68 ( 1.1)	0 ( ... )	4 ( 0.6)	4 ( 0.4)	2 ( 0.2)
DoDDS	66 ( 2.0)	0 ( 0.3)	4 ( 0.6)	8 ( 1.1)	4 ( 0.7)
GUAM	56 ( 1.3)	3 ( 0.5)	2 ( 0.6)	7 ( 0.6)	0 ( 0.0)

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).  
 ... Characteristics of the sample do not permit a reliable estimate.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 8.3** (continued)

**1996 Mathematics Assessment**



POPULATION: 1996 Grade 4 Public School Students  
 REPORTED STATISTICS: Percentage of Students  
 TEACHERS' REPORTS ON: Their Graduate Majors

What were your graduate major fields of study?	Administration/ Supervision/ Curriculum	Counseling	Other	No Graduate Study
JURISDICTIONS	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )
<b>Nation</b>				
NATION	15 ( 1.8)	2 ( 0.7)	16 ( 1.7)	30 ( 2.4)
NORTHEAST	11 ( 3.0)	2 ( ... )	18 ( 2.2)	24 ( 5.0)
SOUTHEAST	9 ( 3.0)	1 ( ... )	10 ( 2.2)	39 ( 6.8)
CENTRAL	19 ( 4.4)	2 ( 1.3)	14 ( 3.0)	23 ( 4.0)
WEST	16 ( 3.3)	3 ( 1.2)	20 ( 4.0)	34 ( 4.0)
<b>States</b>				
ALABAMA	7 ( 1.9)	3 ( 1.1)	3 ( 1.2)	21 ( 2.5)
ALASKA†	13 ( 1.9)	4 ( 1.2)	14 ( 2.0)	25 ( 2.5)
ARIZONA	18 ( 3.0)	3 ( 0.8)	17 ( 2.6)	16 ( 1.8)
ARKANSAS†	7 ( 2.2)	2 ( 1.0)	17 ( 3.3)	29 ( 3.5)
CALIFORNIA	16 ( 2.4)	7 ( 1.9)	21 ( 2.7)	10 ( 2.0)
COLORADO	22 ( 2.8)	4 ( 1.2)	18 ( 2.7)	26 ( 3.1)
CONNECTICUT	11 ( 1.5)	4 ( 1.0)	23 ( 2.4)	5 ( 1.2)
DELAWARE	24 ( 1.1)	4 ( 0.3)	7 ( 0.5)	24 ( 0.9)
DISTRICT OF COLUMBIA	14 ( 0.6)	6 ( 0.3)	26 ( 0.8)	18 ( 0.7)
FLORIDA	12 ( 1.8)	1 ( 0.6)	14 ( 1.9)	37 ( 2.5)
GEORGIA	7 ( 1.5)	2 ( 0.9)	9 ( 1.5)	33 ( 2.6)
HAWAII	15 ( 2.2)	1 ( 0.5)	9 ( 1.5)	23 ( 2.2)
INDIANA	7 ( 1.4)	2 ( 1.0)	8 ( 2.2)	8 ( 2.0)
IOWA†	15 ( 2.8)	4 ( 1.7)	13 ( 2.6)	32 ( 3.7)
KENTUCKY	9 ( 1.9)	7 ( 1.7)	11 ( 2.3)	7 ( 1.7)
LOUISIANA	21 ( 2.8)	5 ( 1.3)	7 ( 2.2)	33 ( 2.8)
MAINE	6 ( 1.9)	3 ( 1.3)	11 ( 1.9)	54 ( 3.2)
MARYLAND	23 ( 2.7)	5 ( 1.7)	13 ( 2.2)	19 ( 2.3)
MASSACHUSETTS	16 ( 2.5)	5 ( 1.4)	22 ( 3.0)	24 ( 2.8)
MICHIGAN†	21 ( 2.7)	5 ( 1.4)	23 ( 3.0)	7 ( 2.0)
MINNESOTA	25 ( 3.1)	1 ( 0.6)	9 ( 2.0)	22 ( 2.5)
MISSISSIPPI	6 ( 1.5)	1 ( 0.4)	4 ( 1.2)	34 ( 3.4)
MISSOURI	17 ( 2.8)	2 ( 0.8)	10 ( 1.8)	29 ( 2.6)
MONTANA†	14 ( 2.5)	5 ( 1.6)	10 ( 1.9)	27 ( 2.9)
NEBRASKA	26 ( 3.6)	3 ( 1.1)	19 ( 3.6)	22 ( 3.0)
NEVADA†	27 ( 3.0)	3 ( 0.9)	19 ( 2.6)	21 ( 2.3)
NEW JERSEY†	12 ( 2.4)	4 ( 1.2)	20 ( 2.7)	46 ( 3.3)
NEW MEXICO	16 ( 2.4)	4 ( 1.2)	20 ( 2.6)	23 ( 3.0)
NEW YORK†	10 ( 1.6)	4 ( 1.0)	24 ( 2.6)	6 ( 1.3)
NORTH CAROLINA	8 ( 1.8)	1 ( 0.4)	7 ( 1.7)	57 ( 3.2)
NORTH DAKOTA	14 ( 2.3)	1 ( 0.4)	9 ( 2.1)	33 ( 3.8)
OREGON	20 ( 2.5)	3 ( 1.1)	19 ( 2.4)	15 ( 1.9)
PENNSYLVANIA†	7 ( 1.4)	3 ( 1.0)	15 ( 2.5)	14 ( 2.2)
RHODE ISLAND	6 ( 1.4)	7 ( 1.5)	21 ( 2.7)	8 ( 1.7)
SOUTH CAROLINA†	8 ( 1.4)	4 ( 1.2)	8 ( 1.4)	16 ( 2.1)
TENNESSEE	30 ( 3.4)	3 ( 1.2)	10 ( 1.7)	33 ( 2.6)
TEXAS	13 ( 2.6)	2 ( 0.6)	19 ( 2.6)	37 ( 3.3)
UTAH	18 ( 2.2)	3 ( 1.0)	15 ( 2.3)	32 ( 3.0)
VERMONT†	26 ( 3.0)	4 ( 1.7)	18 ( 2.0)	17 ( 2.3)
VIRGINIA	14 ( 2.5)	2 ( 1.2)	11 ( 1.6)	41 ( 2.6)
WASHINGTON	25 ( 2.6)	3 ( 1.0)	21 ( 2.2)	22 ( 2.7)
WEST VIRGINIA	19 ( 2.9)	2 ( 1.0)	20 ( 3.1)	11 ( 2.0)
WISCONSIN	18 ( 2.7)	3 ( 1.4)	19 ( 2.4)	24 ( 3.9)
WYOMING	19 ( 2.2)	4 ( 1.3)	17 ( 2.6)	30 ( 3.0)
<b>Other Jurisdictions</b>				
DDESS	14 ( 1.2)	5 ( 0.5)	14 ( 1.2)	17 ( 1.1)
DoDDS	34 ( 1.7)	7 ( 0.8)	25 ( 1.6)	12 ( 1.5)
GUAM	7 ( 0.7)	3 ( 0.4)	21 ( 1.1)	31 ( 1.3)

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).  
 ... Characteristics of the sample do not permit a reliable estimate.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 8.4****1996 Mathematics Assessment**

POPULATION:

1996 Grade 4 Public School Students

REPORTED STATISTICS:

Percentage of Students

TEACHERS' REPORTS ON:

Their Teaching Certification

<i>What type of teaching certification do you have in your main assignment field?</i>	<b>None, or Accreditation other than State, Temporary, or Probationary</b>	<b>Regular</b>	<b>Advanced</b>
<b>JURISDICTIONS</b>	PCT ( SE )	PCT ( SE )	PCT ( SE )
<b>Nation</b>			
NATION	5 ( 1.0)	79 ( 2.0)	16 ( 1.8)
NORTHEAST	11 ( 3.4)	71 ( 3.1)	18 ( 2.1)
SOUTHEAST	3 ( 1.3)	72 ( 4.8)	25 ( 4.8)
CENTRAL	6 ( 2.3)	77 ( 4.4)	17 ( 4.0)
WEST	2 ( 0.9)	89 ( 3.1)	9 ( 2.8)
<b>States</b>			
ALABAMA	0 ( ... )	55 ( 3.6)	45 ( 3.6)
ALASKA†	4 ( 1.4)	88 ( 2.2)	8 ( 1.7)
ARIZONA	7 ( 1.3)	80 ( 2.2)	13 ( 1.8)
ARKANSAS†	1 ( ... )	82 ( 3.6)	17 ( 3.4)
CALIFORNIA	5 ( 1.6)	85 ( 2.2)	9 ( 1.5)
COLORADO	6 ( 1.1)	84 ( 2.1)	10 ( 1.9)
CONNECTICUT	13 ( 1.9)	75 ( 2.7)	12 ( 2.0)
DELAWARE	2 ( 0.3)	88 ( 0.7)	10 ( 0.7)
DISTRICT OF COLUMBIA	28 ( 0.5)	55 ( 0.7)	17 ( 0.7)
FLORIDA	7 ( 1.4)	75 ( 2.5)	17 ( 2.1)
GEORGIA	2 ( 0.9)	62 ( 2.8)	36 ( 3.0)
HAWAII	11 ( 1.6)	51 ( 2.6)	38 ( 2.7)
INDIANA	1 ( ... )	60 ( 3.9)	40 ( 3.9)
IOWA†	6 ( 1.8)	80 ( 3.4)	14 ( 2.7)
KENTUCKY	6 ( 1.8)	71 ( 3.6)	24 ( 3.2)
LOUISIANA	7 ( 2.0)	67 ( 3.4)	26 ( 3.1)
MAINE	3 ( 1.0)	91 ( 1.7)	6 ( 1.4)
MARYLAND	4 ( 1.0)	28 ( 2.7)	68 ( 2.9)
MASSACHUSETTS	1 ( 0.5)	93 ( 1.4)	6 ( 1.3)
MICHIGAN†	10 ( 2.4)	68 ( 3.5)	22 ( 3.1)
MINNESOTA	3 ( 1.0)	90 ( 1.6)	8 ( 1.3)
MISSISSIPPI	3 ( 0.7)	70 ( 3.4)	27 ( 3.4)
MISSOURI	8 ( 1.5)	79 ( 2.3)	13 ( 2.1)
MONTANA†	0 ( ... )	80 ( 2.9)	19 ( 3.0)
NEBRASKA	4 ( 1.5)	76 ( 2.8)	20 ( 2.8)
NEVADA†	4 ( 1.2)	83 ( 2.2)	13 ( 1.9)
NEW JERSEY†	4 ( 1.3)	88 ( 2.8)	8 ( 2.0)
NEW MEXICO	1 ( 0.5)	82 ( 2.6)	17 ( 2.6)
NEW YORK†	19 ( 2.6)	69 ( 3.1)	12 ( 2.2)
NORTH CAROLINA	8 ( 1.7)	80 ( 2.3)	11 ( 1.8)
NORTH DAKOTA	0 ( 0.1)	92 ( 1.9)	8 ( 1.9)
OREGON	2 ( 0.6)	94 ( 1.5)	4 ( 1.4)
PENNSYLVANIA†	7 ( 1.9)	63 ( 3.1)	29 ( 3.1)
RHODE ISLAND	4 ( 0.9)	50 ( 2.6)	46 ( 2.4)
SOUTH CAROLINA†	0 ( ... )	70 ( 2.7)	30 ( 2.6)
TENNESSEE	9 ( 1.9)	63 ( 2.9)	28 ( 2.8)
TEXAS	6 ( 1.4)	82 ( 2.6)	12 ( 2.3)
UTAH	3 ( 1.1)	82 ( 2.9)	15 ( 2.3)
VERMONT†	2 ( 0.9)	90 ( 1.9)	8 ( 1.8)
VIRGINIA	4 ( 1.2)	73 ( 2.7)	23 ( 2.4)
WASHINGTON	5 ( 1.7)	83 ( 2.6)	11 ( 1.9)
WEST VIRGINIA	2 ( 1.0)	49 ( 3.8)	49 ( 3.8)
WISCONSIN	2 ( 1.2)	86 ( 2.5)	11 ( 2.1)
WYOMING	1 ( ... )	84 ( 2.1)	15 ( 2.2)
<b>Other Jurisdictions</b>			
DDESS	4 ( 0.6)	60 ( 1.1)	36 ( 1.3)
DoDDS	11 ( 0.9)	68 ( 1.9)	21 ( 1.8)
GUAM	9 ( 1.3)	74 ( 1.3)	17 ( 0.9)

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).

... Characteristics of the sample do not permit a reliable estimate.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 8.5**

**1992 Mathematics Assessment**



POPULATION: 1992 Grade 4 Public School Students  
 REPORTED STATISTICS: Percentage of Students  
 TEACHERS' REPORTS ON: Their Total Years of Teaching Experience

Counting this year, how many years in total have you taught?	JURISDICTIONS				
	2 Years or Less	3 to 5 Years	6 to 10 Years	11 to 24 Years	25 Years or More
	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )
<b>Nation</b>					
NATION	8 ( 1.1 )	13 ( 1.7 )	14 ( 1.6 )	46 ( 2.4 )	19 ( 1.6 )
NORTHEAST	10 ( 3.8 )	8 ( 2.9 )	7 ( 2.2 )	58 ( 5.1 )	17 ( 2.9 )
SOUTHEAST	8 ( 1.9 )	17 ( 3.7 )	16 ( 2.3 )	42 ( 3.6 )	17 ( 3.2 )
CENTRAL	3 ( 1.4 )	11 ( 3.5 )	19 ( 5.2 )	44 ( 6.7 )	23 ( 2.8 )
WEST	10 ( 1.7 )	15 ( 3.2 )	13 ( 2.3 )	44 ( 3.5 )	18 ( 3.7 )
<b>States</b>					
ALABAMA	5 ( 1.3 )	10 ( 1.9 )	11 ( 1.7 )	64 ( 3.1 )	10 ( 2.1 )
ALASKA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
ARIZONA	9 ( 1.1 )	14 ( 2.0 )	20 ( 2.1 )	46 ( 2.4 )	11 ( 2.1 )
ARKANSAS	5 ( 1.2 )	11 ( 2.2 )	19 ( 2.4 )	52 ( 3.5 )	13 ( 2.1 )
CALIFORNIA	6 ( 1.4 )	17 ( 2.1 )	19 ( 2.4 )	40 ( 3.7 )	19 ( 2.5 )
COLORADO	8 ( 1.6 )	11 ( 1.4 )	16 ( 2.0 )	51 ( 2.8 )	15 ( 1.9 )
CONNECTICUT	4 ( 1.3 )	8 ( 1.6 )	13 ( 2.3 )	56 ( 3.6 )	19 ( 2.6 )
DELAWARE	15 ( 0.7 )	12 ( 0.7 )	13 ( 0.7 )	45 ( 1.0 )	15 ( 0.6 )
DISTRICT OF COLUMBIA	5 ( 0.3 )	7 ( 0.6 )	17 ( 0.8 )	38 ( 0.8 )	34 ( 0.7 )
FLORIDA	8 ( 1.7 )	14 ( 2.2 )	19 ( 3.9 )	47 ( 3.3 )	12 ( 1.9 )
GEORGIA	10 ( 2.1 )	13 ( 2.2 )	18 ( 2.1 )	50 ( 3.2 )	8 ( 1.8 )
HAWAII	11 ( 1.5 )	14 ( 2.3 )	14 ( 1.9 )	39 ( 3.6 )	22 ( 2.5 )
INDIANA	5 ( 1.5 )	9 ( 1.7 )	14 ( 1.9 )	53 ( 3.4 )	19 ( 2.4 )
IOWA	7 ( 1.6 )	12 ( 2.4 )	15 ( 2.8 )	45 ( 3.6 )	21 ( 2.7 )
KENTUCKY	7 ( 1.6 )	11 ( 2.0 )	14 ( 2.4 )	53 ( 2.7 )	16 ( 2.5 )
LOUISIANA	13 ( 2.4 )	8 ( 1.6 )	18 ( 2.7 )	51 ( 3.3 )	11 ( 2.0 )
MAINE	3 ( 0.8 )	14 ( 2.4 )	16 ( 1.9 )	57 ( 3.4 )	10 ( 1.6 )
MARYLAND	13 ( 1.9 )	15 ( 2.1 )	12 ( 2.0 )	43 ( 3.0 )	17 ( 2.8 )
MASSACHUSETTS	1 ( ... )	5 ( 1.4 )	9 ( 2.0 )	57 ( 3.7 )	29 ( 3.7 )
MICHIGAN	5 ( 2.2 )	10 ( 2.0 )	14 ( 2.3 )	50 ( 3.3 )	21 ( 2.2 )
MINNESOTA	6 ( 1.6 )	10 ( 2.0 )	9 ( 1.6 )	52 ( 3.1 )	22 ( 2.8 )
MISSISSIPPI	12 ( 2.4 )	10 ( 1.8 )	11 ( 2.2 )	55 ( 3.3 )	11 ( 2.1 )
MISSOURI	8 ( 1.7 )	8 ( 1.6 )	17 ( 2.2 )	55 ( 3.1 )	12 ( 2.1 )
MONTANA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
NEBRASKA	3 ( 0.9 )	13 ( 1.9 )	14 ( 2.5 )	57 ( 3.2 )	13 ( 2.1 )
NEVADA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
NEW JERSEY	5 ( 1.1 )	5 ( 1.6 )	11 ( 1.7 )	55 ( 3.3 )	24 ( 2.9 )
NEW MEXICO	12 ( 1.9 )	12 ( 2.7 )	18 ( 2.4 )	45 ( 3.4 )	14 ( 2.5 )
NEW YORK	8 ( 1.9 )	13 ( 2.0 )	14 ( 2.5 )	48 ( 3.1 )	17 ( 2.1 )
NORTH CAROLINA	8 ( 1.7 )	11 ( 1.6 )	14 ( 1.6 )	51 ( 3.1 )	15 ( 2.3 )
NORTH DAKOTA	2 ( 0.9 )	8 ( 1.8 )	15 ( 3.0 )	54 ( 3.5 )	21 ( 3.2 )
OREGON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
PENNSYLVANIA	3 ( 0.9 )	7 ( 1.5 )	10 ( 2.2 )	58 ( 3.4 )	23 ( 3.1 )
RHODE ISLAND	4 ( 1.2 )	14 ( 2.4 )	13 ( 2.1 )	54 ( 3.5 )	16 ( 2.4 )
SOUTH CAROLINA	7 ( 1.2 )	15 ( 2.1 )	15 ( 2.3 )	57 ( 2.9 )	7 ( 1.6 )
TENNESSEE	6 ( 1.3 )	10 ( 2.1 )	13 ( 2.0 )	52 ( 3.3 )	20 ( 2.3 )
TEXAS	17 ( 2.4 )	21 ( 2.4 )	19 ( 2.6 )	36 ( 2.9 )	8 ( 1.6 )
UTAH	9 ( 2.0 )	12 ( 1.9 )	22 ( 2.7 )	45 ( 3.3 )	12 ( 2.2 )
VERMONT	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
VIRGINIA	8 ( 1.5 )	13 ( 2.1 )	20 ( 2.3 )	49 ( 2.5 )	9 ( 2.0 )
WASHINGTON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
WEST VIRGINIA	1 ( 0.9 )	6 ( 1.8 )	15 ( 2.4 )	65 ( 3.3 )	13 ( 2.4 )
WISCONSIN	8 ( 2.0 )	12 ( 2.1 )	10 ( 2.0 )	44 ( 3.2 )	27 ( 2.9 )
WYOMING	4 ( 1.0 )	8 ( 1.8 )	15 ( 2.1 )	57 ( 2.8 )	17 ( 2.2 )
<b>Other Jurisdictions</b>					
DDESS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
DoDDS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
GUAM	11 ( 1.0 )	13 ( 0.7 )	12 ( 0.8 )	53 ( 1.3 )	11 ( 0.6 )

— State or other jurisdiction did not participate in the NAEP assessment year presented in this table.

... Characteristics of the sample do not permit a reliable estimate.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 8.5** (continued)

**1996 Mathematics Assessment**



POPULATION: 1996 Grade 4 Public School Students  
 REPORTED STATISTICS: Percentage of Students  
 TEACHERS' REPORTS ON: Their Total Years of Teaching Experience

Counting this year, how many years in total have you taught?	JURISDICTIONS				
	2 Years or Less	3 to 5 Years	6 to 10 Years	11 to 24 Years	25 Years or More
	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )
<b>Nation</b>					
NATION	8 ( 1.3)	14 ( 1.6)	23 ( 2.0)>	35 ( 2.6)<	20 ( 2.5)
NORTHEAST	11 ( 3.5)	10 ( 3.4)	17 ( 4.6)	30 ( 6.0)<	32 ( 6.6)
SOUTHEAST	5 ( 2.0)	21 ( 3.7)	12 ( 2.3)	41 ( 6.1)	19 ( 6.8)
CENTRAL	5 ( 2.6)	8 ( 3.1)	33 ( 5.2)	37 ( 5.7)	17 ( 4.8)
WEST	10 ( 2.2)	17 ( 2.9)	27 ( 3.2)>	31 ( 3.3)	15 ( 2.8)
<b>States</b>					
ALABAMA	8 ( 1.6)	13 ( 2.2)	22 ( 2.5)>	40 ( 3.4)<	17 ( 2.7)
ALASKA†	6 ( 1.4)	12 ( 2.1)	20 ( 2.5)	53 ( 3.1)	9 ( 1.5)
ARIZONA	8 ( 1.3)	12 ( 2.0)	21 ( 2.8)	47 ( 2.9)	11 ( 1.9)
ARKANSAS†	4 ( 1.7)	13 ( 2.5)	17 ( 2.3)	46 ( 4.1)	20 ( 3.1)
CALIFORNIA	5 ( 1.4)	14 ( 3.1)	24 ( 3.6)	35 ( 3.8)	22 ( 3.0)
COLORADO	10 ( 1.9)	12 ( 1.8)	19 ( 2.2)	45 ( 3.1)	15 ( 2.1)
CONNECTICUT	8 ( 1.6)	13 ( 1.7)	14 ( 1.7)	37 ( 2.8)<	28 ( 3.1)
DELAWARE	6 ( 0.5)<	17 ( 1.2)>	15 ( 0.7)	42 ( 1.4)	20 ( 0.8)>
DISTRICT OF COLUMBIA	14 ( 0.5)>	12 ( 0.6)>	12 ( 0.6)<	32 ( 0.8)<	31 ( 0.7)<
FLORIDA	8 ( 1.4)	12 ( 1.7)	15 ( 2.1)	43 ( 2.8)	21 ( 2.4)>
GEORGIA	11 ( 1.6)	16 ( 1.9)	19 ( 2.3)	41 ( 3.1)	13 ( 2.0)
HAWAII	11 ( 1.5)	16 ( 2.4)	24 ( 2.3)>	28 ( 2.7)	20 ( 2.0)
INDIANA	4 ( 1.4)	5 ( 1.4)	13 ( 2.5)	50 ( 4.0)	29 ( 4.0)
IOWA†	6 ( 2.0)	12 ( 2.6)	17 ( 3.1)	46 ( 4.0)	20 ( 3.0)
KENTUCKY	10 ( 1.9)	11 ( 2.2)	17 ( 2.6)	45 ( 3.4)	17 ( 3.1)
LOUISIANA	8 ( 1.8)	13 ( 1.9)	20 ( 3.2)	44 ( 3.2)	15 ( 2.4)
MAINE	2 ( 0.7)	10 ( 1.6)	23 ( 2.7)	47 ( 3.4)	18 ( 2.5)>
MARYLAND	13 ( 2.7)	12 ( 1.9)	17 ( 2.4)	31 ( 2.9)<	27 ( 3.0)
MASSACHUSETTS	4 ( 1.4)	15 ( 2.3)>	12 ( 2.1)	35 ( 3.1)<	34 ( 3.6)
MICHIGAN†	5 ( 1.6)	8 ( 2.3)	14 ( 2.5)	38 ( 3.6)	36 ( 3.1)>
MINNESOTA	6 ( 1.5)	8 ( 2.0)	16 ( 2.1)	35 ( 3.2)<	35 ( 3.2)>
MISSISSIPPI	8 ( 1.6)	12 ( 2.2)	13 ( 1.7)	42 ( 2.7)<	25 ( 3.2)>
MISSOURI	13 ( 2.4)	10 ( 2.5)	13 ( 2.2)	42 ( 3.4)	21 ( 2.9)
MONTANA†	9 ( 2.0)	8 ( 1.9)	16 ( 2.5)	46 ( 3.4)	21 ( 3.3)
NEBRASKA	6 ( 1.6)	5 ( 1.4)<	21 ( 2.9)	47 ( 4.1)	22 ( 3.2)
NEVADA†	12 ( 1.7)	17 ( 2.8)	22 ( 2.6)	35 ( 3.4)	14 ( 2.5)
NEW JERSEY†	6 ( 1.5)	8 ( 1.6)	12 ( 2.7)	44 ( 3.6)	29 ( 3.5)
NEW MEXICO	10 ( 1.9)	20 ( 1.9)	23 ( 2.6)	37 ( 3.2)	10 ( 1.9)
NEW YORK†	8 ( 1.8)	17 ( 2.1)	16 ( 2.2)	35 ( 2.8)<	24 ( 2.4)
NORTH CAROLINA	12 ( 2.3)	13 ( 2.1)	16 ( 2.4)	43 ( 3.0)	17 ( 2.5)
NORTH DAKOTA	4 ( 1.4)	10 ( 2.1)	14 ( 2.4)	49 ( 4.1)	23 ( 3.0)
OREGON	4 ( 1.2)	7 ( 1.3)	17 ( 2.3)	57 ( 3.4)	15 ( 2.5)
PENNSYLVANIA†	5 ( 1.5)	10 ( 1.7)	11 ( 2.3)	44 ( 3.5)<	30 ( 3.0)
RHODE ISLAND	2 ( 0.7)	5 ( 1.2)<	17 ( 1.9)	44 ( 2.8)	32 ( 2.9)>
SOUTH CAROLINA†	7 ( 1.5)	14 ( 2.7)	21 ( 2.6)	45 ( 2.7)<	13 ( 2.3)
TENNESSEE	9 ( 1.7)	16 ( 2.1)	13 ( 1.9)	43 ( 3.1)	19 ( 2.4)
TEXAS	11 ( 1.8)	14 ( 1.7)	23 ( 3.3)	43 ( 3.2)	10 ( 2.0)
UTAH	7 ( 1.6)	8 ( 2.0)	22 ( 3.0)	49 ( 3.3)	14 ( 2.7)
VERMONT†	3 ( 1.1)	10 ( 1.8)	16 ( 2.5)	53 ( 3.4)	18 ( 2.5)
VIRGINIA	10 ( 2.1)	14 ( 2.1)	14 ( 2.2)	47 ( 2.9)	15 ( 2.3)
WASHINGTON	5 ( 1.5)	15 ( 2.4)	22 ( 2.4)	41 ( 3.5)	16 ( 2.3)
WEST VIRGINIA	2 ( 1.0)	2 ( 1.4)	10 ( 2.0)	64 ( 3.6)	22 ( 2.9)
WISCONSIN	7 ( 2.0)	11 ( 2.5)	20 ( 2.5)>	43 ( 3.9)	19 ( 2.7)
WYOMING	1 ( 0.5)	9 ( 1.9)	20 ( 3.0)	46 ( 3.1)	23 ( 2.6)
<b>Other Jurisdictions</b>					
DDESS	2 ( 0.4)	10 ( 0.9)	23 ( 0.9)	45 ( 1.2)	19 ( 1.0)
DoDDS	1 ( 0.5)	6 ( 1.2)	11 ( 1.0)	41 ( 1.9)	41 ( 2.0)
GUAM	20 ( 1.0)>	20 ( 1.4)>	13 ( 1.1)	36 ( 1.4)<	11 ( 0.8)

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).  
 > (<) The value for the students was significantly higher (lower) than in the 1992 assessment at about the 95% confidence level using appropriate multiple comparison procedures.  
 SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 8.6**

**1996 Mathematics Assessment**



POPULATION: 1996 Grade 4 Public School Students  
 REPORTED STATISTICS: Percentage of Students  
 TEACHERS' REPORTS ON: Their Years of Mathematics Teaching Experience

Counting this year, how many years in total have you taught mathematics?	2 Years or Less	3 to 5 Years	6 to 10 Years	11 to 24 Years	25 Years or More
	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )
<b>JURISDICTIONS</b>					
<b>Nation</b>					
NATION	11 ( 1.6)	14 ( 1.9)	26 ( 2.0)	33 ( 2.8)	16 ( 2.1)
NORTHEAST	13 ( 4.0)	11 ( 3.8)	15 ( 4.4)	33 ( 7.1)	28 ( 6.9)
SOUTHEAST	11 ( 2.6)	20 ( 4.1)	17 ( 2.3)	39 ( 5.9)	13 ( 4.6)
CENTRAL	7 ( 2.9)	11 ( 4.3)	33 ( 5.7)	36 ( 6.6)	12 ( 3.4)
WEST	13 ( 2.9)	15 ( 3.0)	33 ( 3.2)	26 ( 3.6)	13 ( 2.1)
<b>States</b>					
ALABAMA	12 ( 2.3)	15 ( 2.1)	24 ( 3.1)	36 ( 3.4)	13 ( 2.5)
ALASKA†	10 ( 2.1)	16 ( 2.5)	17 ( 2.0)	48 ( 3.0)	8 ( 1.5)
ARIZONA	10 ( 1.8)	13 ( 2.1)	22 ( 2.9)	46 ( 3.0)	10 ( 1.8)
ARKANSAS†	5 ( 1.7)	17 ( 3.3)	17 ( 2.6)	44 ( 3.9)	17 ( 2.7)
CALIFORNIA	7 ( 1.8)	14 ( 2.6)	26 ( 3.7)	35 ( 3.8)	18 ( 2.7)
COLORADO	11 ( 2.0)	14 ( 2.1)	21 ( 2.4)	42 ( 3.1)	13 ( 2.0)
CONNECTICUT	10 ( 1.7)	14 ( 1.9)	15 ( 2.0)	36 ( 3.0)	25 ( 3.0)
DELAWARE	9 ( 0.7)	17 ( 1.1)	19 ( 0.7)	39 ( 1.5)	16 ( 0.9)
DISTRICT OF COLUMBIA	17 ( 0.5)	11 ( 0.5)	14 ( 0.4)	32 ( 0.7)	27 ( 0.6)
FLORIDA	9 ( 1.7)	14 ( 1.9)	18 ( 2.1)	42 ( 2.8)	17 ( 1.9)
GEORGIA	13 ( 1.7)	18 ( 2.1)	23 ( 2.7)	38 ( 3.2)	9 ( 1.3)
HAWAII	14 ( 1.6)	19 ( 2.6)	24 ( 2.2)	27 ( 2.6)	16 ( 1.9)
INDIANA	6 ( 1.6)	5 ( 1.6)	14 ( 2.6)	48 ( 4.1)	27 ( 4.1)
IOWA†	9 ( 1.9)	12 ( 2.4)	21 ( 3.1)	39 ( 3.8)	19 ( 3.0)
KENTUCKY	12 ( 2.3)	12 ( 2.2)	19 ( 3.0)	44 ( 3.4)	12 ( 2.9)
LOUISIANA	12 ( 2.2)	13 ( 2.1)	22 ( 3.5)	42 ( 3.7)	10 ( 1.8)
MAINE	3 ( 1.1)	12 ( 2.0)	25 ( 3.0)	43 ( 3.3)	16 ( 2.6)
MARYLAND	15 ( 2.6)	13 ( 2.2)	19 ( 2.6)	31 ( 3.3)	22 ( 3.1)
MASSACHUSETTS	6 ( 1.7)	17 ( 2.8)	15 ( 2.4)	32 ( 3.0)	29 ( 3.4)
MICHIGAN†	8 ( 2.0)	10 ( 2.4)	14 ( 2.6)	38 ( 3.9)	30 ( 3.1)
MINNESOTA	6 ( 1.5)	9 ( 2.3)	16 ( 2.1)	36 ( 3.1)	32 ( 3.3)
MISSISSIPPI	12 ( 2.1)	18 ( 2.6)	14 ( 2.2)	43 ( 2.9)	14 ( 2.3)
MISSOURI	15 ( 2.6)	10 ( 2.5)	14 ( 2.2)	41 ( 3.6)	21 ( 3.1)
MONTANA†	8 ( 1.8)	12 ( 2.5)	17 ( 2.5)	44 ( 3.0)	18 ( 3.0)
NEBRASKA	7 ( 1.8)	8 ( 1.8)	19 ( 2.8)	46 ( 4.2)	20 ( 3.2)
NEVADA†	12 ( 1.8)	18 ( 2.8)	26 ( 2.4)	31 ( 3.0)	13 ( 2.4)
NEW JERSEY†	7 ( 1.6)	9 ( 1.6)	12 ( 2.6)	45 ( 3.7)	27 ( 3.4)
NEW MEXICO	11 ( 1.9)	21 ( 2.1)	24 ( 2.8)	35 ( 3.2)	9 ( 1.8)
NEW YORK†	9 ( 1.8)	18 ( 2.2)	17 ( 2.0)	36 ( 3.1)	20 ( 2.2)
NORTH CAROLINA	16 ( 2.8)	12 ( 1.7)	19 ( 2.5)	40 ( 3.0)	13 ( 2.0)
NORTH DAKOTA	6 ( 1.7)	9 ( 2.0)	18 ( 2.6)	46 ( 4.0)	22 ( 2.9)
OREGON	6 ( 1.5)	8 ( 1.8)	22 ( 2.9)	50 ( 3.5)	14 ( 2.3)
PENNSYLVANIA†	6 ( 1.6)	11 ( 1.8)	17 ( 2.8)	40 ( 3.3)	25 ( 2.8)
RHODE ISLAND	3 ( 0.8)	5 ( 1.4)	24 ( 2.5)	40 ( 2.7)	28 ( 2.5)
SOUTH CAROLINA†	9 ( 1.7)	17 ( 2.6)	22 ( 2.4)	45 ( 3.3)	8 ( 1.5)
TENNESSEE	12 ( 2.0)	19 ( 2.4)	12 ( 1.7)	42 ( 3.3)	15 ( 2.2)
TEXAS	14 ( 1.9)	19 ( 2.7)	23 ( 2.5)	39 ( 3.1)	6 ( 1.3)
UTAH	9 ( 1.9)	8 ( 1.8)	24 ( 3.1)	48 ( 3.3)	11 ( 2.1)
VERMONT†	4 ( 1.2)	10 ( 1.8)	19 ( 2.7)	52 ( 3.3)	15 ( 2.2)
VIRGINIA	11 ( 2.2)	14 ( 2.1)	16 ( 2.3)	47 ( 2.8)	12 ( 2.1)
WASHINGTON	9 ( 2.2)	14 ( 2.5)	25 ( 2.4)	39 ( 3.3)	14 ( 2.1)
WEST VIRGINIA	4 ( 1.3)	3 ( 1.6)	10 ( 2.1)	66 ( 3.3)	16 ( 2.8)
WISCONSIN	7 ( 2.0)	13 ( 2.6)	21 ( 2.7)	42 ( 3.7)	16 ( 2.7)
WYOMING	3 ( 0.8)	11 ( 2.2)	20 ( 2.9)	46 ( 3.1)	20 ( 2.8)
<b>Other Jurisdictions</b>					
DDESS	3 ( 0.6)	14 ( 0.9)	25 ( 1.1)	40 ( 1.3)	17 ( 0.9)
DoDDS	3 ( 0.6)	7 ( 1.2)	14 ( 1.4)	45 ( 2.0)	31 ( 2.0)
GUAM	20 ( 1.0)	20 ( 1.2)	13 ( 1.1)	37 ( 1.4)	9 ( 0.6)

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).  
 SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.



**TABLE 8.7**

**1996 Mathematics Assessment**



POPULATION:

1996 Grade 4 Public School Students

REPORTED STATISTICS:

Percentage of Students

TEACHERS' REPORTS ON:

Recent Courses Taken in Mathematics or Mathematics Education

*During the last two years, how many college or university courses have you taken in mathematics or mathematics education?*

None	One	Two	Three or More
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**JURISDICTIONS** PCT ( SE) PCT ( SE) PCT ( SE) PCT ( SE)

**Nation**

NATION	78 ( 2.4)	14 ( 1.8)	5 ( 1.1)	4 ( 1.2)
NORTHEAST	84 ( 2.9)	12 ( 2.1)	3 ( 1.0)	1 ( 0.7)
SOUTHEAST	87 ( 3.3)	9 ( 2.9)	3 ( 1.1)	1 ( 0.9)
CENTRAL	74 ( 6.6)	19 ( 5.5)	5 ( 2.1)	2 ( 1.1)
WEST	72 ( 4.7)	14 ( 2.4)	7 ( 2.9)	7 ( 3.4)

**States**

ALABAMA	80 ( 2.7)	14 ( 2.1)	2 ( 0.9)	4 ( 1.5)
ALASKA†	58 ( 3.3)	22 ( 2.4)	13 ( 2.3)	8 ( 1.7)
ARIZONA	64 ( 3.1)	20 ( 2.5)	8 ( 1.4)	8 ( 1.6)
ARKANSAS†	75 ( 3.7)	17 ( 3.1)	5 ( 2.0)	3 ( 1.1)
CALIFORNIA	75 ( 2.9)	14 ( 2.5)	7 ( 1.6)	4 ( 1.2)
COLORADO	54 ( 2.9)	24 ( 2.4)	15 ( 2.0)	7 ( 1.3)
CONNECTICUT	89 ( 1.9)	7 ( 1.6)	2 ( 0.8)	1 ( 0.5)
DELAWARE	79 ( 1.1)	13 ( 0.9)	6 ( 0.7)	2 ( 0.6)
DISTRICT OF COLUMBIA	47 ( 0.7)	22 ( 0.7)	16 ( 0.6)	15 ( 0.5)
FLORIDA	85 ( 2.1)	6 ( 1.0)	6 ( 1.5)	3 ( 0.8)
GEORGIA	76 ( 2.5)	10 ( 1.6)	8 ( 1.5)	7 ( 1.5)
HAWAII	60 ( 2.4)	21 ( 1.7)	12 ( 1.8)	7 ( 1.3)
INDIANA	92 ( 2.2)	6 ( 1.9)	2 ( 1.2)	0 ( ... )
IOWA†	70 ( 3.3)	21 ( 3.1)	6 ( 1.7)	3 ( 1.1)
KENTUCKY	84 ( 2.4)	8 ( 1.7)	4 ( 1.1)	4 ( 1.0)
LOUISIANA	76 ( 2.7)	12 ( 2.3)	5 ( 1.2)	7 ( 2.1)
MAINE	74 ( 3.4)	20 ( 2.9)	6 ( 1.6)	1 ( 0.5)
MARYLAND	74 ( 3.5)	15 ( 3.0)	7 ( 1.8)	4 ( 1.6)
MASSACHUSETTS	71 ( 3.0)	19 ( 2.5)	5 ( 1.5)	5 ( 1.2)
MICHIGAN†	84 ( 2.8)	10 ( 1.9)	5 ( 1.6)	2 ( 0.9)
MINNESOTA	67 ( 3.4)	22 ( 2.6)	8 ( 1.7)	3 ( 1.1)
MISSISSIPPI	85 ( 2.4)	8 ( 1.7)	4 ( 1.3)	3 ( 0.9)
MISSOURI	77 ( 3.3)	13 ( 2.2)	5 ( 1.3)	5 ( 1.6)
MONTANA†	60 ( 3.7)	25 ( 3.6)	7 ( 1.8)	7 ( 1.7)
NEBRASKA	69 ( 3.2)	21 ( 3.2)	8 ( 1.8)	1 ( 0.6)
NEVADA†	58 ( 3.6)	24 ( 2.6)	11 ( 2.2)	8 ( 1.9)
NEW JERSEY†	89 ( 2.1)	6 ( 1.5)	2 ( 1.0)	3 ( 1.2)
NEW MEXICO	73 ( 3.3)	14 ( 2.6)	8 ( 1.8)	6 ( 1.6)
NEW YORK†	84 ( 2.2)	9 ( 1.6)	4 ( 0.8)	3 ( 1.1)
NORTH CAROLINA	82 ( 2.6)	10 ( 1.7)	6 ( 1.4)	3 ( 1.1)
NORTH DAKOTA	39 ( 3.0)	37 ( 3.2)	15 ( 2.5)	10 ( 2.6)
OREGON	57 ( 3.7)	25 ( 2.9)	12 ( 2.0)	6 ( 1.5)
PENNSYLVANIA†	82 ( 2.5)	13 ( 2.6)	3 ( 0.8)	2 ( 0.8)
RHODE ISLAND	81 ( 2.3)	13 ( 1.7)	4 ( 1.1)	3 ( 0.7)
SOUTH CAROLINA†	55 ( 3.2)	29 ( 2.9)	11 ( 2.1)	5 ( 1.4)
TENNESSEE	81 ( 2.5)	11 ( 1.8)	5 ( 1.1)	3 ( 1.2)
TEXAS	90 ( 1.7)	6 ( 1.5)	3 ( 1.1)	1 ( 0.6)
UTAH	68 ( 3.2)	17 ( 2.4)	8 ( 1.7)	8 ( 1.8)
VERMONT†	59 ( 3.7)	28 ( 3.1)	10 ( 1.7)	3 ( 1.1)
VIRGINIA	74 ( 2.4)	20 ( 2.3)	3 ( 1.0)	2 ( 0.8)
WASHINGTON	64 ( 3.3)	20 ( 2.6)	10 ( 1.9)	6 ( 1.2)
WEST VIRGINIA	76 ( 3.2)	18 ( 3.2)	5 ( 1.2)	2 ( 0.7)
WISCONSIN	73 ( 2.8)	20 ( 2.7)	4 ( 1.5)	2 ( 1.0)
WYOMING	56 ( 3.9)	29 ( 3.3)	11 ( 2.2)	5 ( 1.3)

**Other Jurisdictions**

DDESS	90 ( 0.7)	9 ( 0.6)	1 ( 0.2)	0 ( 0.1)
DoDDS	62 ( 1.7)	22 ( 1.5)	11 ( 1.0)	5 ( 1.0)
GUAM	74 ( 1.2)	12 ( 0.9)	8 ( 0.7)	5 ( 0.5)

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).  
 ... Characteristics of the sample do not permit a reliable estimate.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 8.8****1996 Mathematics Assessment**

POPULATION:

1996 Grade 4 Public School Students

REPORTED STATISTICS:

Percentage of Students

TEACHERS' REPORTS ON:

Coursework in the Use of Technology

*During the past five years, have you taken courses or participated in professional development activities in the use of technology such as computers?*

Yes

No

**JURISDICTIONS**

PCT ( SE )

PCT ( SE )

**Nation**

NATION	83 ( 1.8)	17 ( 1.8)
NORTHEAST	77 ( 3.4)	23 ( 3.4)
SOUTHEAST	86 ( 3.5)	14 ( 3.5)
CENTRAL	84 ( 5.1)	16 ( 5.1)
WEST	85 ( 2.6)	15 ( 2.6)

**States**

ALABAMA	82 ( 2.8)	18 ( 2.8)
ALASKA†	89 ( 2.3)	11 ( 2.3)
ARIZONA	78 ( 2.8)	22 ( 2.8)
ARKANSAS†	62 ( 4.6)	38 ( 4.6)
CALIFORNIA	85 ( 2.5)	15 ( 2.5)
COLORADO	89 ( 2.0)	11 ( 2.0)
CONNECTICUT	85 ( 2.6)	15 ( 2.6)
DELAWARE	75 ( 0.8)	25 ( 0.8)
DISTRICT OF COLUMBIA	74 ( 0.6)	26 ( 0.6)
FLORIDA	92 ( 1.5)	8 ( 1.5)
GEORGIA	88 ( 2.0)	12 ( 2.0)
HAWAII	80 ( 2.3)	20 ( 2.3)
INDIANA	89 ( 2.3)	11 ( 2.3)
IOWA†	91 ( 2.4)	9 ( 2.4)
KENTUCKY	96 ( 1.3)	4 ( 1.3)
LOUISIANA	66 ( 3.3)	34 ( 3.3)
MAINE	80 ( 2.7)	20 ( 2.7)
MARYLAND	77 ( 2.8)	23 ( 2.8)
MASSACHUSETTS	82 ( 2.4)	18 ( 2.4)
MICHIGAN†	83 ( 2.8)	17 ( 2.8)
MINNESOTA	87 ( 2.2)	13 ( 2.2)
MISSISSIPPI	67 ( 3.8)	33 ( 3.8)
MISSOURI	76 ( 3.5)	24 ( 3.5)
MONTANA†	89 ( 2.4)	11 ( 2.4)
NEBRASKA	85 ( 2.7)	15 ( 2.7)
NEVADA†	71 ( 3.1)	29 ( 3.1)
NEW JERSEY†	70 ( 3.1)	30 ( 3.1)
NEW MEXICO	84 ( 2.1)	16 ( 2.1)
NEW YORK†	74 ( 3.0)	26 ( 3.0)
NORTH CAROLINA	92 ( 2.2)	8 ( 2.2)
NORTH DAKOTA	91 ( 2.2)	9 ( 2.2)
OREGON	84 ( 2.5)	16 ( 2.5)
PENNSYLVANIA†	75 ( 3.3)	25 ( 3.3)
RHODE ISLAND	67 ( 2.8)	33 ( 2.8)
SOUTH CAROLINA†	72 ( 2.9)	28 ( 2.9)
TENNESSEE	83 ( 3.2)	17 ( 3.2)
TEXAS	84 ( 2.3)	16 ( 2.3)
UTAH	92 ( 1.6)	8 ( 1.6)
VERMONT†	81 ( 3.1)	19 ( 3.1)
VIRGINIA	85 ( 2.6)	15 ( 2.6)
WASHINGTON	88 ( 2.2)	12 ( 2.2)
WEST VIRGINIA	91 ( 2.4)	9 ( 2.4)
WISCONSIN	81 ( 2.7)	19 ( 2.7)
WYOMING	91 ( 1.9)	9 ( 1.9)

**Other Jurisdictions**

DDESS	90 ( 0.6)	10 ( 0.6)
DōDDS	82 ( 1.2)	18 ( 1.2)
GUAM	50 ( 1.5)	50 ( 1.5)

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 8.9**

**1992 Mathematics Assessment**



POPULATION: 1992 Grade 4 Public School Students  
 REPORTED STATISTICS: Percentage of Students  
 TEACHERS' REPORTS ON: Studies of Mathematics Instruction Techniques

*Have you ever studied any of the following, either in college or university courses or in professional development workshops or seminars?*

Estimation	Problem Solving in Mathematics Instruction	Use of Manipulatives in Mathematics Instruction	Use of Calculators in Mathematics Instruction	Understanding Students' Thinking about Math
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**JURISDICTIONS**

PCT ( SE )      PCT ( SE )      PCT ( SE )      PCT ( SE )      PCT ( SE )

<b>Nation</b>					
NATION	82 ( 1.9)	92 ( 1.3)	93 ( 1.0)	60 ( 2.7)	72 ( 2.1)
NORTHEAST	76 ( 4.2)	87 ( 4.0)	91 ( 3.4)	61 ( 4.1)	72 ( 5.1)
SOUTHEAST	83 ( 3.1)	93 ( 2.4)	93 ( 2.4)	58 ( 6.1)	74 ( 5.0)
CENTRAL	81 ( 4.6)	91 ( 3.0)	92 ( 1.5)	58 ( 7.8)	68 ( 3.7)
WEST	84 ( 3.1)	94 ( 1.5)	95 ( 1.4)	63 ( 2.7)	74 ( 2.8)
<b>States</b>					
ALABAMA	79 ( 3.0)	94 ( 1.8)	96 ( 1.3)	58 ( 3.4)	72 ( 3.0)
ALASKA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
ARIZONA	79 ( 2.4)	91 ( 1.5)	92 ( 1.7)	59 ( 3.3)	71 ( 2.8)
ARKANSAS	76 ( 2.8)	90 ( 1.8)	92 ( 1.7)	57 ( 3.3)	60 ( 3.5)
CALIFORNIA	88 ( 2.2)	95 ( 1.4)	95 ( 1.2)	70 ( 3.7)	73 ( 2.7)
COLORADO	82 ( 2.3)	94 ( 1.1)	93 ( 1.6)	65 ( 2.9)	73 ( 2.8)
CONNECTICUT	89 ( 1.9)	92 ( 2.0)	96 ( 1.3)	66 ( 3.3)	77 ( 2.6)
DELAWARE	79 ( 1.1)	94 ( 0.6)	91 ( 0.9)	65 ( 0.7)	74 ( 1.1)
DISTRICT OF COLUMBIA	81 ( 0.7)	94 ( 0.6)	94 ( 0.3)	79 ( 0.9)	66 ( 0.9)
FLORIDA	84 ( 1.8)	92 ( 1.7)	95 ( 1.4)	73 ( 3.2)	74 ( 2.5)
GEORGIA	79 ( 2.2)	92 ( 1.7)	94 ( 1.5)	62 ( 3.8)	71 ( 2.9)
HAWAII	80 ( 2.7)	93 ( 1.4)	94 ( 1.3)	75 ( 2.7)	70 ( 2.6)
INDIANA	78 ( 2.8)	92 ( 1.5)	92 ( 1.7)	52 ( 3.7)	65 ( 3.1)
IOWA	83 ( 2.7)	95 ( 1.5)	93 ( 1.6)	66 ( 3.2)	76 ( 2.8)
KENTUCKY	82 ( 2.4)	88 ( 2.5)	90 ( 2.0)	56 ( 4.3)	56 ( 3.5)
LOUISIANA	76 ( 3.3)	90 ( 2.2)	94 ( 1.2)	56 ( 3.5)	71 ( 2.8)
MAINE	82 ( 3.2)	93 ( 2.2)	95 ( 1.7)	59 ( 3.9)	69 ( 3.6)
MARYLAND	84 ( 2.0)	94 ( 1.4)	96 ( 1.2)	79 ( 2.7)	76 ( 2.9)
MASSACHUSETTS	82 ( 2.7)	90 ( 1.8)	90 ( 2.9)	51 ( 4.0)	73 ( 3.2)
MICHIGAN	84 ( 2.2)	91 ( 1.9)	91 ( 2.1)	71 ( 3.1)	70 ( 3.0)
MINNESOTA	77 ( 2.8)	92 ( 2.0)	94 ( 1.6)	63 ( 3.1)	73 ( 2.9)
MISSISSIPPI	79 ( 3.0)	92 ( 1.6)	97 ( 1.1)	69 ( 3.0)	74 ( 3.0)
MISSOURI	79 ( 2.7)	92 ( 1.9)	96 ( 1.3)	64 ( 3.2)	65 ( 3.3)
MONTANA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
NEBRASKA	76 ( 3.4)	88 ( 2.4)	97 ( 1.0)	63 ( 3.6)	68 ( 2.8)
NEVADA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
NEW JERSEY	80 ( 2.8)	95 ( 1.4)	92 ( 2.2)	57 ( 2.9)	74 ( 2.9)
NEW MEXICO	73 ( 2.8)	88 ( 2.1)	91 ( 2.2)	53 ( 3.8)	64 ( 3.5)
NEW YORK	72 ( 2.9)	85 ( 2.2)	86 ( 2.3)	41 ( 4.1)	68 ( 2.9)
NORTH CAROLINA	81 ( 2.5)	88 ( 2.0)	94 ( 1.3)	70 ( 3.1)	61 ( 3.2)
NORTH DAKOTA	77 ( 3.7)	93 ( 1.8)	95 ( 1.5)	57 ( 3.8)	68 ( 3.5)
OREGON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
PENNSYLVANIA	76 ( 2.9)	93 ( 1.4)	89 ( 2.3)	60 ( 3.2)	70 ( 3.0)
RHODE ISLAND	69 ( 2.7)	83 ( 2.2)	87 ( 2.2)	53 ( 3.4)	59 ( 3.0)
SOUTH CAROLINA	84 ( 1.9)	94 ( 1.4)	95 ( 1.2)	65 ( 2.8)	68 ( 3.0)
TENNESSEE	76 ( 2.4)	92 ( 1.6)	93 ( 1.4)	52 ( 3.3)	66 ( 2.6)
TEXAS	76 ( 2.4)	92 ( 1.4)	93 ( 1.7)	61 ( 3.3)	67 ( 2.7)
UTAH	75 ( 3.0)	89 ( 1.9)	94 ( 1.5)	60 ( 3.4)	62 ( 2.9)
VERMONT	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
VIRGINIA	78 ( 2.2)	91 ( 1.7)	94 ( 1.4)	65 ( 2.3)	75 ( 2.3)
WASHINGTON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
WEST VIRGINIA	82 ( 2.7)	91 ( 2.3)	90 ( 2.1)	63 ( 3.1)	59 ( 3.8)
WISCONSIN	81 ( 2.4)	95 ( 1.3)	87 ( 1.7)	65 ( 3.1)	73 ( 2.7)
WYOMING	85 ( 2.6)	93 ( 1.5)	92 ( 1.4)	64 ( 3.0)	72 ( 2.9)
<b>Other Jurisdictions</b>					
DDESS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
DoDDS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
GUAM	80 ( 1.0)	88 ( 1.1)	88 ( 1.0)	52 ( 1.1)	65 ( 1.3)

— State or other jurisdiction did not participate in the NAEP assessment year presented in this table.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 8.9** (continued)

**1996 Mathematics Assessment**



POPULATION: 1996 Grade 4 Public School Students  
 REPORTED STATISTICS: Percentage of Students  
 TEACHERS' REPORTS ON: Studies of Mathematics Instruction Techniques

Have you ever studied any of the following, either in college or university courses or in professional development workshops or seminars?

	Estimation	Problem Solving in Mathematics Instruction	Use of Manipulatives in Mathematics Instruction	Use of Calculators in Mathematics Instruction	Understanding Students' Thinking about Math
JURISDICTIONS	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )
<b>Nation</b>					
NATION	77 ( 1.7)	90 ( 1.6)	91 ( 1.2)	72 ( 2.1)>	71 ( 1.9)
NORTHEAST	65 ( 3.9)	76 ( 5.4)	78 ( 3.9)	56 ( 3.7)	62 ( 4.1)
SOUTHEAST	83 ( 3.4)	94 ( 2.4)	94 ( 1.8)	83 ( 4.4)	70 ( 5.1)
CENTRAL	79 ( 4.1)	91 ( 3.4)	89 ( 3.0)	76 ( 4.2)	70 ( 4.1)
WEST	81 ( 2.4)	95 ( 1.5)	97 ( 0.9)	72 ( 3.6)	77 ( 2.1)
<b>States</b>					
ALABAMA	78 ( 3.3)	94 ( 1.6)	97 ( 1.6)	70 ( 3.2)	73 ( 3.2)
ALASKA†	73 ( 2.8)	85 ( 2.5)	91 ( 2.4)	62 ( 3.3)	64 ( 3.0)
ARIZONA	79 ( 2.8)	89 ( 1.9)	91 ( 1.7)	65 ( 3.0)	73 ( 3.0)
ARKANSAS†	78 ( 3.4)	90 ( 2.5)	95 ( 1.8)	76 ( 3.5)>	58 ( 4.7)
CALIFORNIA	79 ( 3.3)	91 ( 1.8)	94 ( 1.2)	71 ( 3.6)	71 ( 3.4)
COLORADO	79 ( 2.4)	93 ( 2.0)	96 ( 1.2)	70 ( 2.6)	75 ( 2.3)
CONNECTICUT	82 ( 2.6)	90 ( 1.8)	95 ( 1.6)	74 ( 2.8)	71 ( 3.0)
DELAWARE	78 ( 0.8)	95 ( 0.4)	97 ( 0.4)>	81 ( 0.7)>	73 ( 0.9)
DISTRICT OF COLUMBIA	73 ( 0.8)<	89 ( 0.4)<	87 ( 0.5)<	70 ( 0.8)<	58 ( 0.8)<
FLORIDA	80 ( 2.6)	93 ( 1.3)	94 ( 1.2)	80 ( 2.3)	72 ( 2.5)
GEORGIA	81 ( 2.2)	93 ( 1.4)	95 ( 1.2)	75 ( 3.2)	73 ( 2.4)
HAWAII	78 ( 2.4)	90 ( 1.4)	94 ( 1.2)	73 ( 2.9)	77 ( 2.4)
INDIANA	70 ( 3.0)	92 ( 2.0)	91 ( 2.5)	61 ( 3.6)	70 ( 3.4)
IOWA†	76 ( 3.5)	90 ( 1.9)	93 ( 2.2)	67 ( 4.1)	66 ( 3.7)
KENTUCKY	90 ( 2.0)>	98 ( 0.9)>	98 ( 1.0)>	82 ( 3.0)>	69 ( 3.8)
LOUISIANA	76 ( 2.7)	93 ( 1.6)	93 ( 1.5)	78 ( 2.8)>	67 ( 3.4)
MAINE	71 ( 3.4)	90 ( 2.5)	92 ( 2.1)	64 ( 3.5)	74 ( 3.5)
MARYLAND	80 ( 2.2)	92 ( 1.7)	94 ( 1.7)	84 ( 2.0)	76 ( 3.0)
MASSACHUSETTS	80 ( 2.5)	92 ( 1.9)	94 ( 1.8)	65 ( 3.8)	75 ( 3.3)
MICHIGAN†	84 ( 2.6)	93 ( 2.0)	96 ( 1.5)	80 ( 2.9)	74 ( 3.2)
MINNESOTA	77 ( 2.4)	93 ( 1.8)	94 ( 1.6)	75 ( 2.6)>	72 ( 2.7)
MISSISSIPPI	86 ( 2.7)	95 ( 1.4)	97 ( 1.0)	72 ( 3.3)	67 ( 2.9)
MISSOURI	79 ( 2.3)	91 ( 2.1)	97 ( 0.9)	72 ( 3.4)	68 ( 3.2)
MONTANA†	81 ( 3.0)	91 ( 2.1)	94 ( 1.7)	70 ( 3.8)	71 ( 3.6)
NEBRASKA	77 ( 3.0)	87 ( 2.5)	94 ( 1.5)	75 ( 3.5)	63 ( 3.2)
NEVADA†	87 ( 2.2)	97 ( 1.1)	97 ( 1.2)	77 ( 2.9)	85 ( 2.3)
NEW JERSEY†	76 ( 2.8)	91 ( 2.2)	93 ( 1.6)	78 ( 3.1)>	68 ( 3.1)
NEW MEXICO	79 ( 2.5)	87 ( 2.5)	95 ( 1.7)	70 ( 3.4)>	67 ( 3.6)
NEW YORK†	66 ( 2.8)	87 ( 2.5)	92 ( 1.5)	58 ( 3.3)>	65 ( 3.5)
NORTH CAROLINA	82 ( 2.4)	95 ( 1.4)	97 ( 1.1)	90 ( 1.7)>	66 ( 3.2)
NORTH DAKOTA	81 ( 2.4)	90 ( 2.0)	97 ( 1.3)	77 ( 3.1)>	63 ( 2.8)
OREGON	83 ( 2.9)	93 ( 1.5)	96 ( 1.3)	68 ( 3.1)	74 ( 2.8)
PENNSYLVANIA†	71 ( 3.1)	90 ( 2.2)	93 ( 1.9)	69 ( 3.8)	62 ( 3.1)
RHODE ISLAND	78 ( 2.8)	88 ( 2.4)	92 ( 2.0)	72 ( 2.7)>	63 ( 3.4)
SOUTH CAROLINA†	79 ( 2.2)	95 ( 1.2)	95 ( 1.4)	73 ( 3.1)	64 ( 3.3)
TENNESSEE	69 ( 2.9)	88 ( 2.3)	93 ( 1.2)	65 ( 3.4)>	58 ( 3.3)
TEXAS	87 ( 2.0)>	96 ( 1.0)	96 ( 1.0)	71 ( 2.5)	70 ( 3.4)
UTAH	78 ( 2.4)	90 ( 2.2)	97 ( 0.9)	83 ( 2.7)>	61 ( 3.0)
VERMONT†	76 ( 2.8)	97 ( 0.7)	98 ( 0.8)	62 ( 3.2)	82 ( 2.3)
VIRGINIA	78 ( 2.7)	91 ( 1.9)	94 ( 1.4)	76 ( 3.2)>	66 ( 3.1)
WASHINGTON	72 ( 2.8)	88 ( 2.4)	90 ( 2.3)	60 ( 3.4)	65 ( 3.4)
WEST VIRGINIA	87 ( 2.6)	94 ( 1.9)	96 ( 1.4)	83 ( 2.4)>	65 ( 4.3)
WISCONSIN	78 ( 3.2)	87 ( 2.3)<	92 ( 1.9)	65 ( 3.4)	63 ( 3.6)
WYOMING	75 ( 3.2)	89 ( 2.5)	91 ( 1.9)	62 ( 2.9)	64 ( 3.7)
<b>Other Jurisdictions</b>					
DDESS	77 ( 1.2)	92 ( 0.8)	95 ( 0.4)	73 ( 1.1)	70 ( 1.0)
DoDDS	78 ( 1.4)	91 ( 0.8)	94 ( 0.8)	80 ( 1.5)	70 ( 1.4)
GUAM	74 ( 1.1)<	85 ( 1.0)	92 ( 0.8)>	57 ( 1.5)	67 ( 1.3)

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).  
 > (<) The value for the students was significantly higher (lower) than in the 1992 assessment at about the 95% confidence level using appropriate multiple comparison procedures.  
 SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 8.10**

**1992 and 1996 Mathematics Assessment**



POPULATION: 1992 and 1996 Grade 4 Public School Students  
 REPORTED STATISTICS: Percentage of Students  
 TEACHERS' REPORTS ON: Studies of Gender and Cultural Issues

NAEP assessment year...	1992		1996	
	Gender Issues in the Teaching of Mathematics	Teaching Students from Different Cultural Backgrounds	Gender Issues in the Teaching of Mathematics	Teaching Students from Different Cultural Backgrounds
JURISDICTIONS	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )
<b>Nation</b>				
NATION	33 ( 2.4)	43 ( 2.5)	46 ( 2.5)>	50 ( 2.7)>
NORTHEAST	30 ( 5.4)	38 ( 5.5)	31 ( 5.3)	39 ( 5.7)
SOUTHEAST	31 ( 2.9)	48 ( 5.1)	48 ( 4.7)>	51 ( 5.2)
CENTRAL	27 ( 6.0)	34 ( 5.2)	50 ( 7.3)	42 ( 5.9)
WEST	41 ( 4.0)	51 ( 4.3)	51 ( 2.8)	62 ( 4.6)
<b>States</b>				
ALABAMA	41 ( 3.4)	45 ( 3.6)	41 ( 3.6)	45 ( 3.4)
ALASKA†	— ( — )	— ( — )	55 ( 3.4)	64 ( 3.0)
ARIZONA	34 ( 2.8)	51 ( 3.1)	45 ( 3.0)>	54 ( 3.4)
ARKANSAS†	29 ( 3.2)	41 ( 3.0)	33 ( 4.0)	37 ( 4.4)
CALIFORNIA	42 ( 3.3)	69 ( 3.5)	48 ( 3.5)	70 ( 3.3)
COLORADO	46 ( 2.7)	52 ( 2.6)	54 ( 3.2)	53 ( 3.4)
CONNECTICUT	34 ( 3.1)	36 ( 3.1)	36 ( 3.5)	37 ( 2.8)
DELAWARE	37 ( 1.1)	48 ( 1.0)	41 ( 0.7)>	43 ( 1.1)
DISTRICT OF COLUMBIA	40 ( 0.8)	48 ( 1.0)	34 ( 0.8)<	45 ( 0.8)
FLORIDA	40 ( 2.9)	68 ( 3.4)	40 ( 2.6)	77 ( 2.4)
GEORGIA	35 ( 2.7)	43 ( 3.6)	41 ( 2.6)	46 ( 3.0)
HAWAII	34 ( 2.7)	51 ( 3.0)	37 ( 2.8)	58 ( 2.7)
INDIANA	25 ( 2.5)	32 ( 3.3)	24 ( 3.0)	26 ( 3.3)
IOWA†	41 ( 3.6)	45 ( 3.3)	39 ( 3.6)	32 ( 3.8)
KENTUCKY	32 ( 3.7)	31 ( 3.8)	38 ( 3.8)	35 ( 3.7)
LOUISIANA	36 ( 3.6)	47 ( 3.5)	37 ( 3.5)	42 ( 3.7)
MAINE	42 ( 3.7)	12 ( 1.9)	42 ( 3.6)	10 ( 2.6)
MARYLAND	41 ( 2.7)	55 ( 2.9)	51 ( 3.0)	52 ( 3.3)
MASSACHUSETTS	31 ( 2.9)	32 ( 3.2)	38 ( 3.3)	35 ( 4.0)
MICHIGAN†	31 ( 3.4)	38 ( 3.9)	39 ( 3.3)	31 ( 3.7)
MINNESOTA	41 ( 3.0)	44 ( 3.3)	47 ( 3.3)	39 ( 3.5)
MISSISSIPPI	45 ( 4.1)	48 ( 3.3)	37 ( 3.5)	34 ( 3.4)
MISSOURI	30 ( 3.1)	33 ( 2.7)	36 ( 4.3)	35 ( 3.7)
MONTANA†	— ( — )	— ( — )	53 ( 3.3)	42 ( 3.7)
NEBRASKA	44 ( 3.9)	60 ( 3.4)	44 ( 3.8)	59 ( 3.7)
NEVADA†	— ( — )	— ( — )	42 ( 3.5)	61 ( 3.0)
NEW JERSEY†	38 ( 3.1)	48 ( 3.6)	41 ( 4.1)	43 ( 3.8)
NEW MEXICO	34 ( 2.9)	53 ( 3.3)	40 ( 3.3)	62 ( 3.1)
NEW YORK†	28 ( 2.6)	44 ( 2.9)	31 ( 2.5)	41 ( 3.1)
NORTH CAROLINA	32 ( 2.9)	39 ( 2.8)	43 ( 3.1)	46 ( 3.7)
NORTH DAKOTA	29 ( 3.7)	29 ( 3.4)	48 ( 3.9)>	36 ( 3.5)
OREGON	— ( — )	— ( — )	40 ( 3.0)	38 ( 3.1)
PENNSYLVANIA†	27 ( 2.4)	29 ( 2.6)	24 ( 2.9)	24 ( 3.0)
RHODE ISLAND	22 ( 2.7)	33 ( 3.1)	28 ( 3.3)	32 ( 3.4)
SOUTH CAROLINA†	33 ( 3.5)	36 ( 3.0)	38 ( 3.5)	40 ( 3.3)
TENNESSEE	31 ( 3.0)	36 ( 2.8)	34 ( 3.2)	30 ( 3.2)
TEXAS	32 ( 2.3)	56 ( 3.5)	33 ( 2.8)	60 ( 3.6)
UTAH	30 ( 2.9)	42 ( 3.4)	33 ( 3.0)	36 ( 3.0)
VERMONT†	— ( — )	— ( — )	38 ( 3.7)	14 ( 2.1)
VIRGINIA	36 ( 3.5)	48 ( 3.1)	44 ( 3.0)	44 ( 3.1)
WASHINGTON	— ( — )	— ( — )	43 ( 3.3)	49 ( 3.7)
WEST VIRGINIA	31 ( 3.7)	31 ( 3.3)	38 ( 3.7)	28 ( 3.5)
WISCONSIN	40 ( 3.1)	38 ( 3.0)	36 ( 3.5)	29 ( 2.6)
WYOMING	40 ( 3.1)	33 ( 3.3)	39 ( 3.2)	27 ( 2.7)
<b>Other Jurisdictions</b>				
DDESS	— ( — )	— ( — )	35 ( 1.0)	36 ( 1.3)
DoDDS	— ( — )	— ( — )	36 ( 1.6)	48 ( 1.7)
GUAM	44 ( 1.2)	71 ( 1.0)	36 ( 1.6)<	69 ( 1.2)

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).  
 — State or other jurisdiction did not participate in the NAEP assessment year presented in this table.  
 > (<) The value for the students was significantly higher (lower) than in the 1992 assessment at about the 95% confidence level using appropriate multiple comparison procedures.  
 SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 8.11**

**1996 Mathematics Assessment**



POPULATION: 1996 Grade 4 Public School Students  
 REPORTED STATISTICS: Percentage of Students  
 TEACHERS' REPORTS ON: Professional Development

*During the last year, how much time in total have you spent in professional development workshops or seminars in mathematics or mathematics education?*

None	Less than 6 Hours	6 to 15 Hours	16 to 35 Hours	More than 35 Hours
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JURISDICTIONS	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )
<b>Nation</b>					
NATION	15 ( 2.1)	29 ( 2.2)	28 ( 2.4)	15 ( 2.0)	13 ( 1.6)
NORTHEAST	19 ( 6.2)	23 ( 3.9)	30 ( 5.9)	21 ( 5.7)	7 ( 1.1)
SOUTHEAST	17 ( 4.5)	36 ( 5.2)	27 ( 4.4)	10 ( 2.9)	11 ( 3.5)
CENTRAL	15 ( 3.2)	39 ( 4.5)	24 ( 4.3)	11 ( 3.3)	10 ( 3.2)
WEST	12 ( 3.1)	20 ( 3.7)	31 ( 4.4)	17 ( 3.8)	19 ( 3.3)
<b>States</b>					
ALABAMA	13 ( 2.7)	34 ( 3.3)	29 ( 3.0)	10 ( 1.5)	14 ( 2.3)
ALASKA†	14 ( 2.5)	33 ( 3.1)	26 ( 2.7)	12 ( 2.1)	15 ( 2.5)
ARIZONA	21 ( 2.8)	32 ( 3.0)	26 ( 2.6)	8 ( 1.5)	14 ( 2.0)
ARKANSAS†	15 ( 3.1)	17 ( 2.8)	24 ( 3.8)	25 ( 4.1)	20 ( 3.5)
CALIFORNIA	6 ( 1.5)	23 ( 3.1)	27 ( 3.0)	23 ( 3.5)	22 ( 3.3)
COLORADO	21 ( 2.5)	28 ( 2.9)	30 ( 2.7)	11 ( 2.2)	10 ( 1.9)
CONNECTICUT	14 ( 2.1)	40 ( 2.9)	25 ( 2.6)	12 ( 1.6)	10 ( 2.0)
DELAWARE	14 ( 0.9)	41 ( 1.2)	24 ( 0.9)	12 ( 0.6)	10 ( 0.9)
DISTRICT OF COLUMBIA	11 ( 0.4)	28 ( 0.6)	34 ( 0.6)	12 ( 0.5)	15 ( 0.5)
FLORIDA	18 ( 1.9)	29 ( 2.7)	24 ( 2.8)	17 ( 2.6)	13 ( 1.8)
GEORGIA	10 ( 1.9)	30 ( 2.8)	36 ( 2.6)	17 ( 2.1)	8 ( 1.5)
HAWAII	21 ( 1.9)	31 ( 2.4)	17 ( 2.0)	13 ( 1.8)	17 ( 2.1)
INDIANA	28 ( 2.8)	40 ( 3.5)	20 ( 2.8)	8 ( 2.0)	5 ( 1.4)
IOWA†	17 ( 2.9)	40 ( 3.8)	25 ( 3.8)	14 ( 2.8)	4 ( 1.0)
KENTUCKY	10 ( 2.4)	21 ( 3.0)	35 ( 3.4)	17 ( 2.6)	17 ( 2.7)
LOUISIANA	12 ( 2.1)	25 ( 2.6)	32 ( 3.0)	16 ( 2.8)	15 ( 2.8)
MAINE	18 ( 3.1)	24 ( 2.7)	31 ( 3.0)	15 ( 2.9)	13 ( 2.5)
MARYLAND	11 ( 2.1)	36 ( 3.2)	29 ( 3.2)	15 ( 2.8)	8 ( 2.0)
MASSACHUSETTS	9 ( 2.0)	27 ( 3.2)	26 ( 2.6)	17 ( 2.5)	21 ( 2.6)
MICHIGAN†	16 ( 2.3)	31 ( 3.8)	32 ( 3.6)	13 ( 2.2)	9 ( 2.3)
MINNESOTA	15 ( 2.8)	32 ( 3.2)	29 ( 3.4)	14 ( 2.2)	10 ( 1.7)
MISSISSIPPI	8 ( 2.0)	25 ( 2.9)	31 ( 2.9)	22 ( 3.3)	15 ( 2.6)
MISSOURI	19 ( 2.6)	29 ( 3.7)	24 ( 3.4)	18 ( 3.2)	11 ( 2.1)
MONTANA†	13 ( 2.4)	30 ( 3.8)	29 ( 3.3)	15 ( 2.8)	13 ( 2.1)
NEBRASKA	19 ( 3.0)	33 ( 3.7)	25 ( 3.2)	14 ( 2.0)	9 ( 1.6)
NEVADA†	5 ( 1.4)	23 ( 2.9)	31 ( 2.7)	26 ( 3.0)	15 ( 2.0)
NEW JERSEY†	14 ( 2.2)	38 ( 4.2)	26 ( 3.6)	15 ( 3.2)	7 ( 1.6)
NEW MEXICO	22 ( 3.3)	29 ( 3.2)	22 ( 3.0)	14 ( 1.8)	12 ( 2.4)
NEW YORK†	21 ( 3.0)	34 ( 3.3)	24 ( 2.7)	11 ( 1.9)	10 ( 1.9)
NORTH CAROLINA	15 ( 2.5)	31 ( 3.8)	35 ( 3.5)	10 ( 2.0)	9 ( 2.1)
NORTH DAKOTA	17 ( 2.8)	33 ( 3.3)	28 ( 3.1)	10 ( 1.9)	12 ( 2.3)
OREGON	21 ( 3.1)	29 ( 3.0)	26 ( 3.2)	12 ( 2.2)	12 ( 2.2)
PENNSYLVANIA†	23 ( 3.0)	33 ( 3.4)	27 ( 2.8)	8 ( 1.8)	9 ( 2.1)
RHODE ISLAND	18 ( 2.6)	31 ( 2.9)	30 ( 2.9)	13 ( 1.9)	8 ( 1.7)
SOUTH CAROLINA†	6 ( 1.5)	35 ( 3.7)	32 ( 3.1)	16 ( 2.6)	11 ( 1.9)
TENNESSEE	16 ( 2.3)	37 ( 2.9)	28 ( 2.6)	11 ( 2.0)	8 ( 1.8)
TEXAS	5 ( 1.4)	19 ( 3.1)	29 ( 2.7)	22 ( 3.1)	24 ( 3.7)
UTAH	18 ( 2.5)	28 ( 3.1)	22 ( 2.7)	17 ( 2.6)	15 ( 2.4)
VERMONT†	10 ( 2.0)	14 ( 2.1)	35 ( 3.5)	24 ( 3.3)	17 ( 2.3)
VIRGINIA	17 ( 2.4)	29 ( 2.8)	24 ( 2.6)	17 ( 2.6)	13 ( 2.1)
WASHINGTON	18 ( 2.8)	26 ( 3.0)	23 ( 2.7)	20 ( 2.5)	13 ( 2.1)
WEST VIRGINIA	10 ( 2.2)	32 ( 3.6)	38 ( 3.6)	15 ( 2.6)	5 ( 1.4)
WISCONSIN	25 ( 3.4)	36 ( 3.4)	21 ( 3.1)	7 ( 1.5)	11 ( 2.2)
WYOMING	25 ( 3.2)	35 ( 2.9)	22 ( 2.8)	11 ( 1.8)	7 ( 2.1)
<b>Other Jurisdictions</b>					
DDESS	26 ( 0.8)	34 ( 1.3)	26 ( 1.1)	10 ( 1.0)	4 ( 0.5)
D <sub>o</sub> DDS	5 ( 0.5)	35 ( 1.6)	33 ( 1.5)	9 ( 1.1)	19 ( 1.8)
GUAM	39 ( 1.4)	30 ( 1.6)	20 ( 1.4)	6 ( 0.7)	4 ( 0.4)

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).  
 SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 8.12**

**1990 Mathematics Assessment**

POPULATION: 1990 Grade 8 Public School Students  
 REPORTED STATISTICS: Percentage of Students  
 TEACHERS' REPORTS ON: Their Highest Academic Degree



What is the highest academic degree you hold?	Bachelor's Degree	Master's Degree	Educational Specialist's or Professional Diploma	Doctorate or Professional Degree
JURISDICTIONS	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )
<b>Nation</b>				
NATION	56 ( 4.2)	35 ( 4.3)	6 ( 1.8)	2 ( 1.4)
NORTHEAST	46 (15.0)	45 (15.9)	9 ( 3.9)	0 ( ... )
SOUTHEAST	56 ( 8.2)	26 ( 8.2)	14 ( 6.3)	5 ( ... )
CENTRAL	48 ( 9.1)	44 ( 9.4)	4 ( 2.7)	4 ( 2.7)
WEST	68 ( 5.2)	31 ( 5.1)	1 ( 0.7)	0 ( ... )
<b>States</b>				
ALABAMA	52 ( 4.7)	42 ( 4.7)	6 ( 1.9)	0 ( ... )
ALASKA	— ( — )	— ( — )	— ( — )	— ( — )
ARIZONA	55 ( 2.8)	36 ( 2.7)	8 ( 1.5)	1 ( ... )
ARKANSAS	66 ( 3.9)	30 ( 3.7)	4 ( 1.5)	0 ( ... )
CALIFORNIA	64 ( 3.2)	32 ( 3.1)	3 ( 0.9)	1 ( 0.4)
COLORADO	50 ( 3.3)	42 ( 3.1)	7 ( 1.8)	1 ( ... )
CONNECTICUT	17 ( 2.7)	49 ( 3.3)	33 ( 3.2)	1 ( ... )
DELAWARE	47 ( 1.1)	42 ( 1.1)	10 ( 0.3)	0 ( ... )
DISTRICT OF COLUMBIA	40 ( 1.0)	48 ( 1.2)	7 ( 0.5)	5 ( 0.4)
FLORIDA	55 ( 3.1)	40 ( 3.2)	4 ( 1.5)	1 ( ... )
GEORGIA	54 ( 3.6)	39 ( 3.5)	8 ( 1.5)	0 ( ... )
HAWAII	68 ( 0.8)	24 ( 0.8)	8 ( 0.4)	0 ( ... )
INDIANA	18 ( 3.1)	77 ( 3.0)	4 ( 1.2)	0 ( ... )
IOWA	64 ( 3.9)	31 ( 4.1)	5 ( 1.5)	0 ( ... )
KENTUCKY	25 ( 3.5)	46 ( 4.5)	28 ( 4.0)	0 ( ... )
LOUISIANA	61 ( 4.4)	27 ( 3.7)	8 ( 2.2)	5 ( 2.7)
MAINE	— ( — )	— ( — )	— ( — )	— ( — )
MARYLAND	41 ( 3.6)	48 ( 3.6)	11 ( 1.7)	0 ( ... )
MASSACHUSETTS	— ( — )	— ( — )	— ( — )	— ( — )
MICHIGAN	36 ( 3.4)	58 ( 3.5)	6 ( 1.6)	0 ( ... )
MINNESOTA	56 ( 3.4)	39 ( 3.1)	5 ( 2.3)	0 ( ... )
MISSISSIPPI	— ( — )	— ( — )	— ( — )	— ( — )
MISSOURI	— ( — )	— ( — )	— ( — )	— ( — )
MONTANA	62 ( 2.5)	34 ( 2.4)	3 ( 0.6)	1 ( 0.0)
NEBRASKA	67 ( 2.6)	31 ( 2.5)	2 ( 0.8)	0 ( ... )
NEW MEXICO	54 ( 1.2)	42 ( 1.2)	5 ( 0.4)	0 ( ... )
NEW YORK	31 ( 3.3)	57 ( 3.2)	11 ( 1.9)	2 ( 0.8)
NORTH CAROLINA	65 ( 2.9)	33 ( 2.9)	2 ( 0.5)	0 ( ... )
NORTH DAKOTA	81 ( 1.9)	19 ( 1.9)	0 ( ... )	0 ( ... )
OREGON	56 ( 3.2)	39 ( 3.0)	4 ( 1.2)	1 ( ... )
RHODE ISLAND	52 ( 1.1)	44 ( 1.1)	4 ( 0.2)	0 ( ... )
SOUTH CAROLINA	— ( — )	— ( — )	— ( — )	— ( — )
TENNESSEE	— ( — )	— ( — )	— ( — )	— ( — )
TEXAS	62 ( 3.3)	36 ( 3.2)	2 ( 1.1)	0 ( ... )
UTAH	— ( — )	— ( — )	— ( — )	— ( — )
VERMONT	— ( — )	— ( — )	— ( — )	— ( — )
VIRGINIA	69 ( 2.5)	29 ( 2.7)	2 ( 1.0)	0 ( ... )
WASHINGTON	— ( — )	— ( — )	— ( — )	— ( — )
WEST VIRGINIA	57 ( 3.5)	37 ( 3.7)	5 ( 1.4)	0 ( ... )
WISCONSIN	56 ( 4.3)	43 ( 4.3)	1 ( ... )	0 ( ... )
WYOMING	70 ( 0.9)	28 ( 0.9)	2 ( 0.2)	0 ( ... )
<b>Other Jurisdictions</b>				
DDESS	— ( — )	— ( — )	— ( — )	— ( — )
DoDDS	— ( — )	— ( — )	— ( — )	— ( — )
GUAM	80 ( 0.6)	16 ( 0.5)	4 ( 0.3)	0 ( ... )

— State or other jurisdiction did not participate in the NAEP assessment year presented in this table.

... Characteristics of the sample do not permit a reliable estimate.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 8.12** (continued)

**1992 Mathematics Assessment**



POPULATION: 1992 Grade 8 Public School Students  
 REPORTED STATISTICS: Percentage of Students  
 TEACHERS' REPORTS ON: Their Highest Academic Degree

What is the highest academic degree you hold?	Bachelor's Degree	Master's Degree	Educational Specialist's or Professional Diploma	Doctorate or Professional Degree
JURISDICTIONS	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )
<b>Nation</b>				
NATION	53 ( 2.9)	41 ( 2.7)	6 ( 1.3)	0 ( 0.3)
NORTHEAST	37 ( 5.5)	47 ( 5.8)	15 ( 4.0)	1 ( ... )
SOUTHEAST	59 ( 7.4)	37 ( 7.3)	4 ( 2.5)	0 ( ... )
CENTRAL	47 ( 5.6)	48 ( 4.5)	5 ( 3.0)	0 ( ... )
WEST	64 ( 4.5)	33 ( 3.9)	2 ( 1.2)	1 ( ... )
<b>States</b>				
ALABAMA	47 ( 3.6)	50 ( 3.7)	3 ( 1.2)	0 ( ... )
ALASKA	— ( — )	— ( — )	— ( — )	— ( — )
ARIZONA	55 ( 4.0)	39 ( 4.1)	5 ( 1.5)	1 ( 0.6)
ARKANSAS	68 ( 3.7)	28 ( 3.6)	4 ( 1.7)	0 ( ... )
CALIFORNIA	61 ( 3.0)	37 ( 2.9)	2 ( 0.7)	0 ( ... )
COLORADO	50 ( 3.1)	46 ( 3.3)	4 ( 1.2)	1 ( ... )
CONNECTICUT	15 ( 2.8)	53 ( 3.9)	32 ( 3.6)	0 ( ... )
DELAWARE	53 ( 1.0)»	46 ( 0.9)	1 ( 0.1)«	0 ( ... )
DISTRICT OF COLUMBIA	42 ( 1.0)	42 ( 1.1)«	14 ( 0.7)»	3 ( 0.6)
FLORIDA	66 ( 3.0)	31 ( 2.9)	3 ( 1.1)	0 ( ... )
GEORGIA	59 ( 3.1)	29 ( 3.1)	12 ( 2.3)	0 ( ... )
HAWAII	72 ( 0.9)»	16 ( 0.8)«	10 ( 0.5)»	2 ( ... )
INDIANA	22 ( 3.6)	72 ( 3.7)	5 ( 1.5)	0 ( ... )
IOWA	66 ( 4.0)	31 ( 4.0)	2 ( 1.0)	0 ( ... )
KENTUCKY	35 ( 3.4)	44 ( 3.7)	21 ( 3.5)	0 ( ... )
LOUISIANA	61 ( 3.7)	26 ( 2.8)	12 ( 2.8)	1 ( ... )
MAINE	64 ( 3.6)	30 ( 3.4)	3 ( 1.3)	3 ( 1.7)
MARYLAND	41 ( 3.6)	51 ( 3.2)	8 ( 1.9)	0 ( ... )
MASSACHUSETTS	42 ( 3.3)	47 ( 3.3)	11 ( 2.5)	0 ( ... )
MICHIGAN	42 ( 3.5)	48 ( 3.7)	9 ( 2.0)	1 ( 0.4)
MINNESOTA	58 ( 4.2)	35 ( 3.6)	7 ( 2.6)	0 ( ... )
MISSISSIPPI	54 ( 4.0)	41 ( 3.9)	5 ( 1.2)	3 ( ... )
MISSOURI	51 ( 3.7)	45 ( 3.4)	4 ( 1.4)	0 ( ... )
MONTANA	— ( — )	— ( — )	— ( — )	— ( — )
NEBRASKA	54 ( 4.1)	41 ( 4.1)	4 ( 1.4)	1 ( ... )
NEW MEXICO	59 ( 2.7)	39 ( 2.8)	2 ( 0.4)«	0 ( ... )
NEW YORK	25 ( 3.1)	63 ( 3.4)	11 ( 2.4)	1 ( 0.4)
NORTH CAROLINA	65 ( 2.8)	33 ( 2.8)	2 ( 0.7)	0 ( ... )
NORTH DAKOTA	84 ( 2.1)	16 ( 2.1)	0 ( ... )	0 ( ... )
OREGON	— ( — )	— ( — )	— ( — )	— ( — )
RHODE ISLAND	50 ( 1.0)	46 ( 1.0)	3 ( 0.3)	1 ( 0.0)
SOUTH CAROLINA	49 ( 3.7)	39 ( 3.4)	12 ( 1.8)	0 ( ... )
TENNESSEE	41 ( 4.2)	46 ( 4.2)	11 ( 2.2)	3 ( 1.3)
TEXAS	65 ( 3.7)	32 ( 3.6)	2 ( 0.9)	1 ( ... )
UTAH	64 ( 2.5)	28 ( 2.4)	5 ( 0.9)	4 ( 2.5)
VERMONT	— ( — )	— ( — )	— ( — )	— ( — )
VIRGINIA	68 ( 2.8)	31 ( 2.9)	1 ( 0.6)	0 ( ... )
WASHINGTON	— ( — )	— ( — )	— ( — )	— ( — )
WEST VIRGINIA	56 ( 4.2)	38 ( 3.9)	6 ( 1.7)	0 ( ... )
WISCONSIN	62 ( 4.7)	36 ( 4.6)	2 ( 1.0)	0 ( ... )
WYOMING	78 ( 2.5)	20 ( 2.3)«	3 ( 1.1)	0 ( ... )
<b>Other Jurisdictions</b>				
DDESS	— ( — )	— ( — )	— ( — )	— ( — )
DoDDS	— ( — )	— ( — )	— ( — )	— ( — )
GUAM	79 ( 0.9)	21 ( 0.9)»	0 ( ... )	0 ( ... )

— State or other jurisdiction did not participate in the NAEP assessment year presented in this table.

... Characteristics of the sample do not permit a reliable estimate.

» («) The value for the students was significantly higher (lower) than in the 1990 assessment at about the 95% confidence level using appropriate multiple comparison procedures.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.



**TABLE 8.12** (continued)

**1996 Mathematics Assessment**



POPULATION: 1996 Grade 8 Public School Students  
 REPORTED STATISTICS: Percentage of Students  
 TEACHERS' REPORTS ON: Their Highest Academic Degree

What is the highest academic degree you hold?	Bachelor's Degree	Master's Degree	Educational Specialist's or Professional Diploma	Doctorate or Professional Degree
JURISDICTIONS	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )
<b>Nation</b>				
NATION	59 ( 3.4)	35 ( 3.2)	5 ( 1.2)	1 ( 0.4)
NORTHEAST	41 ( 6.9)	51 ( 8.0)	8 ( 3.1)	0 ( 0.2)
SOUTHEAST	58 ( 6.1)	34 ( 5.3)	6 ( 2.7)	2 ( ... )
CENTRAL	57 ( 9.1)	39 ( 7.3)	4 ( ... )	0 ( ... )
WEST	74 ( 4.6)	23 ( 4.9)	2 ( ... )	1 ( ... )
<b>States</b>				
ALABAMA	46 ( 4.0)	49 ( 3.9)	5 ( 1.5)	0 ( ... )
ALASKA†	61 ( 2.8)	35 ( 2.5)	3 ( 1.2)	0 ( ... )
ARIZONA	60 ( 3.4)	35 ( 3.8)	4 ( 1.7)	0 ( ... )
ARKANSAS†	69 ( 4.0)	30 ( 4.1)	0 ( 0.1)	1 ( ... )
CALIFORNIA	61 ( 3.4)	34 ( 3.1)	4 ( 1.5)	2 ( 0.9)
COLORADO	55 ( 3.7)	40 ( 3.5)	4 ( 1.5)	0 ( ... )
CONNECTICUT	16 ( 3.0)	57 ( 3.3)	26 ( 2.7)	1 ( ... )
DELAWARE	53 ( 1.0)»	42 ( 0.9)	5 ( 0.5)«>	0 ( ... )
DISTRICT OF COLUMBIA	57 ( 1.1)»>	35 ( 1.2)«<	5 ( 0.3)«<	3 ( 0.4)«<
FLORIDA	65 ( 3.7)	31 ( 3.5)	4 ( 1.5)	1 ( ... )
GEORGIA	47 ( 3.2)	40 ( 3.0)	13 ( 2.1)	0 ( ... )
HAWAII	71 ( 1.0)	20 ( 0.8)«<	9 ( 0.7)	0 ( ... )
INDIANA	29 ( 4.0)	67 ( 4.3)	5 ( 1.8)	0 ( ... )
IOWA†	62 ( 4.5)	36 ( 4.5)	1 ( 0.5)	0 ( ... )
KENTUCKY	32 ( 4.0)	49 ( 4.0)	19 ( 2.8)	0 ( ... )
LOUISIANA	63 ( 3.8)	21 ( 3.1)	16 ( 2.8)	0 ( ... )
MAINE	70 ( 3.1)	25 ( 3.4)	5 ( 2.0)	0 ( ... )
MARYLAND†	47 ( 3.5)	48 ( 3.4)	3 ( 1.1)«<	1 ( ... )
MASSACHUSETTS	37 ( 3.9)	54 ( 3.7)	7 ( 2.0)	2 ( ... )
MICHIGAN†	48 ( 4.0)	47 ( 4.0)	5 ( 1.7)	0 ( ... )
MINNESOTA	63 ( 3.8)	33 ( 3.6)	4 ( 1.5)	0 ( ... )
MISSISSIPPI	61 ( 4.1)	33 ( 3.7)	5 ( 1.7)	0 ( 0.0)
MISSOURI	55 ( 4.1)	41 ( 4.4)	4 ( 1.2)	0 ( ... )
MONTANA†	65 ( 3.2)	34 ( 3.1)	1 ( ... )	0 ( 0.0)«<
NEBRASKA	60 ( 3.8)	38 ( 3.7)	2 ( 0.9)	0 ( ... )
NEW MEXICO	61 ( 2.1)»	31 ( 2.3)«<	7 ( 1.3)	2 ( ... )
NEW YORK†	24 ( 3.5)	70 ( 3.5)	6 ( 1.6)	1 ( ... )
NORTH CAROLINA	69 ( 2.9)	29 ( 2.9)	2 ( 0.8)	0 ( ... )
NORTH DAKOTA	82 ( 1.7)	17 ( 1.7)	1 ( ... )	0 ( ... )
OREGON	46 ( 3.7)	50 ( 3.6)	4 ( 1.1)	0 ( ... )
RHODE ISLAND	50 ( 1.1)	45 ( 1.2)	6 ( 0.5)»>	0 ( ... )
SOUTH CAROLINA†	50 ( 4.3)	36 ( 3.7)	13 ( 2.2)	0 ( ... )
TENNESSEE	49 ( 4.3)	43 ( 3.9)	6 ( 1.7)	2 ( 1.1)
TEXAS	76 ( 3.1)»	21 ( 3.0)«<	2 ( 1.0)	1 ( ... )
UTAH	67 ( 2.0)	28 ( 1.8)	3 ( 0.6)	2 ( ... )
VERMONT†	55 ( 2.4)	41 ( 2.4)	4 ( 0.6)	1 ( ... )
VIRGINIA	63 ( 3.4)	35 ( 3.4)	1 ( 0.6)	1 ( 0.4)
WASHINGTON	50 ( 3.0)	46 ( 3.1)	4 ( 1.4)	0 ( 0.1)
WEST VIRGINIA	41 ( 3.5)«<	46 ( 3.1)	13 ( 2.4)»	0 ( ... )
WISCONSIN†	58 ( 4.8)	41 ( 4.7)	1 ( 0.5)	0 ( ... )
WYOMING	73 ( 1.1)	24 ( 1.0)«<	1 ( 0.4)	2 ( 0.1)
<b>Other Jurisdictions</b>				
DDESS	25 ( 1.3)	61 ( 1.6)	14 ( 1.2)	0 ( ... )
DoDDS	32 ( 0.9)	50 ( 1.1)	18 ( 0.8)	0 ( ... )
GUAM	81 ( 1.5)	18 ( 1.5)	0 ( ... )	0 ( ... )

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).  
 ... Characteristics of the sample do not permit a reliable estimate.  
 » («) The value for the students was significantly higher (lower) than in the 1990 assessment at about the 95% confidence level using appropriate multiple comparison procedures.  
 > (<) The value for the students was significantly higher (lower) than in the 1992 assessment at about the 95% confidence level using appropriate multiple comparison procedures.  
 SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 8.13**

**1996 Mathematics Assessment**



POPULATION: 1996 Grade 8 Public School Students  
 REPORTED STATISTICS: Percentage of Students  
 TEACHERS' REPORTS ON: Their Undergraduate Majors

What were your undergraduate major fields of study?

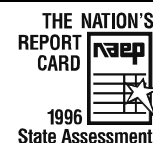
	Education	Mathematics	Mathematics Education	Special Education	ESL	Other
JURISDICTIONS	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )
<b>Nation</b>						
NATION	59 ( 3.2)	47 ( 3.0)	23 ( 2.9)	1 ( 0.4)	0 ( 0.2)	37 ( 3.3)
NORTHEAST	62 ( 7.4)	73 ( 6.1)	21 ( 9.0)	3 ( 1.1)	0 ( ... )	31 ( 9.0)
SOUTHEAST	58 ( 6.7)	42 ( 5.9)	25 ( 5.2)	3 ( 1.2)	0 ( ... )	32 ( 4.5)
CENTRAL	74 ( 7.3)	39 ( 8.3)	27 ( 7.0)	1 ( ... )	1 ( ... )	27 ( 8.2)
WEST	45 ( 4.2)	40 ( 4.2)	20 ( 3.2)	0 ( 0.2)	0 ( ... )	53 ( 4.8)
<b>States</b>						
ALABAMA	63 ( 4.2)	54 ( 3.8)	28 ( 3.7)	2 ( 1.0)	0 ( ... )	28 ( 3.9)
ALASKA†	61 ( 2.9)	47 ( 3.0)	16 ( 2.3)	9 ( 2.1)	2 ( 0.8)	35 ( 2.9)
ARIZONA	77 ( 3.1)	32 ( 3.7)	18 ( 2.9)	3 ( 1.2)	5 ( 1.2)	38 ( 3.9)
ARKANSAS†	64 ( 4.0)	47 ( 5.1)	36 ( 4.7)	1 ( 0.7)	0 ( ... )	26 ( 3.4)
CALIFORNIA	35 ( 3.4)	43 ( 3.6)	8 ( 1.4)	2 ( 1.1)	0 ( ... )	54 ( 3.8)
COLORADO	60 ( 3.1)	54 ( 3.5)	28 ( 3.5)	1 ( 0.8)	0 ( ... )	37 ( 3.5)
CONNECTICUT	57 ( 3.5)	48 ( 3.7)	17 ( 2.6)	1 ( 0.5)	1 ( ... )	29 ( 3.2)
DELAWARE	70 ( 1.1)	28 ( 1.0)	34 ( 0.9)	2 ( 0.3)	0 ( ... )	24 ( 1.0)
DISTRICT OF COLUMBIA	42 ( 1.3)	61 ( 1.0)	20 ( 0.6)	3 ( 0.4)	0 ( ... )	32 ( 1.1)
FLORIDA	54 ( 3.8)	42 ( 2.7)	34 ( 3.1)	2 ( 0.6)	1 ( 0.6)	38 ( 3.3)
GEORGIA	72 ( 2.5)	33 ( 2.9)	28 ( 3.1)	1 ( 0.6)	0 ( ... )	27 ( 2.5)
HAWAII	65 ( 0.9)	46 ( 1.2)	40 ( 1.1)	1 ( 0.3)	0 ( 0.3)	30 ( 1.0)
INDIANA	64 ( 4.1)	53 ( 4.5)	50 ( 4.4)	1 ( 0.6)	0 ( ... )	19 ( 3.4)
IOWA†	73 ( 4.3)	45 ( 4.6)	32 ( 4.1)	2 ( 0.9)	0 ( ... )	32 ( 4.7)
KENTUCKY	79 ( 3.5)	43 ( 3.9)	28 ( 3.1)	2 ( 0.7)	0 ( ... )	27 ( 3.4)
LOUISIANA	80 ( 3.3)	28 ( 3.7)	23 ( 3.6)	1 ( 0.4)	0 ( ... )	22 ( 3.6)
MAINE	73 ( 3.3)	42 ( 4.2)	25 ( 3.0)	3 ( 1.1)	0 ( ... )	36 ( 3.2)
MARYLAND†	56 ( 3.8)	57 ( 4.1)	24 ( 3.6)	1 ( 0.4)	0 ( ... )	26 ( 3.1)
MASSACHUSETTS	46 ( 3.1)	53 ( 3.7)	15 ( 2.3)	0 ( ... )	1 ( ... )	34 ( 3.5)
MICHIGAN†	77 ( 3.0)	44 ( 4.3)	22 ( 3.6)	1 ( 0.3)	0 ( ... )	33 ( 4.0)
MINNESOTA	63 ( 3.6)	76 ( 3.2)	43 ( 3.3)	2 ( 0.9)	0 ( ... )	20 ( 3.1)
MISSISSIPPI	66 ( 3.7)	41 ( 4.1)	25 ( 3.5)	1 ( 0.5)	0 ( ... )	22 ( 3.6)
MISSOURI	73 ( 4.0)	47 ( 4.1)	36 ( 3.6)	1 ( 0.4)	0 ( ... )	29 ( 3.8)
MONTANA†	71 ( 3.3)	40 ( 3.4)	37 ( 3.6)	3 ( 0.7)	0 ( ... )	25 ( 3.1)
NEBRASKA	80 ( 2.7)	65 ( 3.0)	51 ( 3.0)	1 ( 0.3)	0 ( ... )	33 ( 3.1)
NEW MEXICO	71 ( 2.2)	40 ( 2.4)	20 ( 1.9)	4 ( 0.3)	4 ( 1.2)	47 ( 3.1)
NEW YORK†	54 ( 4.3)	63 ( 3.4)	31 ( 4.4)	2 ( 0.7)	1 ( 0.6)	31 ( 3.8)
NORTH CAROLINA	70 ( 3.5)	43 ( 3.0)	44 ( 3.4)	2 ( 0.8)	0 ( ... )	19 ( 2.4)
NORTH DAKOTA	70 ( 2.0)	51 ( 2.8)	47 ( 2.9)	1 ( 0.3)	0 ( ... )	27 ( 2.4)
OREGON	68 ( 2.7)	31 ( 3.6)	21 ( 3.2)	4 ( 1.2)	1 ( 0.5)	46 ( 3.8)
RHODE ISLAND	72 ( 0.9)	60 ( 1.0)	34 ( 0.9)	1 ( 0.1)	0 ( ... )	34 ( 1.0)
SOUTH CAROLINA†	56 ( 4.1)	41 ( 4.0)	24 ( 3.8)	4 ( 1.8)	0 ( ... )	19 ( 3.2)
TENNESSEE	71 ( 3.5)	33 ( 4.2)	13 ( 2.5)	6 ( 1.9)	0 ( ... )	32 ( 4.0)
TEXAS	66 ( 3.7)	62 ( 3.3)	24 ( 2.4)	2 ( 1.0)	1 ( 0.4)	38 ( 3.9)
UTAH	74 ( 2.0)	41 ( 2.1)	33 ( 2.5)	4 ( 1.1)	2 ( 0.4)	44 ( 1.7)
VERMONT†	59 ( 3.0)	47 ( 2.4)	18 ( 2.6)	2 ( 1.0)	1 ( 0.4)	34 ( 2.7)
VIRGINIA	54 ( 3.1)	55 ( 3.5)	27 ( 2.1)	2 ( 0.7)	0 ( ... )	34 ( 2.9)
WASHINGTON	66 ( 3.6)	32 ( 3.4)	29 ( 3.0)	3 ( 0.9)	0 ( ... )	49 ( 3.7)
WEST VIRGINIA	79 ( 2.4)	46 ( 3.7)	39 ( 3.3)	3 ( 0.9)	0 ( ... )	30 ( 3.5)
WISCONSIN†	86 ( 2.7)	39 ( 4.6)	32 ( 4.9)	3 ( 1.4)	0 ( ... )	19 ( 3.3)
WYOMING	72 ( 1.1)	63 ( 1.2)	52 ( 1.3)	2 ( 0.4)	0 ( ... )	26 ( 1.3)
<b>Other Jurisdictions</b>						
DDESS	65 ( 1.9)	34 ( 1.7)	46 ( 1.8)	4 ( 0.8)	0 ( ... )	32 ( 2.1)
DoDDS	57 ( 0.7)	43 ( 0.8)	28 ( 0.8)	5 ( 0.2)	1 ( 0.3)	48 ( 1.0)
GUAM	78 ( 1.3)	34 ( 1.3)	0 ( ... )	2 ( 0.6)	0 ( ... )	40 ( 1.3)

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).  
 ... Characteristics of the sample do not permit a reliable estimate.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 8.14**

**1996 Mathematics Assessment**



POPULATION: 1996 Grade 8 Public School Students  
 REPORTED STATISTICS: Percentage of Students  
 TEACHERS' REPORTS ON: Their Graduate Majors

What were your graduate major fields of study?	Education	Mathematics	Mathematics Education	Special Education	Bilingual
JURISDICTIONS	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )
<b>Nation</b>					
NATION	47 ( 2.9)	18 ( 2.4)	19 ( 2.8)	1 ( 0.3)	0 ( ... )
NORTHEAST	68 ( 5.5)	30 ( 7.5)	26 ( 5.8)	1 ( ... )	0 ( ... )
SOUTHEAST	36 ( 5.6)	12 ( 4.3)	19 ( 5.0)	3 ( 1.1)	0 ( ... )
CENTRAL	37 ( 6.9)	19 ( 5.2)	21 ( 8.1)	0 ( ... )	1 ( ... )
WEST	49 ( 5.7)	15 ( 3.6)	12 ( 3.5)	1 ( 0.6)	0 ( 0.1)
<b>States</b>					
ALABAMA	45 ( 4.7)	18 ( 2.5)	36 ( 4.0)	3 ( 0.7)	0 ( ... )
ALASKA†	61 ( 3.0)	18 ( 2.0)	16 ( 1.6)	7 ( 2.0)	0 ( ... )
ARIZONA	53 ( 3.5)	13 ( 2.6)	18 ( 2.4)	1 ( 0.3)	5 ( 1.5)
ARKANSAS†	29 ( 4.2)	22 ( 3.7)	26 ( 5.4)	1 ( 0.8)	0 ( ... )
CALIFORNIA	58 ( 3.0)	20 ( 2.8)	20 ( 2.8)	6 ( 1.8)	3 ( 1.2)
COLORADO	41 ( 3.6)	13 ( 2.5)	21 ( 2.6)	7 ( 2.0)	0 ( ... )
CONNECTICUT	64 ( 3.4)	23 ( 2.9)	29 ( 3.1)	3 ( 1.0)	1 ( 0.7)
DELAWARE	30 ( 1.4)	7 ( 0.7)	18 ( 1.0)	4 ( 0.5)	0 ( ... )
DISTRICT OF COLUMBIA	31 ( 1.0)	21 ( 0.9)	38 ( 0.9)	1 ( 0.2)	1 ( 0.1)
FLORIDA	29 ( 2.7)	18 ( 2.6)	18 ( 2.7)	4 ( 1.2)	1 ( 0.5)
GEORGIA	48 ( 3.3)	15 ( 2.3)	29 ( 3.3)	1 ( 0.6)	0 ( ... )
HAWAII	47 ( 1.0)	17 ( 0.9)	33 ( 0.9)	5 ( 0.6)	1 ( 0.2)
INDIANA	61 ( 4.2)	30 ( 4.0)	35 ( 4.6)	1 ( 0.5)	1 ( ... )
IOWA†	44 ( 4.3)	13 ( 2.6)	22 ( 3.3)	2 ( 1.4)	0 ( ... )
KENTUCKY	60 ( 4.3)	18 ( 3.6)	24 ( 3.4)	3 ( 1.1)	0 ( ... )
LOUISIANA	37 ( 4.4)	15 ( 2.7)	15 ( 3.0)	3 ( 0.8)	0 ( ... )
MAINE	36 ( 2.9)	16 ( 3.0)	13 ( 2.5)	4 ( 0.9)	0 ( ... )
MARYLAND†	52 ( 3.6)	18 ( 3.6)	17 ( 2.8)	3 ( 0.8)	0 ( ... )
MASSACHUSETTS	49 ( 3.3)	24 ( 2.9)	26 ( 3.6)	4 ( 1.7)	1 ( ... )
MICHIGAN†	48 ( 3.8)	15 ( 3.0)	24 ( 3.6)	2 ( 1.2)	0 ( ... )
MINNESOTA	35 ( 3.4)	20 ( 2.7)	25 ( 2.7)	2 ( 1.1)	0 ( ... )
MISSISSIPPI	35 ( 3.2)	15 ( 2.9)	20 ( 2.6)	1 ( 0.8)	0 ( ... )
MISSOURI	40 ( 4.2)	16 ( 2.4)	29 ( 3.7)	4 ( 1.6)	0 ( ... )
MONTANA†	48 ( 2.8)	23 ( 2.9)	31 ( 3.4)	3 ( 0.5)	0 ( ... )
NEBRASKA	36 ( 2.7)	23 ( 3.2)	27 ( 3.1)	0 ( ... )	0 ( ... )
NEW MEXICO	40 ( 2.5)	11 ( 1.2)	14 ( 1.6)	6 ( 0.9)	3 ( 0.9)
NEW YORK†	55 ( 4.2)	28 ( 4.0)	39 ( 3.8)	8 ( 2.2)	1 ( 0.6)
NORTH CAROLINA	25 ( 3.1)	12 ( 2.0)	17 ( 2.3)	3 ( 1.0)	0 ( ... )
NORTH DAKOTA	34 ( 2.5)	19 ( 2.4)	25 ( 2.3)	5 ( 1.2)	0 ( ... )
OREGON	65 ( 3.3)	23 ( 3.7)	33 ( 3.4)	6 ( 1.4)	0 ( ... )
RHODE ISLAND	47 ( 1.1)	37 ( 0.9)	26 ( 0.7)	3 ( 0.3)	3 ( 0.2)
SOUTH CAROLINA†	45 ( 3.7)	22 ( 2.9)	27 ( 3.3)	4 ( 1.6)	0 ( ... )
TENNESSEE	39 ( 4.1)	11 ( 2.6)	8 ( 2.1)	4 ( 1.2)	0 ( ... )
TEXAS	27 ( 3.0)	11 ( 2.0)	8 ( 1.8)	1 ( ... )	0 ( ... )
UTAH	36 ( 1.8)	20 ( 1.0)	23 ( 1.9)	2 ( 0.6)	2 ( 0.3)
VERMONT†	51 ( 2.9)	20 ( 2.5)	33 ( 2.2)	7 ( 0.8)	0 ( ... )
VIRGINIA	37 ( 2.9)	19 ( 2.8)	18 ( 2.1)	2 ( 0.8)	0 ( ... )
WASHINGTON	54 ( 3.4)	13 ( 2.5)	18 ( 2.5)	3 ( 1.1)	0 ( ... )
WEST VIRGINIA	51 ( 3.2)	10 ( 2.4)	20 ( 2.8)	8 ( 1.9)	0 ( ... )
WISCONSIN†	53 ( 4.8)	13 ( 2.7)	16 ( 3.3)	4 ( 1.7)	0 ( ... )
WYOMING	38 ( 1.0)	18 ( 0.7)	25 ( 0.8)	2 ( 0.3)	0 ( ... )
<b>Other Jurisdictions</b>					
DDESS	47 ( 1.9)	2 ( 0.6)	30 ( 1.6)	1 ( 0.3)	0 ( ... )
D <sub>o</sub> DDS	50 ( 1.0)	19 ( 0.6)	20 ( 0.7)	7 ( 0.4)	3 ( 0.2)
GUAM	74 ( 1.8)	5 ( 0.8)	24 ( 1.5)	1 ( 0.5)	0 ( ... )

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).

... Characteristics of the sample do not permit a reliable estimate.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 8.14** (continued) **1996 Mathematics Assessment**

POPULATION: 1996 Grade 8 Public School Students  
 REPORTED STATISTICS: Percentage of Students  
 TEACHERS' REPORTS ON: Their Graduate Majors



What were your graduate major fields of study?	Administration/ Supervision/ Curriculum	Counseling	Other	No Graduate Study
JURISDICTIONS	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )
<b>Nation</b>				
NATION	19 ( 3.2)	3 ( 1.0)	18 ( 2.6)	24 ( 2.5)
NORTHEAST	23 ( 9.4)	0 ( ... )	20 ( 8.4)	8 ( 3.3)
SOUTHEAST	22 ( 4.9)	3 ( 1.6)	8 ( 2.8)	32 ( 5.3)
CENTRAL	16 ( 6.7)	3 ( 1.6)	24 ( 6.6)	24 ( 6.9)
WEST	18 ( 5.1)	6 ( 2.6)	19 ( 3.5)	26 ( 4.0)
<b>States</b>				
ALABAMA	4 ( 1.3)	1 ( 0.5)	8 ( 2.3)	29 ( 3.4)
ALASKA†	16 ( 1.6)	4 ( 0.4)	16 ( 1.5)	22 ( 2.8)
ARIZONA	23 ( 3.4)	10 ( 1.8)	9 ( 1.5)	21 ( 3.0)
ARKANSAS†	12 ( 2.8)	2 ( 0.9)	14 ( 2.8)	30 ( 4.4)
CALIFORNIA	21 ( 2.9)	3 ( 1.1)	23 ( 3.2)	12 ( 2.1)
COLORADO	19 ( 2.8)	4 ( 1.0)	20 ( 3.0)	30 ( 3.2)
CONNECTICUT	22 ( 3.1)	3 ( 1.1)	20 ( 2.7)	4 ( 1.0)
DELAWARE	29 ( 1.5)	5 ( 0.3)	12 ( 0.6)	29 ( 1.0)
DISTRICT OF COLUMBIA	13 ( 0.5)	0 ( ... )	20 ( 1.3)	23 ( 1.1)
FLORIDA	15 ( 2.3)	3 ( 0.8)	15 ( 2.4)	39 ( 3.0)
GEORGIA	6 ( 1.4)	1 ( 0.5)	16 ( 2.3)	32 ( 3.2)
HAWAII	14 ( 0.8)	2 ( 0.3)	12 ( 0.8)	34 ( 1.1)
INDIANA	10 ( 2.3)	4 ( 1.7)	15 ( 3.2)	12 ( 2.8)
IOWA†	20 ( 3.6)	3 ( 1.6)	10 ( 2.3)	28 ( 3.4)
KENTUCKY	11 ( 2.4)	9 ( 2.5)	15 ( 3.2)	11 ( 2.5)
LOUISIANA	19 ( 2.9)	5 ( 1.3)	13 ( 2.6)	34 ( 4.5)
MAINE	14 ( 2.6)	2 ( 1.2)	13 ( 2.6)	44 ( 2.9)
MARYLAND†	19 ( 2.9)	6 ( 2.0)	14 ( 2.3)	17 ( 2.8)
MASSACHUSETTS	19 ( 3.0)	4 ( 1.7)	11 ( 2.0)	19 ( 2.1)
MICHIGAN†	26 ( 3.9)	3 ( 1.2)	21 ( 3.2)	16 ( 3.1)
MINNESOTA	19 ( 3.0)	1 ( 0.6)	9 ( 2.2)	32 ( 3.4)
MISSISSIPPI	14 ( 2.9)	1 ( 0.5)	8 ( 2.1)	38 ( 3.6)
MISSOURI	19 ( 3.6)	6 ( 2.4)	13 ( 2.4)	27 ( 3.3)
MONTANA†	19 ( 2.2)	9 ( 0.6)	13 ( 2.5)	25 ( 2.9)
NEBRASKA	19 ( 2.0)	3 ( 0.6)	18 ( 2.4)	25 ( 2.8)
NEW MEXICO	16 ( 1.8)	4 ( 1.1)	22 ( 2.1)	34 ( 2.0)
NEW YORK†	12 ( 2.1)	4 ( 1.5)	19 ( 3.4)	2 ( 0.8)
NORTH CAROLINA	6 ( 1.5)	1 ( 0.7)	10 ( 2.3)	54 ( 3.4)
NORTH DAKOTA	15 ( 1.2)	1 ( ... )	13 ( 1.9)	42 ( 2.8)
OREGON	14 ( 2.5)	3 ( 0.9)	20 ( 3.4)	10 ( 2.0)
RHODE ISLAND	11 ( 0.6)	6 ( 0.3)	14 ( 0.9)	20 ( 0.9)
SOUTH CAROLINA†	9 ( 2.4)	3 ( 1.1)	8 ( 2.1)	25 ( 3.5)
TENNESSEE	34 ( 4.3)	7 ( 2.4)	12 ( 3.3)	25 ( 3.4)
TEXAS	14 ( 2.2)	4 ( 1.4)	11 ( 2.3)	46 ( 3.2)
UTAH	12 ( 1.4)	5 ( 0.8)	19 ( 1.7)	35 ( 1.5)
VERMONT†	31 ( 2.8)	5 ( 0.6)	21 ( 2.2)	16 ( 1.8)
VIRGINIA	17 ( 2.3)	5 ( 1.9)	9 ( 1.5)	33 ( 2.8)
WASHINGTON	24 ( 3.1)	3 ( 1.1)	25 ( 3.1)	21 ( 2.8)
WEST VIRGINIA	24 ( 3.3)	6 ( 1.9)	26 ( 3.4)	11 ( 1.6)
WISCONSIN†	17 ( 3.2)	3 ( 1.2)	17 ( 3.1)	28 ( 4.2)
WYOMING	16 ( 0.7)	6 ( 0.4)	18 ( 1.0)	39 ( 1.2)
<b>Other Jurisdictions</b>				
DDESS	9 ( 1.7)	11 ( 0.9)	13 ( 1.0)	9 ( 1.1)
DoDDS	20 ( 0.7)	8 ( 0.4)	34 ( 1.0)	11 ( 0.5)
GUAM	13 ( 1.0)	5 ( 1.0)	22 ( 1.4)	18 ( 1.1)

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).  
 ... Characteristics of the sample do not permit a reliable estimate.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 8.15**

**1996 Mathematics Assessment**



POPULATION: 1996 Grade 8 Public School Students  
 REPORTED STATISTICS: Percentage of Students  
 TEACHERS' REPORTS ON: Their Teaching Certification

*What type of teaching certification do you have in your main assignment field?*

**None, or Accreditation other than State, Temporary, or Probationary**

**Regular**

**Advanced**

**JURISDICTIONS**

PCT ( SE )

PCT ( SE )

PCT ( SE )

**Nation**

NATION	8 ( 1.4)	79 ( 2.6)	14 ( 2.4)
NORTHEAST	9 ( 3.3)	81 ( 5.8)	10 ( 4.7)
SOUTHEAST	8 ( 3.2)	62 ( 6.3)	30 ( 6.4)
CENTRAL	4 ( 1.9)	86 ( 4.6)	10 ( 4.9)
WEST	11 ( 2.7)	84 ( 2.7)	5 ( 1.2)

**States**

ALABAMA	2 ( 1.4)	68 ( 3.9)	30 ( 3.6)
ALASKA†	6 ( 1.5)	87 ( 2.2)	7 ( 1.6)
ARIZONA	10 ( 1.8)	85 ( 2.6)	5 ( 2.3)
ARKANSAS†	5 ( 2.2)	92 ( 2.4)	3 ( 0.9)
CALIFORNIA	14 ( 2.4)	79 ( 2.7)	7 ( 1.8)
COLORADO	12 ( 2.3)	78 ( 3.3)	10 ( 2.4)
CONNECTICUT	15 ( 2.3)	71 ( 3.2)	14 ( 2.7)
DELAWARE	9 ( 0.6)	81 ( 1.2)	10 ( 1.1)
DISTRICT OF COLUMBIA	20 ( 1.0)	67 ( 1.0)	12 ( 0.8)
FLORIDA	14 ( 2.4)	73 ( 3.5)	12 ( 2.3)
GEORGIA	1 ( 0.5)	59 ( 3.1)	40 ( 3.1)
HAWAII	30 ( 1.1)	50 ( 1.3)	20 ( 0.8)
INDIANA	1 ( 1.0)	73 ( 4.2)	26 ( 4.1)
IOWA†	6 ( 2.1)	74 ( 3.8)	20 ( 3.1)
KENTUCKY	12 ( 2.9)	75 ( 4.1)	13 ( 3.0)
LOUISIANA	11 ( 2.3)	70 ( 4.1)	19 ( 3.3)
MAINE	9 ( 2.1)	79 ( 2.9)	12 ( 2.7)
MARYLAND†	7 ( 1.8)	21 ( 3.4)	72 ( 3.7)
MASSACHUSETTS	5 ( 1.6)	90 ( 2.2)	6 ( 1.7)
MICHIGAN†	20 ( 3.2)	65 ( 4.0)	15 ( 2.4)
MINNESOTA	5 ( 2.0)	93 ( 2.3)	2 ( 1.1)
MISSISSIPPI	10 ( 2.6)	67 ( 4.0)	23 ( 3.4)
MISSOURI	10 ( 2.6)	83 ( 3.0)	7 ( 1.9)
MONTANA†	2 ( 0.5)	70 ( 3.6)	29 ( 3.6)
NEBRASKA	8 ( 1.7)	78 ( 2.4)	14 ( 2.1)
NEW MEXICO	5 ( 1.1)	81 ( 1.8)	14 ( 1.5)
NEW YORK†	23 ( 3.6)	63 ( 4.6)	14 ( 3.8)
NORTH CAROLINA	13 ( 2.3)	67 ( 2.9)	20 ( 2.3)
NORTH DAKOTA	2 ( 0.7)	93 ( 1.2)	5 ( 1.0)
OREGON	9 ( 2.4)	77 ( 2.9)	14 ( 2.7)
RHODE ISLAND	15 ( 0.6)	49 ( 1.0)	36 ( 0.8)
SOUTH CAROLINA†	5 ( 1.2)	68 ( 3.6)	27 ( 3.8)
TENNESSEE	12 ( 2.5)	62 ( 3.7)	25 ( 3.5)
TEXAS	8 ( 1.6)	88 ( 2.1)	4 ( 1.4)
UTAH	7 ( 0.8)	78 ( 2.0)	15 ( 1.9)
VERMONT†	7 ( 1.1)	82 ( 2.1)	11 ( 2.0)
VIRGINIA	6 ( 1.4)	67 ( 3.1)	27 ( 3.1)
WASHINGTON	7 ( 1.5)	80 ( 2.5)	13 ( 2.3)
WEST VIRGINIA	2 ( 0.9)	62 ( 3.3)	36 ( 3.4)
WISCONSIN†	2 ( 0.8)	94 ( 1.6)	4 ( 1.4)
WYOMING	2 ( 0.6)	83 ( 1.0)	15 ( 0.8)

**Other Jurisdictions**

DDESS	1 ( 0.4)	52 ( 1.5)	47 ( 1.4)
DoDDS	6 ( 0.5)	76 ( 1.0)	18 ( 0.8)
GUAM	16 ( 1.1)	59 ( 1.6)	25 ( 1.4)

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).  
 SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 8.16**

**1992 Mathematics Assessment**



POPULATION: 1992 Grade 8 Public School Students  
 REPORTED STATISTICS: Percentage of Students  
 TEACHERS' REPORTS ON: Their Total Years of Teaching Experience

Counting this year, how many years in total have you taught?	JURISDICTIONS				
	2 Years or Less	3 to 5 Years	6 to 10 Years	11 to 24 Years	25 Years or More
	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )
<b>Nation</b>					
NATION	9 ( 1.6)	11 ( 1.4)	15 ( 1.4)	48 ( 2.1)	17 ( 1.7)
NORTHEAST	8 ( 3.6)	1 ( 0.5)	11 ( 3.7)	53 ( 4.6)	27 ( 4.4)
SOUTHEAST	14 ( 4.6)	9 ( 2.2)	18 ( 3.6)	50 ( 4.0)	10 ( 3.2)
CENTRAL	3 ( 1.0)	14 ( 3.0)	11 ( 2.2)	47 ( 5.8)	25 ( 4.7)
WEST	11 ( 2.4)	17 ( 3.5)	17 ( 1.6)	45 ( 2.8)	11 ( 2.0)
<b>States</b>					
ALABAMA	7 ( 2.0)	16 ( 2.4)	14 ( 2.7)	53 ( 4.3)	11 ( 2.5)
ALASKA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
ARIZONA	7 ( 1.8)	13 ( 2.1)	17 ( 2.5)	47 ( 4.2)	16 ( 2.8)
ARKANSAS	7 ( 2.0)	14 ( 2.6)	16 ( 3.1)	54 ( 4.1)	9 ( 2.2)
CALIFORNIA	11 ( 2.4)	14 ( 2.1)	17 ( 2.9)	37 ( 3.2)	21 ( 2.3)
COLORADO	8 ( 1.6)	13 ( 2.3)	20 ( 2.6)	47 ( 3.2)	12 ( 2.2)
CONNECTICUT	3 ( 1.0)	4 ( 1.5)	10 ( 2.0)	56 ( 3.4)	27 ( 3.3)
DELAWARE	15 ( 0.6)	14 ( 0.5)	17 ( 0.7)	49 ( 0.9)	6 ( 0.7)
DISTRICT OF COLUMBIA	5 ( 0.4)	10 ( 0.8)	9 ( 0.7)	52 ( 1.1)	24 ( 0.8)
FLORIDA	7 ( 1.7)	15 ( 2.3)	17 ( 2.2)	51 ( 3.5)	10 ( 1.8)
GEORGIA	12 ( 2.1)	12 ( 1.8)	19 ( 2.7)	46 ( 3.1)	12 ( 2.3)
HAWAII	21 ( 0.7)	12 ( 0.6)	19 ( 0.7)	33 ( 1.0)	16 ( 0.5)
INDIANA	5 ( 1.7)	15 ( 3.1)	12 ( 2.2)	53 ( 3.9)	15 ( 2.6)
IOWA	6 ( 2.0)	7 ( 2.2)	13 ( 2.3)	52 ( 4.4)	23 ( 3.8)
KENTUCKY	14 ( 2.4)	16 ( 2.4)	14 ( 2.9)	45 ( 3.7)	11 ( 2.9)
LOUISIANA	10 ( 2.0)	13 ( 2.3)	15 ( 2.3)	46 ( 3.5)	16 ( 3.0)
MAINE	4 ( 1.5)	8 ( 1.8)	13 ( 2.3)	57 ( 3.8)	17 ( 3.1)
MARYLAND	5 ( 1.5)	6 ( 1.6)	16 ( 3.1)	57 ( 3.7)	15 ( 2.6)
MASSACHUSETTS	1 ( 0.4)	2 ( 0.9)	8 ( 1.8)	68 ( 4.1)	21 ( 3.7)
MICHIGAN	9 ( 1.9)	10 ( 2.3)	8 ( 1.7)	52 ( 3.2)	20 ( 2.6)
MINNESOTA	7 ( 2.1)	13 ( 2.8)	13 ( 2.4)	33 ( 3.8)	34 ( 3.5)
MISSISSIPPI	8 ( 2.3)	6 ( 1.6)	14 ( 2.3)	58 ( 3.8)	14 ( 3.1)
MISSOURI	8 ( 1.8)	9 ( 2.3)	24 ( 3.4)	46 ( 3.3)	12 ( 2.7)
MONTANA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
NEBRASKA	9 ( 2.8)	12 ( 2.0)	17 ( 2.8)	45 ( 4.5)	18 ( 3.5)
NEW MEXICO	13 ( 2.2)	20 ( 2.9)	14 ( 2.3)	48 ( 3.9)	5 ( 1.2)
NEW YORK	3 ( 1.5)	10 ( 2.4)	11 ( 2.0)	56 ( 3.4)	20 ( 2.8)
NORTH CAROLINA	15 ( 2.5)	9 ( 1.8)	17 ( 2.2)	49 ( 3.1)	10 ( 2.1)
NORTH DAKOTA	6 ( 1.6)	6 ( 1.3)	17 ( 3.0)	39 ( 4.0)	31 ( 3.4)
OREGON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
RHODE ISLAND	7 ( 0.6)	8 ( 0.6)	15 ( 0.5)	61 ( 1.1)	9 ( 0.5)
SOUTH CAROLINA	10 ( 2.4)	14 ( 1.9)	15 ( 2.1)	53 ( 2.7)	8 ( 1.6)
TENNESSEE	6 ( 1.9)	9 ( 1.8)	14 ( 2.0)	59 ( 3.3)	13 ( 2.4)
TEXAS	13 ( 2.1)	12 ( 2.3)	21 ( 2.8)	42 ( 3.5)	12 ( 2.1)
UTAH	16 ( 1.8)	21 ( 1.7)	14 ( 1.4)	32 ( 2.5)	17 ( 1.8)
VERMONT	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
VIRGINIA	9 ( 1.4)	13 ( 1.7)	18 ( 2.8)	52 ( 3.3)	9 ( 1.9)
WASHINGTON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
WEST VIRGINIA	6 ( 1.9)	13 ( 2.7)	23 ( 3.2)	50 ( 3.8)	8 ( 2.1)
WISCONSIN	14 ( 4.9)	14 ( 2.9)	7 ( 1.7)	40 ( 4.2)	25 ( 4.3)
WYOMING	12 ( 1.5)	16 ( 2.1)	11 ( 2.1)	47 ( 2.8)	13 ( 2.2)
<b>Other Jurisdictions</b>					
DDESS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
DoDDS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
GUAM	17 ( 0.9)	10 ( 0.7)	10 ( 0.9)	53 ( 1.0)	10 ( 0.5)

— State or other jurisdiction did not participate in the NAEP assessment year presented in this table.  
 SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 8.16** (continued) **1996 Mathematics Assessment**



POPULATION: 1996 Grade 8 Public School Students  
 REPORTED STATISTICS: Percentage of Students  
 TEACHERS' REPORTS ON: Their Total Years of Teaching Experience

Counting this year, how many years in total have you taught?	2 Years or Less					3 to 5 Years					6 to 10 Years					11 to 24 Years					25 Years or More									
	JURISDICTIONS					PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )										
<b>Nation</b>																														
NATION	8 ( 1.7)		11 ( 2.2)		19 ( 2.5)		37 ( 3.9)		25 ( 3.1)																					
NORTHEAST	3 ( 0.9)		9 ( 3.6)		17 ( 7.0)		39 ( 8.1)		32 ( 8.9)																					
SOUTHEAST	7 ( 2.4)		17 ( 5.5)		17 ( 4.1)		46 ( 5.8)		14 ( 4.0)																					
CENTRAL	9 ( 5.8)		7 ( 2.7)		12 ( 5.5)		38 (11.4)		34 ( 8.5)																					
WEST	10 ( 2.1)		12 ( 4.4)		28 ( 3.8)		28 ( 4.3)		22 ( 4.4)																					
<b>States</b>																														
ALABAMA	15 ( 3.1)		13 ( 2.6)		22 ( 2.8)		40 ( 4.1)		11 ( 2.3)																					
ALASKA†	9 ( 1.8)		14 ( 2.3)		24 ( 2.4)		35 ( 3.0)		17 ( 1.1)																					
ARIZONA	16 ( 2.5)>		24 ( 2.9)>		20 ( 2.6)		30 ( 3.1)<		10 ( 3.5)																					
ARKANSAS†	11 ( 3.2)		13 ( 2.9)		20 ( 3.7)		37 ( 4.5)<		19 ( 4.8)																					
CALIFORNIA	7 ( 1.4)		18 ( 2.7)		19 ( 2.8)		34 ( 3.3)		21 ( 2.5)																					
COLORADO	10 ( 2.0)		18 ( 2.7)		21 ( 3.1)		37 ( 3.1)		14 ( 2.8)																					
CONNECTICUT	10 ( 2.1)>		6 ( 1.6)		6 ( 1.7)		45 ( 3.1)		33 ( 3.0)																					
DELAWARE	11 ( 0.7)<		20 ( 1.0)>		14 ( 0.7)<		40 ( 1.1)<		15 ( 0.8)>																					
DISTRICT OF COLUMBIA	10 ( 0.8)>		7 ( 0.6)<		13 ( 0.4)>		48 ( 1.3)		22 ( 1.1)																					
FLORIDA	11 ( 1.7)		13 ( 2.3)		21 ( 3.2)		41 ( 4.2)		14 ( 2.3)																					
GEORGIA	9 ( 1.6)		12 ( 1.9)		21 ( 2.8)		46 ( 3.6)		11 ( 1.7)																					
HAWAII	17 ( 0.9)<		25 ( 0.8)>		22 ( 1.2)		22 ( 0.9)<		14 ( 0.7)																					
INDIANA	6 ( 1.9)		12 ( 3.0)		15 ( 3.9)		36 ( 4.0)<		30 ( 3.9)>																					
IOWA†	6 ( 2.2)		8 ( 2.3)		13 ( 3.0)		47 ( 4.9)		25 ( 3.5)																					
KENTUCKY	10 ( 2.3)		21 ( 3.6)		26 ( 3.3)		36 ( 4.0)		8 ( 2.4)																					
LOUISIANA	9 ( 2.1)		17 ( 3.0)		20 ( 3.4)		39 ( 4.0)		15 ( 2.9)																					
MAINE	6 ( 1.8)		13 ( 3.2)		18 ( 2.1)		40 ( 4.4)<		23 ( 3.2)																					
MARYLAND†	11 ( 2.3)		16 ( 2.8)>		12 ( 2.7)		43 ( 3.6)<		18 ( 3.0)																					
MASSACHUSETTS	5 ( 1.5)>		8 ( 1.8)>		8 ( 1.8)		48 ( 3.2)<		30 ( 3.5)																					
MICHIGAN†	7 ( 1.7)		14 ( 2.9)		18 ( 3.3)>		39 ( 3.9)		21 ( 3.3)																					
MINNESOTA	9 ( 2.5)		19 ( 3.0)		19 ( 2.9)		28 ( 3.5)		25 ( 3.1)																					
MISSISSIPPI	12 ( 2.8)		11 ( 2.7)		16 ( 2.7)		43 ( 3.5)<		18 ( 2.9)																					
MISSOURI	14 ( 3.2)		14 ( 2.1)		23 ( 3.6)		33 ( 3.8)		15 ( 3.3)																					
MONTANA†	9 ( 1.6)		8 ( 1.7)		16 ( 3.1)		40 ( 3.8)		27 ( 2.9)																					
NEBRASKA	8 ( 1.2)		16 ( 2.3)		16 ( 2.0)		35 ( 3.1)		25 ( 3.4)																					
NEW MEXICO	13 ( 1.6)		20 ( 2.2)		15 ( 2.0)		42 ( 2.5)		10 ( 1.3)																					
NEW YORK†	10 ( 2.9)		10 ( 2.3)		11 ( 2.4)		39 ( 4.2)<		30 ( 4.3)																					
NORTH CAROLINA	13 ( 2.4)		15 ( 2.4)		17 ( 2.7)		44 ( 3.6)		11 ( 1.9)																					
NORTH DAKOTA	4 ( 1.4)		18 ( 1.9)>		17 ( 2.8)		42 ( 2.7)		19 ( 1.9)<																					
OREGON	6 ( 1.3)		7 ( 2.1)		20 ( 2.4)		45 ( 3.8)		21 ( 3.6)																					
RHODE ISLAND	11 ( 0.6)>		10 ( 0.7)		14 ( 0.7)		44 ( 0.8)<		22 ( 0.8)>																					
SOUTH CAROLINA†	12 ( 2.5)		15 ( 3.1)		15 ( 2.2)		48 ( 3.8)		10 ( 1.8)																					
TENNESSEE	10 ( 2.6)		17 ( 3.5)		13 ( 2.7)		47 ( 3.7)		13 ( 2.7)																					
TEXAS	12 ( 2.1)		18 ( 3.2)		20 ( 2.7)		38 ( 3.6)		12 ( 2.4)																					
UTAH	15 ( 0.9)		14 ( 1.2)<		22 ( 2.1)>		31 ( 2.3)		17 ( 1.8)																					
VERMONT†	10 ( 1.4)		10 ( 2.0)		19 ( 2.0)		37 ( 2.8)		24 ( 2.1)																					
VIRGINIA	11 ( 2.5)		14 ( 2.6)		12 ( 1.7)		45 ( 3.2)		17 ( 2.5)																					
WASHINGTON	7 ( 1.6)		15 ( 2.0)		16 ( 2.3)		44 ( 3.4)		19 ( 3.1)																					
WEST VIRGINIA	1 ( 0.7)		5 ( 1.2)<		20 ( 2.2)		56 ( 3.1)		18 ( 2.9)>																					
WISCONSIN†	11 ( 3.2)		14 ( 2.2)		22 ( 3.2)>		31 ( 3.8)		22 ( 3.8)																					
WYOMING	8 ( 0.9)		18 ( 0.9)		17 ( 0.9)		38 ( 1.3)<		19 ( 0.8)																					
<b>Other Jurisdictions</b>																														
DDESS	1 ( 0.4)		1 ( 0.1)		15 ( 1.9)		65 ( 1.8)		17 ( 1.2)																					
DoDDS	8 ( 0.3)		4 ( 0.2)		6 ( 0.5)		52 ( 0.8)		30 ( 1.0)																					
GUAM	43 ( 1.4)>		15 ( 1.1)>		5 ( 0.7)<		21 ( 1.2)<		16 ( 1.3)>																					

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).  
 > (<) The value for the students was significantly higher (lower) than in the 1992 assessment at about the 95% confidence level using appropriate multiple comparison procedures.  
 SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 8.17**

**1992 Mathematics Assessment**



POPULATION: 1992 Grade 8 Public School Students  
 REPORTED STATISTICS: Percentage of Students  
 TEACHERS' REPORTS ON: Their Years of Mathematics Teaching Experience

Counting this year, how many years in total have you taught mathematics?	JURISDICTIONS				
	2 Years or Less	3 to 5 Years	6 to 10 Years	11 to 24 Years	25 Years or More
	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )
<b>Nation</b>					
NATION	11 ( 1.6)	14 ( 1.7)	18 ( 1.8)	44 ( 2.4)	13 ( 1.8)
NORTHEAST	10 ( 2.9)	4 ( 2.4)	12 ( 3.4)	53 ( 5.1)	21 ( 6.1)
SOUTHEAST	14 ( 4.6)	18 ( 5.1)	21 ( 4.5)	39 ( 5.0)	8 ( 2.3)
CENTRAL	5 ( 2.2)	15 ( 2.9)	17 ( 3.8)	42 ( 5.7)	22 ( 5.0)
WEST	12 ( 2.1)	18 ( 2.9)	22 ( 2.3)	43 ( 3.6)	6 ( 1.4)
<b>States</b>					
ALABAMA	9 ( 2.2)	18 ( 2.6)	17 ( 3.1)	48 ( 4.1)	8 ( 2.3)
ALASKA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
ARIZONA	10 ( 1.9)	16 ( 2.3)	26 ( 3.0)	39 ( 3.5)	9 ( 2.2)
ARKANSAS	8 ( 2.3)	13 ( 2.4)	20 ( 3.6)	51 ( 4.4)	7 ( 2.1)
CALIFORNIA	16 ( 2.8)	18 ( 2.1)	20 ( 2.7)	35 ( 3.3)	11 ( 1.7)
COLORADO	11 ( 1.7)	17 ( 2.4)	19 ( 2.4)	43 ( 3.0)	10 ( 2.0)
CONNECTICUT	5 ( 1.3)	8 ( 1.7)	14 ( 2.3)	52 ( 3.1)	21 ( 2.9)
DELAWARE	17 ( 0.6)	23 ( 0.7)	20 ( 0.6)	35 ( 0.9)	6 ( 0.7)
DISTRICT OF COLUMBIA	5 ( 0.4)	11 ( 0.8)	10 ( 0.8)	53 ( 1.1)	21 ( 0.7)
FLORIDA	10 ( 2.2)	17 ( 2.4)	26 ( 2.9)	40 ( 3.3)	6 ( 1.6)
GEORGIA	14 ( 2.3)	15 ( 2.0)	25 ( 3.3)	38 ( 3.6)	9 ( 1.8)
HAWAII	27 ( 0.6)	15 ( 0.7)	15 ( 0.7)	29 ( 0.9)	13 ( 0.5)
INDIANA	6 ( 1.8)	16 ( 3.1)	12 ( 2.3)	54 ( 4.1)	11 ( 2.1)
IOWA	8 ( 2.2)	10 ( 2.2)	14 ( 2.2)	47 ( 4.2)	21 ( 3.9)
KENTUCKY	17 ( 2.5)	17 ( 2.6)	15 ( 3.0)	43 ( 3.6)	8 ( 2.5)
LOUISIANA	13 ( 2.4)	16 ( 2.7)	15 ( 2.7)	45 ( 3.4)	12 ( 2.6)
MAINE	7 ( 1.7)	9 ( 1.9)	22 ( 3.5)	49 ( 4.6)	14 ( 3.3)
MARYLAND	7 ( 1.7)	7 ( 1.6)	21 ( 3.4)	51 ( 3.6)	14 ( 2.7)
MASSACHUSETTS	3 ( 1.3)	5 ( 1.3)	13 ( 2.5)	61 ( 3.7)	18 ( 3.5)
MICHIGAN	15 ( 2.3)	12 ( 2.4)	14 ( 2.3)	45 ( 3.7)	14 ( 2.0)
MINNESOTA	9 ( 2.2)	13 ( 2.7)	13 ( 2.2)	34 ( 3.9)	31 ( 3.1)
MISSISSIPPI	9 ( 2.4)	11 ( 2.3)	16 ( 2.6)	54 ( 3.8)	10 ( 2.6)
MISSOURI	9 ( 2.0)	10 ( 2.2)	27 ( 3.6)	44 ( 3.4)	9 ( 2.4)
MONTANA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
NEBRASKA	11 ( 2.9)	12 ( 2.0)	19 ( 3.0)	41 ( 4.4)	18 ( 3.5)
NEW MEXICO	15 ( 2.3)	22 ( 3.1)	19 ( 2.6)	42 ( 3.5)	2 ( 0.6)
NEW YORK	5 ( 1.6)	12 ( 2.4)	13 ( 2.7)	52 ( 4.0)	18 ( 2.6)
NORTH CAROLINA	18 ( 2.6)	14 ( 2.3)	17 ( 2.3)	44 ( 3.1)	8 ( 2.0)
NORTH DAKOTA	7 ( 1.6)	7 ( 1.9)	22 ( 3.1)	39 ( 3.9)	24 ( 3.3)
OREGON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
RHODE ISLAND	10 ( 0.7)	8 ( 0.5)	18 ( 0.6)	55 ( 1.1)	10 ( 0.5)
SOUTH CAROLINA	13 ( 2.5)	17 ( 2.1)	16 ( 2.4)	49 ( 3.0)	5 ( 1.2)
TENNESSEE	8 ( 2.3)	16 ( 2.5)	18 ( 2.8)	48 ( 3.7)	10 ( 1.9)
TEXAS	16 ( 2.3)	12 ( 2.1)	21 ( 2.6)	41 ( 3.3)	10 ( 1.9)
UTAH	21 ( 1.9)	22 ( 1.9)	18 ( 1.6)	28 ( 2.6)	11 ( 1.3)
VERMONT	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
VIRGINIA	12 ( 1.7)	14 ( 2.1)	22 ( 2.7)	46 ( 3.1)	6 ( 1.4)
WASHINGTON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
WEST VIRGINIA	9 ( 2.2)	14 ( 2.9)	25 ( 3.3)	46 ( 3.9)	7 ( 2.0)
WISCONSIN	19 ( 5.9)	13 ( 2.7)	8 ( 1.8)	41 ( 4.1)	18 ( 3.6)
WYOMING	13 ( 1.5)	19 ( 1.8)	12 ( 2.2)	46 ( 3.1)	11 ( 1.5)
<b>Other Jurisdictions</b>					
DDESS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
D <sub>o</sub> DDS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
GUAM	27 ( 1.2)	5 ( 0.7)	10 ( 0.8)	48 ( 1.1)	10 ( 0.5)

— State or other jurisdiction did not participate in the NAEP assessment year presented in this table.  
 SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.



**TABLE 8.17** (continued) **1996 Mathematics Assessment**



POPULATION: **1996 Grade 8 Public School Students**  
 REPORTED STATISTICS: **Percentage of Students**  
 TEACHERS' REPORTS ON: **Their Years of Mathematics Teaching Experience**

Counting this year, how many years in total have you taught mathematics?	JURISDICTIONS				
	2 Years or Less	3 to 5 Years	6 to 10 Years	11 to 24 Years	25 Years or More
	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )
<b>Nation</b>					
NATION	11 ( 1.8)	14 ( 2.1)	21 ( 2.7)	37 ( 3.8)	17 ( 2.8)
NORTHEAST	3 ( 0.9)	11 ( 3.8)	21 ( 7.7)	38 ( 8.6)	27 ( 6.8)
SOUTHEAST	10 ( 3.2)	18 ( 2.6)	17 ( 3.2)	42 ( 4.7)	12 ( 3.6)
CENTRAL	17 ( 5.5)	4 ( 1.6)	11 ( 5.6)	39 (11.1)	29 ( 8.1)
WEST	12 ( 2.6)	21 ( 5.7)	31 ( 4.6)	31 ( 4.8)	6 ( 2.3)
<b>States</b>					
ALABAMA	14 ( 3.1)	15 ( 3.1)	23 ( 2.7)	39 ( 4.1)	9 ( 2.2)
ALASKA†	10 ( 1.9)	19 ( 2.6)	28 ( 2.7)	30 ( 2.1)	12 ( 0.9)
ARIZONA	21 ( 2.6)>	24 ( 3.0)	19 ( 2.3)	28 ( 3.1)	8 ( 3.5)
ARKANSAS†	13 ( 3.3)	16 ( 2.9)	20 ( 3.7)	35 ( 4.4)	16 ( 4.9)
CALIFORNIA	10 ( 1.6)	22 ( 2.3)	22 ( 2.6)	32 ( 3.5)	14 ( 2.2)
COLORADO	16 ( 2.3)	20 ( 2.6)	23 ( 3.4)	32 ( 3.1)	11 ( 2.4)
CONNECTICUT	11 ( 2.0)	7 ( 1.7)	11 ( 2.2)	46 ( 2.8)	25 ( 2.7)
DELAWARE	20 ( 1.0)	16 ( 1.0)<	20 ( 0.9)	37 ( 1.3)	7 ( 0.6)
DISTRICT OF COLUMBIA	13 ( 1.0)>	4 ( 0.2)<	16 ( 0.4)>	47 ( 1.0)<	19 ( 0.8)
FLORIDA	13 ( 1.8)	15 ( 2.5)	26 ( 3.2)	35 ( 3.7)	10 ( 2.0)
GEORGIA	13 ( 2.0)	14 ( 2.0)	25 ( 2.7)	40 ( 3.6)	8 ( 1.5)
HAWAII	25 ( 1.0)	26 ( 0.7)>	18 ( 1.1)	20 ( 0.9)<	11 ( 0.6)
INDIANA	7 ( 1.9)	13 ( 3.1)	19 ( 4.1)	33 ( 4.2)<	29 ( 3.9)>
IOWA†	7 ( 2.3)	10 ( 2.5)	15 ( 2.6)	44 ( 4.8)	23 ( 3.3)
KENTUCKY	10 ( 2.4)	26 ( 3.4)	22 ( 3.3)	37 ( 4.1)	5 ( 2.1)
LOUISIANA	13 ( 2.5)	20 ( 3.1)	23 ( 3.5)	34 ( 4.1)	10 ( 3.3)
MAINE	10 ( 2.3)	15 ( 3.1)	16 ( 2.0)	42 ( 4.3)	16 ( 2.9)
MARYLAND†	13 ( 2.5)	14 ( 2.6)	13 ( 2.8)	46 ( 3.7)	14 ( 2.6)
MASSACHUSETTS	6 ( 1.6)	11 ( 2.1)	12 ( 2.3)	45 ( 3.3)<	26 ( 3.2)
MICHIGAN†	11 ( 2.1)	18 ( 3.1)	23 ( 3.6)	33 ( 4.1)	15 ( 2.7)
MINNESOTA	12 ( 2.7)	19 ( 3.0)	18 ( 2.9)	27 ( 3.5)	24 ( 3.1)
MISSISSIPPI	13 ( 2.9)	11 ( 2.6)	21 ( 3.2)	44 ( 3.8)	12 ( 2.6)
MISSOURI	16 ( 3.1)	13 ( 2.5)	25 ( 3.3)	34 ( 3.8)	12 ( 3.0)
MONTANA†	12 ( 1.6)	12 ( 1.9)	18 ( 2.6)	36 ( 3.6)	22 ( 3.0)
NEBRASKA	10 ( 1.5)	17 ( 2.1)	17 ( 2.2)	36 ( 3.2)	21 ( 3.3)
NEW MEXICO	17 ( 1.8)	22 ( 2.4)	19 ( 1.8)	35 ( 2.5)	7 ( 1.0)>
NEW YORK†	12 ( 3.0)	10 ( 2.0)	13 ( 3.0)	40 ( 4.7)	25 ( 3.9)
NORTH CAROLINA	14 ( 2.1)	16 ( 2.2)	18 ( 2.8)	42 ( 3.4)	10 ( 1.9)
NORTH DAKOTA	7 ( 1.6)	18 ( 1.7)>	18 ( 2.8)	42 ( 2.8)	15 ( 1.8)
OREGON	11 ( 2.0)	12 ( 2.2)	25 ( 3.1)	37 ( 3.0)	14 ( 3.0)
RHODE ISLAND	14 ( 0.6)>	9 ( 0.6)	13 ( 0.6)<	44 ( 0.9)<	20 ( 0.7)>
SOUTH CAROLINA†	15 ( 2.6)	18 ( 3.3)	15 ( 2.1)	46 ( 4.0)	6 ( 1.3)
TENNESSEE	13 ( 3.0)	18 ( 3.1)	20 ( 3.6)	39 ( 4.2)	9 ( 2.4)
TEXAS	12 ( 2.1)	18 ( 3.2)	22 ( 2.5)	37 ( 3.5)	11 ( 2.2)
UTAH	17 ( 1.1)	15 ( 1.4)<	26 ( 1.8)>	30 ( 1.7)	12 ( 1.2)
VERMONT†	15 ( 1.6)	11 ( 2.2)	25 ( 2.6)	29 ( 3.0)	21 ( 2.1)
VIRGINIA	13 ( 2.8)	16 ( 2.5)	14 ( 1.8)	43 ( 3.4)	14 ( 2.2)>
WASHINGTON	10 ( 1.9)	17 ( 2.3)	24 ( 3.4)	39 ( 3.5)	10 ( 2.0)
WEST VIRGINIA	5 ( 1.1)	6 ( 1.6)	20 ( 2.4)	54 ( 3.0)	15 ( 2.6)
WISCONSIN†	13 ( 3.5)	18 ( 2.8)	23 ( 3.6)>	26 ( 3.3)<	21 ( 3.9)
WYOMING	11 ( 0.9)	17 ( 0.8)	21 ( 1.2)>	34 ( 1.4)<	16 ( 0.7)>
<b>Other Jurisdictions</b>					
DDESS	1 ( 0.4)	3 ( 0.8)	18 ( 1.7)	59 ( 2.1)	19 ( 1.9)
D <sub>o</sub> DDS	9 ( 0.3)	15 ( 0.5)	14 ( 0.7)	44 ( 1.0)	19 ( 1.2)
GUAM	43 ( 1.4)>	15 ( 1.1)>	6 ( 0.8)<	18 ( 1.2)<	18 ( 1.2)>

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).  
 > (<) The value for the students was significantly higher (lower) than in the 1992 assessment at about the 95% confidence level using appropriate multiple comparison procedures.  
 SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 8.18**

**1996 Mathematics Assessment**



POPULATION:

1996 Grade 8 Public School Students

REPORTED STATISTICS:

Percentage of Students

TEACHERS' REPORTS ON:

Recent Courses Taken in Mathematics or Mathematics Education

*During the last two years, how many college or university courses have you taken in mathematics or mathematics education?*

None	One	Two	Three or More
------	-----	-----	---------------

JURISDICTIONS	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )
<b>Nation</b>				
NATION	74 ( 3.1)	10 ( 2.2)	5 ( 1.3)	11 ( 2.0)
NORTHEAST	74 ( 5.8)	10 ( 4.6)	5 ( 2.1)	11 ( 3.7)
SOUTHEAST	80 ( 5.0)	6 ( 2.0)	2 ( 0.9)	11 ( 3.4)
CENTRAL	70 ( 7.8)	16 ( 7.3)	3 ( 1.4)	11 ( 5.2)
WEST	72 ( 5.4)	9 ( 2.0)	7 ( 3.8)	12 ( 3.3)
<b>States</b>				
ALABAMA	68 ( 3.4)	8 ( 2.1)	9 ( 2.3)	16 ( 2.4)
ALASKA†	57 ( 3.2)	19 ( 1.5)	10 ( 1.3)	14 ( 2.4)
ARIZONA	58 ( 3.2)	15 ( 2.2)	10 ( 2.1)	16 ( 2.8)
ARKANSAS†	60 ( 5.0)	20 ( 3.5)	9 ( 2.7)	11 ( 2.5)
CALIFORNIA	62 ( 3.3)	17 ( 2.4)	8 ( 1.5)	13 ( 2.3)
COLORADO	46 ( 3.7)	21 ( 3.0)	14 ( 2.6)	20 ( 3.4)
CONNECTICUT	78 ( 2.7)	8 ( 1.7)	6 ( 2.0)	8 ( 1.7)
DELAWARE	61 ( 1.0)	15 ( 0.7)	5 ( 0.5)	19 ( 0.8)
DISTRICT OF COLUMBIA	26 ( 1.0)	27 ( 0.9)	23 ( 0.9)	24 ( 1.0)
FLORIDA	66 ( 3.6)	15 ( 2.3)	7 ( 1.4)	12 ( 2.4)
GEORGIA	72 ( 3.1)	8 ( 1.9)	9 ( 1.3)	11 ( 1.7)
HAWAII	46 ( 1.1)	18 ( 1.0)	8 ( 0.5)	28 ( 0.9)
INDIANA	84 ( 3.3)	8 ( 2.5)	3 ( 1.4)	4 ( 1.7)
IOWA†	64 ( 4.8)	20 ( 4.2)	9 ( 2.6)	7 ( 2.2)
KENTUCKY	65 ( 4.1)	11 ( 2.5)	10 ( 2.5)	15 ( 3.0)
LOUISIANA	64 ( 4.0)	16 ( 3.5)	7 ( 1.8)	14 ( 2.7)
MAINE	62 ( 3.4)	25 ( 3.0)	8 ( 2.0)	5 ( 1.6)
MARYLAND†	64 ( 3.7)	15 ( 2.5)	11 ( 2.6)	11 ( 2.1)
MASSACHUSETTS	61 ( 3.5)	15 ( 2.6)	11 ( 2.4)	14 ( 2.9)
MICHIGAN†	76 ( 3.5)	10 ( 2.1)	9 ( 2.4)	6 ( 1.9)
MINNESOTA	63 ( 4.3)	13 ( 2.7)	9 ( 2.7)	15 ( 3.1)
MISSISSIPPI	77 ( 3.4)	7 ( 1.8)	6 ( 1.8)	10 ( 2.5)
MISSOURI	56 ( 4.1)	20 ( 3.6)	10 ( 2.3)	14 ( 2.6)
MONTANA†	53 ( 2.7)	18 ( 2.7)	13 ( 2.4)	16 ( 2.4)
NEBRASKA	69 ( 3.0)	12 ( 1.9)	4 ( 1.3)	14 ( 2.2)
NEW MEXICO	65 ( 2.1)	17 ( 1.9)	4 ( 1.2)	13 ( 1.9)
NEW YORK†	70 ( 3.3)	11 ( 2.6)	7 ( 2.3)	12 ( 2.0)
NORTH CAROLINA	75 ( 3.0)	9 ( 2.0)	4 ( 1.3)	12 ( 2.5)
NORTH DAKOTA	25 ( 2.3)	17 ( 2.0)	34 ( 2.5)	24 ( 2.5)
OREGON	63 ( 3.3)	13 ( 2.4)	11 ( 2.2)	14 ( 2.8)
RHODE ISLAND	58 ( 1.0)	16 ( 0.8)	12 ( 0.7)	14 ( 0.6)
SOUTH CAROLINA†	28 ( 3.5)	32 ( 3.6)	19 ( 3.1)	21 ( 2.8)
TENNESSEE	75 ( 3.9)	12 ( 2.9)	6 ( 2.1)	6 ( 1.9)
TEXAS	77 ( 3.1)	10 ( 2.4)	4 ( 1.3)	9 ( 1.8)
UTAH	51 ( 2.0)	14 ( 2.2)	9 ( 1.3)	26 ( 1.7)
VERMONT†	43 ( 3.2)	31 ( 2.5)	18 ( 1.5)	7 ( 2.0)
VIRGINIA	49 ( 2.9)	27 ( 3.0)	11 ( 1.8)	13 ( 2.4)
WASHINGTON	61 ( 3.6)	17 ( 3.2)	11 ( 2.1)	10 ( 2.1)
WEST VIRGINIA	67 ( 3.6)	18 ( 3.0)	9 ( 1.9)	6 ( 1.5)
WISCONSIN†	59 ( 4.2)	19 ( 2.7)	9 ( 1.9)	13 ( 3.9)
WYOMING	34 ( 1.2)	29 ( 0.9)	18 ( 0.7)	19 ( 1.1)
<b>Other Jurisdictions</b>				
DDESS	87 ( 1.1)	2 ( 0.5)	4 ( 1.0)	7 ( 0.7)
DoDDS	52 ( 1.1)	13 ( 0.6)	22 ( 1.0)	14 ( 0.6)
GUAM	30 ( 1.1)	6 ( 0.7)	5 ( 0.8)	59 ( 1.2)

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 8.19****1996 Mathematics Assessment**

POPULATION:  
 REPORTED STATISTICS:  
 TEACHERS' REPORTS ON:

1996 Grade 8 Public School Students  
 Percentage of Students  
 Coursework in the Use of Technology



*During the past five years, have you taken courses or participated in professional development activities in the use of technology such as computers?*

**Yes****No****JURISDICTIONS**

PCT ( SE )

PCT ( SE )

**Nation**

NATION	76 ( 2.9)	24 ( 2.9)
NORTHEAST	61 ( 9.8)	39 ( 9.8)
SOUTHEAST	80 ( 5.7)	20 ( 5.7)
CENTRAL	80 ( 4.4)	20 ( 4.4)
WEST	81 ( 4.7)	19 ( 4.7)

**States**

ALABAMA	76 ( 3.6)	24 ( 3.6)
ALASKA†	84 ( 2.2)	16 ( 2.2)
ARIZONA	72 ( 4.4)	28 ( 4.4)
ARKANSAS†	67 ( 4.2)	33 ( 4.2)
CALIFORNIA	80 ( 3.3)	20 ( 3.3)
COLORADO	84 ( 2.5)	16 ( 2.5)
CONNECTICUT	87 ( 2.1)	13 ( 2.1)
DELAWARE	82 ( 1.0)	18 ( 1.0)
DISTRICT OF COLUMBIA	76 ( 0.9)	24 ( 0.9)
FLORIDA	88 ( 3.2)	12 ( 3.2)
GEORGIA	83 ( 2.5)	17 ( 2.5)
HAWAII	66 ( 1.1)	34 ( 1.1)
INDIANA	75 ( 4.0)	25 ( 4.0)
IOWA†	80 ( 3.8)	20 ( 3.8)
KENTUCKY	92 ( 1.7)	8 ( 1.7)
LOUISIANA	62 ( 4.0)	38 ( 4.0)
MAINE	78 ( 2.9)	22 ( 2.9)
MARYLAND†	85 ( 3.2)	15 ( 3.2)
MASSACHUSETTS	81 ( 3.0)	19 ( 3.0)
MICHIGAN†	75 ( 3.4)	25 ( 3.4)
MINNESOTA	84 ( 2.9)	16 ( 2.9)
MISSISSIPPI	73 ( 3.5)	27 ( 3.5)
MISSOURI	81 ( 3.6)	19 ( 3.6)
MONTANA†	81 ( 2.5)	19 ( 2.5)
NEBRASKA	90 ( 1.7)	10 ( 1.7)
NEW MEXICO	73 ( 2.2)	27 ( 2.2)
NEW YORK†	74 ( 3.2)	26 ( 3.2)
NORTH CAROLINA	92 ( 1.8)	8 ( 1.8)
NORTH DAKOTA	88 ( 1.2)	12 ( 1.2)
OREGON	80 ( 3.2)	20 ( 3.2)
RHODE ISLAND	67 ( 0.9)	33 ( 0.9)
SOUTH CAROLINA†	70 ( 3.7)	30 ( 3.7)
TENNESSEE	83 ( 3.4)	17 ( 3.4)
TEXAS	88 ( 2.3)	12 ( 2.3)
UTAH	84 ( 1.5)	16 ( 1.5)
VERMONT†	80 ( 2.4)	20 ( 2.4)
VIRGINIA	86 ( 2.1)	14 ( 2.1)
WASHINGTON	81 ( 3.1)	19 ( 3.1)
WEST VIRGINIA	81 ( 2.4)	19 ( 2.4)
WISCONSIN†	79 ( 3.7)	21 ( 3.7)
WYOMING	91 ( 0.7)	9 ( 0.7)

**Other Jurisdictions**

DDESS	92 ( 1.1)	8 ( 1.1)
DoDDS	85 ( 0.5)	15 ( 0.5)
GUAM	50 ( 1.2)	50 ( 1.2)

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 8.20**

**1992 Mathematics Assessment**



POPULATION: 1992 Grade 8 Public School Students  
 REPORTED STATISTICS: Percentage of Students  
 TEACHERS' REPORTS ON: Studies of Mathematics Instruction Techniques

Have you ever studied any of the following, either in college or university courses or in professional development workshops or seminars?  <b>JURISDICTIONS</b>	Estimation	Problem Solving in Mathematics Instruction	Use of Manipulatives in Mathematics Instruction	Use of Calculators in Mathematics Instruction	Understanding Students' Thinking about Math
	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )
<b>Nation</b>					
NATION	79 ( 2.2)	94 ( 1.2)	90 ( 1.6)	77 ( 2.7)	66 ( 2.6)
NORTHEAST	78 ( 5.3)	93 ( 2.8)	94 ( 2.2)	72 ( 6.9)	68 ( 5.8)
SOUTHEAST	80 ( 3.8)	93 ( 2.6)	86 ( 4.7)	74 ( 5.6)	62 ( 7.4)
CENTRAL	75 ( 5.9)	98 ( 1.4)	91 ( 2.7)	79 ( 6.7)	71 ( 4.8)
WEST	81 ( 3.0)	93 ( 2.5)	90 ( 2.4)	82 ( 2.8)	65 ( 2.0)
<b>States</b>					
ALABAMA	81 ( 3.0)	95 ( 1.8)	86 ( 2.8)	74 ( 3.3)	74 ( 3.0)
ALASKA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
ARIZONA	76 ( 2.9)	96 ( 1.0)	87 ( 2.9)	70 ( 3.2)	70 ( 3.6)
ARKANSAS	65 ( 3.6)	92 ( 2.2)	84 ( 3.0)	78 ( 3.3)	60 ( 3.8)
CALIFORNIA	77 ( 2.8)	92 ( 1.5)	89 ( 2.1)	78 ( 3.3)	69 ( 3.2)
COLORADO	75 ( 2.7)	95 ( 1.1)	85 ( 2.1)	69 ( 2.8)	66 ( 3.2)
CONNECTICUT	86 ( 2.7)	95 ( 1.5)	88 ( 2.4)	83 ( 2.6)	77 ( 3.1)
DELAWARE	67 ( 0.6)	91 ( 0.4)	74 ( 0.6)	76 ( 0.7)	65 ( 1.0)
DISTRICT OF COLUMBIA	90 ( 0.8)	100 ( 0.2)	95 ( 0.6)	93 ( 0.8)	74 ( 1.2)
FLORIDA	76 ( 2.5)	92 ( 2.3)	87 ( 2.6)	79 ( 2.8)	67 ( 2.9)
GEORGIA	83 ( 2.5)	93 ( 1.6)	88 ( 2.2)	73 ( 2.9)	72 ( 3.2)
HAWAII	64 ( 0.8)	89 ( 0.6)	85 ( 0.5)	66 ( 0.8)	56 ( 1.0)
INDIANA	67 ( 3.1)	89 ( 2.6)	75 ( 3.0)	65 ( 3.4)	62 ( 3.8)
IOWA	84 ( 3.0)	93 ( 2.5)	86 ( 3.0)	72 ( 3.4)	70 ( 4.1)
KENTUCKY	77 ( 2.9)	91 ( 2.1)	85 ( 2.7)	67 ( 3.4)	62 ( 4.1)
LOUISIANA	78 ( 3.2)	97 ( 0.9)	87 ( 2.6)	74 ( 3.2)	65 ( 3.4)
MAINE	75 ( 3.5)	95 ( 1.3)	89 ( 2.7)	69 ( 4.2)	61 ( 3.7)
MARYLAND	80 ( 2.7)	94 ( 1.9)	90 ( 2.3)	88 ( 2.7)	77 ( 2.8)
MASSACHUSETTS	77 ( 2.8)	92 ( 1.5)	79 ( 3.3)	59 ( 3.5)	67 ( 3.1)
MICHIGAN	82 ( 2.7)	91 ( 1.9)	83 ( 2.5)	79 ( 2.5)	67 ( 2.7)
MINNESOTA	73 ( 2.9)	93 ( 2.0)	78 ( 3.0)	68 ( 4.0)	56 ( 3.7)
MISSISSIPPI	82 ( 2.5)	96 ( 1.4)	89 ( 2.5)	70 ( 3.0)	70 ( 3.6)
MISSOURI	78 ( 3.0)	91 ( 2.3)	85 ( 2.8)	73 ( 3.4)	67 ( 3.5)
MONTANA	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
NEBRASKA	80 ( 2.8)	94 ( 2.2)	87 ( 2.3)	76 ( 3.5)	60 ( 4.3)
NEW MEXICO	75 ( 3.4)	92 ( 2.2)	86 ( 2.2)	65 ( 3.6)	59 ( 3.1)
NEW YORK	55 ( 4.1)	91 ( 2.0)	81 ( 2.8)	61 ( 4.3)	67 ( 3.2)
NORTH CAROLINA	79 ( 2.8)	93 ( 1.4)	87 ( 1.8)	77 ( 3.2)	64 ( 3.2)
NORTH DAKOTA	68 ( 4.1)	92 ( 2.0)	71 ( 3.9)	66 ( 4.3)	59 ( 3.5)
OREGON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
RHODE ISLAND	71 ( 0.9)	86 ( 0.5)	75 ( 0.8)	71 ( 0.8)	63 ( 0.9)
SOUTH CAROLINA	80 ( 2.7)	96 ( 1.2)	91 ( 2.1)	72 ( 3.3)	68 ( 3.6)
TENNESSEE	75 ( 3.8)	93 ( 2.2)	85 ( 2.9)	65 ( 4.1)	63 ( 3.7)
TEXAS	74 ( 3.1)	93 ( 1.7)	87 ( 2.3)	85 ( 2.4)	57 ( 3.5)
UTAH	74 ( 2.1)	89 ( 1.3)	74 ( 2.5)	66 ( 2.6)	53 ( 2.4)
VERMONT	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
VIRGINIA	75 ( 2.5)	95 ( 1.3)	85 ( 2.4)	77 ( 2.8)	69 ( 2.9)
WASHINGTON	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
WEST VIRGINIA	78 ( 3.3)	96 ( 1.5)	85 ( 2.6)	73 ( 2.9)	65 ( 3.2)
WISCONSIN	79 ( 4.8)	95 ( 1.4)	82 ( 4.8)	76 ( 4.6)	75 ( 4.7)
WYOMING	54 ( 3.0)	80 ( 2.0)	71 ( 3.1)	62 ( 2.4)	52 ( 2.7)
<b>Other Jurisdictions</b>					
DDESS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
DoDDS	— ( — )	— ( — )	— ( — )	— ( — )	— ( — )
GUAM	57 ( 1.4)	80 ( 1.1)	90 ( 0.5)	67 ( 0.7)	42 ( 1.4)

— State or other jurisdiction did not participate in the NAEP assessment year presented in this table.  
 SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 8.20** (continued) **1996 Mathematics Assessment**



POPULATION: 1996 Grade 8 Public School Students  
 REPORTED STATISTICS: Percentage of Students  
 TEACHERS' REPORTS ON: Studies of Mathematics Instruction Techniques

Have you ever studied any of the following, either in college or university courses or in professional development workshops or seminars?  <b>JURISDICTIONS</b>	Estimation	Problem Solving in Mathematics Instruction	Use of Manipulatives in Mathematics Instruction	Use of Calculators in Mathematics Instruction	Understanding Students' Thinking about Math
	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )
<b>Nation</b>					
NATION	77 ( 2.4)	94 ( 1.9)	89 ( 2.3)	80 ( 2.7)	72 ( 2.6)
NORTHEAST	88 ( 3.8)	97 ( 2.2)	94 ( 4.0)	83 ( 7.5)	84 ( 4.9)
SOUTHEAST	76 ( 4.8)	98 ( 0.9)	89 ( 3.2)	87 ( 3.8)	66 ( 4.1)
CENTRAL	69 ( 5.8)	87 ( 6.6)	84 ( 7.8)	66 ( 7.4)	70 ( 7.3)
WEST	76 ( 4.9)	96 ( 2.2)	92 ( 2.6)	84 ( 3.1)	69 ( 4.8)
<b>States</b>					
ALABAMA	71 ( 3.5)	89 ( 3.3)	93 ( 2.5)	85 ( 3.3)	57 ( 4.4)<
ALASKA†	77 ( 3.0)	94 ( 1.2)	95 ( 0.8)	77 ( 3.4)	79 ( 2.8)
ARIZONA	78 ( 2.6)	94 ( 1.6)	87 ( 2.3)	83 ( 2.2)>	74 ( 2.5)
ARKANSAS†	80 ( 3.5)>	97 ( 0.6)	90 ( 2.7)	91 ( 2.4)>	65 ( 5.9)
CALIFORNIA	82 ( 2.5)	93 ( 1.6)	92 ( 1.9)	87 ( 2.6)	78 ( 2.3)
COLORADO	75 ( 2.2)	93 ( 1.9)	89 ( 2.3)	80 ( 2.4)>	63 ( 3.7)
CONNECTICUT	88 ( 2.1)	97 ( 1.2)	93 ( 2.0)	92 ( 1.9)>	80 ( 2.9)
DELAWARE	82 ( 0.8)>	95 ( 0.4)>	96 ( 0.3)>	94 ( 0.5)>	78 ( 0.9)>
DISTRICT OF COLUMBIA	85 ( 0.9)<	97 ( 0.6)<	96 ( 0.6)	88 ( 0.9)<	65 ( 1.1)<
FLORIDA	78 ( 3.3)	94 ( 1.3)	91 ( 1.6)	91 ( 1.8)>	71 ( 3.0)
GEORGIA	85 ( 2.1)	96 ( 0.8)	95 ( 1.4)>	87 ( 2.0)>	75 ( 2.9)
HAWAII	80 ( 0.8)>	97 ( 0.4)>	88 ( 0.6)>	79 ( 1.0)>	74 ( 0.9)>
INDIANA	69 ( 4.5)	90 ( 3.2)	84 ( 3.0)	74 ( 3.5)	64 ( 4.4)
IOWA†	73 ( 4.0)	91 ( 2.7)	84 ( 3.2)	83 ( 3.4)	61 ( 4.6)
KENTUCKY	86 ( 2.3)>	99 ( 0.7)>	97 ( 1.2)>	88 ( 2.8)>	72 ( 3.8)
LOUISIANA	82 ( 3.6)	92 ( 2.4)	90 ( 2.1)	81 ( 3.5)	71 ( 3.9)
MAINE	73 ( 2.6)	92 ( 1.7)	91 ( 2.3)	77 ( 3.3)	68 ( 3.5)
MARYLAND†	76 ( 3.1)	96 ( 1.3)	90 ( 2.3)	87 ( 3.1)	73 ( 2.8)
MASSACHUSETTS	75 ( 3.8)	95 ( 1.8)	86 ( 3.0)	82 ( 3.1)>	74 ( 3.3)
MICHIGAN†	82 ( 3.1)	93 ( 2.1)	89 ( 2.4)	83 ( 3.4)	69 ( 3.6)
MINNESOTA	73 ( 4.0)	94 ( 1.8)	88 ( 2.0)>	83 ( 2.8)>	65 ( 3.6)
MISSISSIPPI	82 ( 2.9)	96 ( 1.4)	94 ( 1.3)	86 ( 2.9)>	63 ( 3.6)
MISSOURI	82 ( 3.0)	97 ( 1.5)	89 ( 2.4)	87 ( 2.7)>	71 ( 3.9)
MONTANA†	78 ( 2.2)	97 ( 0.9)	90 ( 1.9)	85 ( 2.7)	83 ( 2.9)
NEBRASKA	79 ( 2.3)	96 ( 1.2)	90 ( 1.8)	80 ( 2.3)	71 ( 2.9)
NEW MEXICO	66 ( 2.7)	90 ( 1.8)	89 ( 2.2)	76 ( 2.3)>	64 ( 2.7)
NEW YORK†	65 ( 4.4)	93 ( 2.3)	86 ( 2.6)	78 ( 3.6)>	66 ( 3.2)
NORTH CAROLINA	82 ( 2.9)	96 ( 1.2)	96 ( 1.3)>	94 ( 1.5)>	72 ( 2.8)
NORTH DAKOTA	77 ( 1.8)	91 ( 1.4)	89 ( 1.5)>	89 ( 1.6)>	59 ( 2.8)
OREGON	77 ( 2.9)	94 ( 1.6)	86 ( 2.5)	70 ( 3.3)	69 ( 4.0)
RHODE ISLAND	68 ( 0.8)<	93 ( 0.5)>	93 ( 0.5)>	79 ( 0.7)>	70 ( 1.0)>
SOUTH CAROLINA†	76 ( 3.2)	93 ( 2.0)	92 ( 1.6)	83 ( 3.3)	67 ( 4.0)
TENNESSEE	75 ( 4.0)	95 ( 1.6)	85 ( 3.2)	82 ( 3.4)>	65 ( 3.8)
TEXAS	82 ( 2.9)	97 ( 1.0)	93 ( 1.7)	92 ( 1.7)	67 ( 3.2)
UTAH	71 ( 1.8)	92 ( 0.9)	83 ( 1.6)>	89 ( 1.7)>	58 ( 2.1)
VERMONT†	75 ( 2.4)	95 ( 1.1)	88 ( 2.0)	71 ( 2.4)	79 ( 1.8)
VIRGINIA	75 ( 3.3)	92 ( 2.3)	87 ( 2.5)	90 ( 2.3)>	67 ( 3.4)
WASHINGTON	72 ( 3.4)	93 ( 1.5)	88 ( 2.0)	72 ( 3.3)	66 ( 2.8)
WEST VIRGINIA	81 ( 2.8)	95 ( 1.4)	92 ( 1.8)	85 ( 2.2)>	60 ( 3.3)
WISCONSIN†	73 ( 4.1)	93 ( 2.0)	81 ( 3.7)	86 ( 2.6)	72 ( 4.0)
WYOMING	67 ( 1.1)>	91 ( 0.9)>	84 ( 0.8)>	79 ( 0.7)>	66 ( 1.1)>
<b>Other Jurisdictions</b>					
DDESS	84 ( 1.6)	98 ( 0.7)	100 ( ... )	94 ( 0.5)	91 ( 1.3)
DoDDS	76 ( 0.8)	91 ( 0.4)	83 ( 0.6)	83 ( 0.6)	72 ( 0.8)
GUAM	90 ( 0.9)>	96 ( 0.6)>	84 ( 1.5)<	88 ( 1.1)>	80 ( 1.5)>

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).

... Characteristics of the sample do not permit a reliable estimate.

> (<) The value for the students was significantly higher (lower) than in the 1992 assessment at about the 95% confidence level using appropriate multiple comparison procedures.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 8.21**

**1992 and 1996 Mathematics Assessment**



POPULATION: 1992 and 1996 Grade 8 Public School Students  
 REPORTED STATISTICS: Percentage of Students  
 TEACHERS' REPORTS ON: Studies of Gender and Cultural Issues

NAEP assessment year...	1992		1996	
	Gender Issues in the Teaching of Mathematics	Teaching Students from Different Cultural Backgrounds	Gender Issues in the Teaching of Mathematics	Teaching Students from Different Cultural Backgrounds
JURISDICTIONS	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )
<b>Nation</b>				
NATION	42 ( 2.7)	51 ( 2.4)	48 ( 3.4)	52 ( 3.0)
NORTHEAST	42 ( 7.0)	46 ( 7.0)	56 (10.2)	37 ( 8.1)
SOUTHEAST	35 ( 4.4)	43 ( 3.1)	40 ( 4.2)	55 ( 5.2)
CENTRAL	50 ( 6.0)	55 ( 5.5)	42 ( 6.7)	45 ( 6.0)
WEST	43 ( 4.6)	58 ( 3.5)	54 ( 6.3)	65 ( 6.3)
<b>States</b>				
ALABAMA	34 ( 4.6)	42 ( 4.6)	39 ( 3.6)	44 ( 3.8)
ALASKA†	— ( —)	— ( —)	55 ( 2.6)	75 ( 2.6)
ARIZONA	43 ( 4.0)	57 ( 3.5)	53 ( 3.3)	62 ( 3.9)
ARKANSAS†	34 ( 4.0)	34 ( 3.7)	44 ( 3.9)	36 ( 3.7)
CALIFORNIA	42 ( 3.5)	65 ( 3.2)	63 ( 3.5)>	82 ( 2.7)
COLORADO	54 ( 3.1)	55 ( 2.9)	60 ( 3.3)	54 ( 3.6)
CONNECTICUT	45 ( 4.1)	44 ( 3.5)	57 ( 3.7)	49 ( 3.2)
DELAWARE	49 ( 1.0)	46 ( 0.9)	51 ( 1.5)	55 ( 1.5)
DISTRICT OF COLUMBIA	47 ( 1.2)	56 ( 1.0)	57 ( 1.4)>	66 ( 1.1)
FLORIDA	39 ( 2.9)	66 ( 3.5)	50 ( 3.1)>	78 ( 2.6)
GEORGIA	47 ( 3.9)	54 ( 3.1)	58 ( 3.1)	54 ( 3.2)
HAWAII	31 ( 0.9)	47 ( 0.8)	48 ( 1.1)>	67 ( 1.1)
INDIANA	36 ( 4.0)	42 ( 4.2)	41 ( 4.4)	36 ( 4.2)
IOWA†	55 ( 4.6)	51 ( 4.1)	47 ( 4.8)	35 ( 4.0)
KENTUCKY	37 ( 3.9)	35 ( 3.4)	55 ( 4.0)>	45 ( 3.8)
LOUISIANA	38 ( 3.6)	43 ( 3.3)	46 ( 4.4)	40 ( 3.8)
MAINE	43 ( 4.1)	11 ( 2.1)	57 ( 4.6)	15 ( 2.1)
MARYLAND†	66 ( 3.6)	66 ( 3.3)	55 ( 3.7)	62 ( 3.9)
MASSACHUSETTS	32 ( 3.3)	33 ( 2.8)	53 ( 4.5)>	43 ( 3.8)
MICHIGAN†	42 ( 3.5)	33 ( 2.6)	50 ( 4.0)	30 ( 4.0)
MINNESOTA	44 ( 3.4)	42 ( 3.4)	61 ( 3.7)>	56 ( 3.9)
MISSISSIPPI	47 ( 4.1)	53 ( 3.4)	38 ( 3.7)	36 ( 3.1)
MISSOURI	34 ( 3.1)	32 ( 3.0)	61 ( 4.3)>	44 ( 4.6)
MONTANA†	— ( —)	— ( —)	65 ( 3.4)	52 ( 3.6)
NEBRASKA	60 ( 3.2)	59 ( 4.1)	68 ( 4.2)	79 ( 2.3)
NEW MEXICO	41 ( 3.4)	56 ( 3.7)	53 ( 2.0)>	63 ( 2.4)
NEW YORK†	37 ( 3.9)	33 ( 3.3)	45 ( 4.7)	47 ( 4.7)
NORTH CAROLINA	38 ( 3.2)	39 ( 3.3)	49 ( 3.2)>	54 ( 3.2)
NORTH DAKOTA	44 ( 4.2)	36 ( 3.5)	63 ( 3.1)>	42 ( 2.7)
OREGON	— ( —)	— ( —)	51 ( 3.4)	44 ( 4.4)
RHODE ISLAND	39 ( 0.8)	35 ( 0.8)	45 ( 1.1)>	41 ( 0.9)
SOUTH CAROLINA†	34 ( 3.2)	38 ( 3.4)	44 ( 4.5)	40 ( 4.1)
TENNESSEE	34 ( 3.4)	36 ( 3.1)	47 ( 4.5)>	37 ( 3.6)
TEXAS	32 ( 3.1)	57 ( 3.2)	52 ( 4.4)>	62 ( 3.5)
UTAH	45 ( 2.7)	52 ( 2.5)	57 ( 2.2)>	58 ( 2.4)
VERMONT†	— ( —)	— ( —)	48 ( 2.9)	16 ( 1.9)
VIRGINIA	45 ( 3.6)	49 ( 3.5)	59 ( 3.6)>	57 ( 3.6)
WASHINGTON	— ( —)	— ( —)	55 ( 3.1)	56 ( 3.5)
WEST VIRGINIA	44 ( 3.0)	34 ( 2.9)	52 ( 3.3)	33 ( 3.7)
WISCONSIN†	53 ( 4.5)	44 ( 4.3)	64 ( 4.4)	48 ( 3.9)
WYOMING	37 ( 2.8)	28 ( 2.7)	44 ( 1.3)	33 ( 1.0)
<b>Other Jurisdictions</b>				
DDESS	— ( —)	— ( —)	52 ( 1.8)	40 ( 1.7)
DoDDS	— ( —)	— ( —)	55 ( 0.9)	52 ( 1.1)
GUAM	25 ( 1.1)	53 ( 1.0)	58 ( 1.7)>	82 ( 1.2)

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).  
 — State or other jurisdiction did not participate in the NAEP assessment year presented in this table.  
 > (<) The value for the students was significantly higher (lower) than in the 1992 assessment at about the 95% confidence level using appropriate multiple comparison procedures.  
 SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

**TABLE 8.22**

**1996 Mathematics Assessment**



POPULATION: 1996 Grade 8 Public School Students  
 REPORTED STATISTICS: Percentage of Students  
 TEACHERS' REPORTS ON: Professional Development

During the last year, how much time in total have you spent in professional development workshops or seminars in mathematics or mathematics education?	None	Less than 6 Hours	6 to 15 Hours	16 to 35 Hours	More than 35 Hours
	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )	PCT ( SE )
<b>JURISDICTIONS</b>					
<b>Nation</b>					
NATION	5 ( 1.2)	19 ( 3.1)	28 ( 2.7)	21 ( 2.6)	27 ( 2.9)
NORTHEAST	7 ( 2.7)	28 (11.2)	36 ( 8.6)	15 ( 6.1)	14 ( 6.3)
SOUTHEAST	5 ( 1.8)	21 ( 5.6)	26 ( 4.5)	22 ( 5.0)	26 ( 3.4)
CENTRAL	6 ( 3.6)	25 ( 6.5)	34 ( 5.4)	16 ( 4.9)	19 ( 7.5)
WEST	4 ( 2.3)	7 ( 2.6)	20 ( 3.9)	26 ( 4.6)	43 ( 5.4)
<b>States</b>					
ALABAMA	4 ( 1.1)	22 ( 3.7)	30 ( 3.6)	23 ( 3.3)	22 ( 3.1)
ALASKA†	18 ( 3.0)	24 ( 1.4)	27 ( 1.9)	22 ( 2.1)	9 ( 1.5)
ARIZONA	10 ( 2.3)	22 ( 2.7)	25 ( 2.8)	19 ( 2.8)	24 ( 3.0)
ARKANSAS†	7 ( 2.6)	15 ( 3.0)	23 ( 4.0)	29 ( 3.4)	26 ( 4.6)
CALIFORNIA	5 ( 1.3)	6 ( 1.3)	20 ( 3.0)	20 ( 3.1)	50 ( 3.6)
COLORADO	7 ( 2.3)	21 ( 2.6)	29 ( 3.3)	22 ( 3.3)	20 ( 3.1)
CONNECTICUT	4 ( 1.4)	16 ( 2.6)	33 ( 2.9)	27 ( 2.8)	20 ( 2.7)
DELAWARE	2 ( 0.4)	14 ( 0.6)	29 ( 1.1)	17 ( 0.9)	38 ( 1.1)
DISTRICT OF COLUMBIA	0 ( ... )	16 ( 0.6)	25 ( 1.4)	16 ( 1.1)	44 ( 1.2)
FLORIDA	4 ( 1.3)	11 ( 1.8)	24 ( 3.0)	26 ( 3.1)	35 ( 3.3)
GEORGIA	6 ( 1.4)	16 ( 2.2)	34 ( 2.5)	21 ( 2.7)	23 ( 2.5)
HAWAII	7 ( 0.6)	17 ( 1.0)	21 ( 1.0)	26 ( 0.9)	29 ( 0.9)
INDIANA	11 ( 2.3)	25 ( 3.6)	35 ( 4.0)	17 ( 3.4)	13 ( 2.8)
IOWA†	8 ( 2.8)	18 ( 3.2)	39 ( 4.8)	23 ( 4.4)	12 ( 2.6)
KENTUCKY	2 ( 0.8)	5 ( 1.6)	24 ( 3.6)	30 ( 3.9)	39 ( 3.7)
LOUISIANA	14 ( 2.2)	16 ( 2.7)	29 ( 3.7)	23 ( 3.1)	17 ( 2.7)
MAINE	8 ( 1.8)	23 ( 3.1)	27 ( 3.7)	18 ( 2.5)	23 ( 2.9)
MARYLAND†	4 ( 1.3)	14 ( 2.2)	30 ( 3.4)	24 ( 3.7)	29 ( 3.9)
MASSACHUSETTS	1 ( 0.6)	7 ( 2.0)	23 ( 3.7)	29 ( 3.1)	39 ( 3.6)
MICHIGAN†	7 ( 2.0)	21 ( 3.1)	28 ( 3.6)	22 ( 3.2)	22 ( 3.4)
MINNESOTA	5 ( 1.6)	14 ( 2.4)	30 ( 3.7)	22 ( 2.8)	28 ( 3.1)
MISSISSIPPI	3 ( 1.1)	13 ( 1.9)	25 ( 3.3)	28 ( 3.0)	32 ( 3.0)
MISSOURI	6 ( 2.1)	15 ( 3.0)	24 ( 3.3)	25 ( 3.5)	30 ( 3.4)
MONTANA†	6 ( 1.5)	16 ( 3.1)	23 ( 2.4)	24 ( 3.0)	31 ( 3.1)
NEBRASKA	9 ( 2.0)	25 ( 3.5)	30 ( 3.1)	23 ( 2.6)	13 ( 1.8)
NEW MEXICO	19 ( 1.6)	25 ( 2.5)	29 ( 2.1)	18 ( 2.1)	9 ( 1.0)
NEW YORK†	9 ( 2.7)	21 ( 3.9)	30 ( 3.8)	24 ( 3.6)	16 ( 3.2)
NORTH CAROLINA	8 ( 1.7)	23 ( 3.2)	32 ( 3.2)	21 ( 2.9)	16 ( 2.4)
NORTH DAKOTA	8 ( 1.0)	19 ( 2.7)	31 ( 2.6)	25 ( 2.3)	19 ( 2.2)
OREGON	10 ( 2.0)	21 ( 3.2)	32 ( 3.7)	23 ( 3.6)	15 ( 2.8)
RHODE ISLAND	8 ( 0.5)	24 ( 0.8)	31 ( 0.7)	20 ( 1.0)	17 ( 0.8)
SOUTH CAROLINA†	5 ( 1.3)	14 ( 2.7)	32 ( 3.4)	26 ( 3.0)	23 ( 3.3)
TENNESSEE	8 ( 2.5)	12 ( 2.4)	44 ( 3.8)	19 ( 2.9)	17 ( 3.2)
TEXAS	3 ( 0.8)	6 ( 1.6)	27 ( 3.6)	36 ( 4.1)	28 ( 3.4)
UTAH	11 ( 1.1)	16 ( 1.3)	25 ( 2.3)	23 ( 2.2)	23 ( 1.4)
VERMONT†	7 ( 1.5)	16 ( 1.3)	20 ( 2.1)	23 ( 2.3)	35 ( 3.3)
VIRGINIA	5 ( 1.5)	15 ( 2.1)	29 ( 2.7)	23 ( 2.9)	27 ( 2.9)
WASHINGTON	11 ( 2.6)	12 ( 1.4)	29 ( 3.0)	26 ( 2.8)	21 ( 2.8)
WEST VIRGINIA	5 ( 1.5)	17 ( 3.0)	32 ( 3.3)	23 ( 3.0)	23 ( 2.9)
WISCONSIN†	14 ( 3.7)	17 ( 2.6)	30 ( 4.1)	20 ( 3.8)	20 ( 3.4)
WYOMING	9 ( 0.5)	25 ( 1.1)	33 ( 0.8)	19 ( 0.8)	15 ( 0.9)
<b>Other Jurisdictions</b>					
DDESS	4 ( 0.1)	13 ( 0.4)	45 ( 1.9)	13 ( 1.0)	25 ( 1.5)
DoDDS	7 ( 0.5)	18 ( 0.8)	25 ( 0.6)	27 ( 0.9)	25 ( 0.7)
GUAM	68 ( 1.4)	24 ( 1.3)	2 ( 0.5)	0 ( ... )	5 ( 0.8)

† State or other jurisdiction did not satisfy one or more of the 1996 school participation rate guidelines for the school sample(s) presented in this table (see Appendix A).  
 ... Characteristics of the sample do not permit a reliable estimate.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.





# Appendix A

## *Technical Appendix*

### *Introduction*

Conducting a large-scale assessment such as the National Assessment of Educational Progress (NAEP) entails the successful coordination of numerous projects, committees, procedures, and tasks. This appendix provides an overview of the NAEP 1996 mathematics assessment's primary components — framework, development, administration, scoring, and analysis. A more extensive review of the procedures and methods used in the mathematics assessment will be included in two subsequent technical reports — *NAEP 1996 Technical Report* and *Technical Report of the NAEP 1996 State Assessment Program in Mathematics*.

### *The NAEP 1996 Mathematics Assessment*

The 1996 assessment was the first update of the NAEP mathematics assessment framework<sup>1</sup> since the release of the National Council of Teachers of Mathematics (NCTM) *Curriculum and Evaluation Standards for School Mathematics*.<sup>2</sup> This update reflected refinements in the specifications governing the development of the 1996 assessment while ensuring comparability of results across the 1990, 1992, and 1996 assessments. The refinements that distinguish the framework of the assessment conducted in 1996 from the framework of the assessments conducted in 1990 and 1992 include the following:

- moving away from the rigid content-strand-by-cognitive-process matrix that governed the development of earlier assessments. Classifying specific questions into cells of a matrix required those questions to measure a unique content strand at a unique cognitive level. This stipulation often decontextualized the questions and limited the possibility of assessing students' abilities to reason in rich problem-solving situations and to make connections among content strands within mathematics.
- allowing individual questions on the assessment to be classified in one or more content strands when appropriate. Knowledge or skills from more than one content strand is often needed to answer a question. The option to classify questions in multiple ways provides a greater opportunity to measure student ability in content settings that closely approximate real-world reasoning and problem-solving

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<sup>1</sup> National Assessment Governing Board (1994). *Mathematics framework for the 1996 National Assessment of Educational Progress*. Washington, DC: Author.

<sup>2</sup> National Council of Teachers of Mathematics (1989). *Curriculum and evaluation standards for school mathematics*. Reston, VA: Author.

situations. (However, to develop content strands scales, the primary content classification was used for questions with multiple classifications.)

- including the mathematics ability categories (conceptual understanding, procedural knowledge, and problem solving) as well as the process goals from the NCTM Standards (i.e., communication and connections) to achieve a balance of questions that measured a range of cognitive outcomes.
- continuing the move towards including more constructed-response questions.
- creating “families” of questions that probe a student’s understanding of mathematics vertically within a content strand or horizontally across content strands.
- revising the number sense, properties, and operations and geometry and spatial sense content strands to reflect the NCTM Standards emphasis on developing and assessing students’ abilities to make sense of both number and operation and spatial settings.

These refinements to the NAEP mathematics framework were made so that the 1996 assessment would: (1) more adequately reflect recent curricular emphases and objectives and yet (2) maintain a connection with the 1990 and 1992 assessments to measure trends in student performance. Prior to the 1996 assessment, investigations were conducted to ensure that results from the assessment could be reported on the existing NAEP mathematics scale. The conclusion drawn from these investigations was that results from the 1990, 1992, and 1996 assessments could be reported on a common scale and trends in mathematics performance since 1990 examined. Figure A.1 describes the five mathematics content strands that constitute the NAEP assessment.

**Figure A.1**

## Descriptions of the Five NAEP Mathematics Content Strands



### Data Analysis, Statistics, and Probability

This content strand emphasizes the appropriate methods for gathering data, the visual exploration of data, various ways of representing data, and the development and evaluation of arguments based on data analysis. At grade 4, students are asked to apply their understanding of numbers and quantities by solving problems that involve data. Fourth graders are asked to interact with a variety of graphs, to make predictions from data and explain their reasoning, to deal informally with measures of central tendency, and to use the basic concepts of chance in meaningful contexts. At grade 8, students are asked to analyze statistical claims and to design experiments, and they are asked to use simulations to model real-world situations. This strand focuses on eighth graders' basic understanding of sampling, their ability to make predictions based on experiments or data, and their ability to use some formal terminology related to probability, data analysis, and statistics. At grade 12, the strand focuses on the ability to apply the concepts of probability and to use formulas and more formal terminology to describe a variety of situations. For twelfth graders, the strand also emphasizes a basic understanding of how to use mathematical equations and graphs to interpret data.

### Algebra and Functions

This content strand extends from work with simple patterns at grade 4 to basic algebra concepts at grade 8 to sophisticated analysis at grade 12. It involves not only algebra but also precalculus and some topics from discrete mathematics. Students were expected to use algebraic notation and thinking in meaningful contexts to solve mathematical and real-world problems, specifically addressing an increasing understanding of the use of functions (including algebraic and geometric) as a representational tool. The grade 4 assessment involved informal demonstration of students' abilities to generalize from patterns, including the justification of their generalizations. Students were expected to translate between mathematical representations, to use simple equations, and to do basic graphing. At grade 8, the assessment included more algebraic notation, stressing the meaning of variables and an informal understanding of the use of symbolic representations in problem-solving contexts. Students were asked to use variables to represent a rule underlying a pattern. Eighth graders were asked to demonstrate a beginning understanding of equations and functions and the ability to solve simple equations and inequalities. By grade 12, students were asked about basic algebraic notation and terminology as they relate to representations of mathematical and real-world situations. Twelfth graders were asked to use functions as a way of representing and describing relationships.

**Figure A.1**  
(continued)

## Descriptions of the Five NAEP Mathematics Content Strands



### Number Sense, Properties, and Operations

This content strand focuses on students' understanding of numbers (whole numbers, fractions, decimals, integers, real numbers, and complex numbers), operations, and estimation and their application to real-world situations. At grade 4, this strand emphasizes the development of number sense through connecting various models to their numerical representations and an understanding of the meaning of addition, subtraction, multiplication, and division. At grade 8, number sense is extended to include positive and negative numbers, and the strand addresses properties and operations involving whole numbers, fractions, decimals, integers, and rational numbers. At grade 12, this strand includes real and complex numbers and allows students to demonstrate competency up to the precalculus or calculus level.

### Measurement

This content strand focuses on an understanding of the process of measurement and the use of numbers and measures to describe and compare mathematical and real-world objects. Students are asked to identify attributes, select appropriate units and tools, apply measurement concepts, and communicate measurement-related ideas. At grade 4, the strand focuses on time, money, temperature, length, perimeter, area, capacity, weight/mass, and angle measure. At grades 8 and 12, the strand includes these measurement concepts, but, the focus shifts to more complex measurement problems that involve volume or surface area or that require students to combine shapes and to translate and apply measures. Eighth- and twelfth-grade students also solve problems involving proportional thinking (such as scale drawing or map reading) and do applications that involve the use of complex measurement formulas.

### Geometry and Spatial Sense

This content strand is designed to extend beyond low-level identification of geometric shapes to include transformations and combinations of those shapes. Informal constructions and demonstrations (including drawing representations) along with their justifications, take precedence over more traditional types of compass-and-straightedge constructions and proofs. At grade 4, students are asked to model properties of shapes under simple combinations and transformations, and they are asked to use mathematical communication skills to draw figures from verbal descriptions. At grade 8, students are asked to expand their understanding to include properties of angles and polygons. They are also asked to apply reasoning skills to make and validate conjectures about transformations and combinations of shapes. At grade 12, students are asked to demonstrate an understanding of transformational geometry and to apply concepts of proportional thinking to various geometric situations.

## *The Assessment Design*

Students participating in the assessment received a booklet containing a set of general background questions, a set of subject-specific background questions, and a combination of cognitive questions grouped in sets called blocks. At each grade level, the blocks of questions consisted of multiple-choice and constructed-response questions. Two types of constructed-response questions were included — short and extended constructed response. Short constructed-response questions required students to provide answers to computation problems or to describe solutions in one or two sentences. Extended constructed-response questions required students to provide longer answers (e.g., a description of possibilities, a more involved computational analysis, or a description of a pattern and its implications). Students were expected to adequately answer the short constructed-response questions in 2 to 3 minutes and the extended constructed-response questions in approximately 5 minutes. Short constructed-response questions which first appeared in the assessment in 1996 were graded to allow for partial credit (i.e., giving student credit for answers that are partially correct) according to a unique scoring rubric developed for each constructed-response question. Short constructed-response questions included in the 1990 and 1992 mathematics assessments were dichotomously scored (i.e., correct or incorrect). The extended constructed-response questions included in the 1992 and 1996 assessments were scored allowing for partial credit.

The blocks of questions contained several other features. Five to seven of the blocks at each grade level allowed for the use of calculators. At grade 4, students were provided four-function calculators, and at grades 8 and 12<sup>3</sup>, students were provided scientific calculators. Prior to the assessment, all students were trained to use these calculators. For several blocks, students were given manipulatives (including geometric shapes, three dimensional models, and spinners). For two of the blocks at each grade level, students were given rulers at grade 4 and rulers and protractors at grades 8 and 12 so they could answer questions dealing with measurements and draw specified geometric shapes.

As part of the national assessment, other blocks of questions were developed for each of the grade levels. Each grade level had two estimation blocks that employed a paced-audiotape format to measure students' estimation skills. Each grade level also had two 30-minute theme blocks that contained a mixture of multiple-choice and constructed-response questions. All the questions in these theme blocks related to some aspect of a rich problem setting that served as a unifying theme for the entire block. Neither the estimation nor the theme block components were included in the state assessment.

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<sup>3</sup> Grade 12 was assessed at the national level only. No grade 12 results are included in this report.

Of the 17 blocks in the national sample at grade 4 and 19 blocks in the national sample at grade 8, 3 were carried forward from the 1990 assessment and 5 were carried forward from the 1992 assessment to allow for the measurement of trends across time. The remaining blocks of questions at each grade level contained new questions that were developed for the 1996 assessment as specified by the updated framework.

The data in Table A.1 reflect the number of questions by type and grade level for the 1990, 1992, and 1996 assessments. As mentioned earlier, the 1996 assessment continued the shift toward more constructed-response questions, including extended constructed-response questions that required students to provide an answer and a corresponding explanation.

Each booklet also included three sets of student background questions. The first set consisting of general background questions included questions about race or ethnicity, mother's and father's level of education, reading materials in the home, homework, attendance, and academic expectations. The second set consisting of mathematics background questions included questions about instructional activities, courses taken, use of specialized resources such as calculators in mathematics classes, and views on the utility and value of the subject. (Students were given 5 minutes to complete each set of questions, with the exception of the fourth graders, who were given more time because the general background questions were read aloud to them.) The third set of questions followed the cognitive question blocks and contained five questions about students' motivation to do well on the assessment, their perception of the difficulty of the assessment, and their familiarity with the types of cognitive questions included.

	<b>Distribution of Questions by Question Type</b>				
	<b>GRADE 4</b>		<b>GRADE 8</b>		
	1992	1996	1990	1992	1996
Multiple-Choice	99	81	149	118	102
Short Constructed-Response *	59	64	42	65	69
Extended Constructed-Response **	5	13	–	6	12
<b>Total</b>	<b>163</b>	<b>158</b>	<b>191</b>	<b>189</b>	<b>183</b>

\* Short constructed-response questions included in the 1990 and 1992 assessments were scored dichotomously. New short constructed-response questions included in the 1996 assessment were scored to allow for partial credit.

\*\* No extended constructed-response questions were included in the 1990 assessment.

The booklets were carefully balanced to accommodate time requirements for the question types in each block, using information gathered from field testing. Information on the design of the assessment is presented in the forthcoming *NAEP 1996 Technical Report*.

In addition to the student assessment booklets, three other instruments provided data relating to the assessment—a mathematics teacher questionnaire, a school characteristics and policy questionnaire, and an SD/LEP student questionnaire.

The teacher questionnaire was administered to the mathematics teacher of the fourth- and eighth-grade students participating in the assessment. The questionnaire consisted of three sections and took approximately 20 minutes to complete. The first section focused on the teacher's general background and experience; the second section focused on the teacher's background related to mathematics; and the third section focused on classroom information about mathematics instruction.

The school characteristics and policy questionnaire was given to the principal or other administrator in each participating school and took about 20 minutes to complete. The questions asked about the principal's background and experience, school policies, programs, facilities, and the demographic composition and background of the students and teachers.

The SD/LEP student questionnaire was completed by a school staff member knowledgeable about those students who were selected to participate in the assessment and who were identified as (1) having an Individualized Education Plan (IEP) or equivalent plan (for reasons other than being gifted or talented) or (2) having limited English proficiency (LEP). A SD/LEP student questionnaire was completed for each identified student regardless of whether the student participated in the assessment. Each questionnaire took approximately 3 minutes to complete and asked about the student and the special programs in which he or she participated.

### ***National and State Samples***

The national and regional results presented in this report are based on nationally representative probability samples of fourth- and eighth-grade students. The samples were selected using a complex multistage sampling design that involved sampling students from selected schools within selected geographic areas across the country. The sample design had the following stages:

1. selection of geographic areas (a county, group of counties, or metropolitan statistical area)
2. selection of schools (public and nonpublic) within the selected areas
3. selection of students within selected schools



Each selected school that participated in the assessment and each student assessed represents a portion of the population of interest. Sampling weights are needed to make valid inferences between the student samples and the respective populations from which they were drawn. Sampling weights account for disproportionate representation due to the oversampling of students who attend schools with high concentrations of Black and/or Hispanic students and who attend nonpublic schools. Sampling weights also account for lower sampling rates for very small schools.

The public school results of the 1990 and 1992 Trial State Assessments and the public and nonpublic results of the 1996 state assessment program in mathematics provided in this report are based on state-level samples of fourth- and eighth-grade students. The samples of both public and nonpublic school fourth- and eighth-grade students were selected based on a two-stage sample design that entailed selecting schools within participating jurisdictions and selecting students within schools. The first-stage samples of schools were selected with probability proportional to the fourth- or eighth-grade enrollment in those schools. Special procedures were used for jurisdictions that have many small schools and for jurisdictions that have a small number of schools. As with the national samples, the jurisdiction samples were weighted to allow for valid inferences about the populations of interest.

Tables A.2a through A.2g contain data from the 1996 state assessment program in mathematics along with data from the 1992 assessment (grade 4 and grade 8) and the 1990 assessment (grade 8). The tables contain the unweighted number of participating schools and students as well as weighted school and student participation rates. Two weighted school participation rates are provided for the nation and for each jurisdiction. The first rate is the weighted percentage of schools participating in the assessment before substitution. This rate is based only on the number of schools that were initially selected for the assessment. The numerator of this rate is the sum of the number of students represented by each initially selected school that participated in the assessment. The denominator is the sum of the number of students represented by each of the initially selected schools that had eligible students enrolled. This rate included both participating and nonparticipating schools.

The second school participation rate is the weighted participation rate after substitution. The numerator of this rate is the sum of the number of students represented by each of the participating schools, whether originally selected or substituted. The denominator is the same as that for the weighted participation rate for the initial sample. This statement means that for a given jurisdiction, the weighted participation rate after substitution is at least as great as the weighted participation rate before substitution.

Also presented in Table A.2a through A2g are the weighted percentages of students who participated after make-up sessions were completed. This rate reflects the percentage of the eligible student population from participating schools within the jurisdiction, and this percentage represents the students who participated in the assessment in either an initial session or a make-up session. The numerator of this rate is the sum, across all assessed students, of the number of students that each selected student who was eligible to participate represents, including students who did not participate.



Table A.2a

# NAEP 1990 School and Student Participation Rates by States Grade 8 Public Schools



	Weighted School Participation		Total Number of Schools Participating	Weighted Student Participation Rate	Total Number of Students Assessed
	Before Substitutes	After Substitutes			
<b>Nation</b>	<b>88</b>	<b>92</b>	<b>120</b>	<b>90</b>	<b>9,922</b>
Alabama	86	97	98	95	2,531
Alaska	—	—	—	—	—
Arizona	97	97	102	93	2,558
Arkansas	100	100	107	95	2,669
California	94	94	98	93	2,424
Colorado	100	100	105	94	2,675
Connecticut	100	100	103	95	2,672
Delaware	100	100	30	93	2,110
District of Columbia	100	100	36	88	2,135
Florida	98	98	101	92	2,534
Georgia	100	100	106	94	2,766
Hawaii	100	100	52	93	2,551
Indiana	89	94	98	95	2,569
Iowa ‡	91	91	92	96	2,474
Kentucky	100	100	104	95	2,680
Louisiana	100	100	99	94	2,572
Maine	—	—	—	—	—
Maryland	100	100	105	94	2,794
Massachusetts	—	—	—	—	—
Michigan	90	97	98	95	2,587
Minnesota	90	93	97	95	2,584
Mississippi	—	—	—	—	—
Missouri	—	—	—	—	—
Montana	90	90	100	96	2,486
Nebraska	87	94	103	95	2,519
Nevada	—	—	—	—	—
New Jersey	97	98	107	94	2,710
New Mexico	100	100	106	94	2,643
New York	86	86	91	93	2,302
North Carolina	100	100	106	95	2,843
North Dakota	96	100	106	96	2,485
Oregon	100	100	106	93	2,708
Rhode Island	94	97	51	93	2,675
South Carolina	—	—	—	—	—
Tennessee	—	—	—	—	—
Texas	88	97	101	96	2,542
Utah	—	—	—	—	—
Vermont	—	—	—	—	—
Virginia	99	99	104	94	2,661
Washington	—	—	—	—	—
West Virginia	100	100	101	94	2,600
Wisconsin	99	99	106	94	2,750
Wyoming	100	100	69	96	2,701
DDESS	—	—	—	—	—
DoDDS	—	—	—	—	—
Guam	100	100	6	93	1,617

National results are based on the national assessment samples, not on aggregated state assessment program samples.

‡ Indicates that the jurisdiction did not satisfy one or more of the guidelines for public school participation rates (see Appendix A).

— State or other jurisdiction did not participate in the NAEP assessment year presented in this table.

DDESS: Department of Defense Domestic Dependent Elementary and Secondary Schools

DoDDS: Department of Defense Dependents Schools (Overseas)

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1996 Mathematics Assessment.

**Table A.2b**

**NAEP 1992 School and Student Participation Rates by States  
Grade 4 Public Schools**



	Weighted School Participation		Total Number of Schools Participating	Weighted Student Participation Rate	Total Number of Students Assessed
	Before Substitutes	After Substitutes			
<b>Nation</b>	<b>86</b>	<b>86</b>	<b>270</b>	<b>94</b>	<b>5,641</b>
Alabama	75	97	106	95	2,605
Alaska	—	—	—	—	—
Arizona	100	100	108	95	2,762
Arkansas	90	99	120	96	2,647
California	91	97	108	94	2,412
Colorado	100	100	121	95	2,906
Connecticut	99	99	110	96	2,600
Delaware ‡	92	92	44	95	2,040
District of Columbia	99	99	107	93	2,399
Florida	100	100	110	95	2,828
Georgia	100	100	108	95	2,766
Hawaii	100	100	108	95	2,625
Indiana	76	91	105	96	2,593
Iowa	100	100	128	96	2,770
Kentucky	93	96	118	96	2,703
Louisiana	100	100	109	95	2,792
Maine ‡	57	71	98	95	1,923
Maryland	99	99	110	96	2,844
Massachusetts	87	97	114	95	2,549
Michigan	83	90	98	94	2,423
Minnesota	82	94	107	95	2,669
Mississippi	98	100	109	97	2,712
Missouri	89	97	110	96	2,509
Montana	—	—	—	—	—
Nebraska ‡	80	87	120	96	2,337
Nevada	—	—	—	—	—
New Jersey ‡	76	82	95	96	2,231
New Mexico	75	90	108	95	2,436
New York ‡	78	83	90	96	2,284
North Carolina	95	99	116	95	2,884
North Dakota	73	90	116	96	2,193
Oregon	—	—	—	—	—
Pennsylvania	84	95	111	96	2,740
Rhode Island	83	96	105	95	2,390
South Carolina	98	99	109	97	2,771
Tennessee	92	93	109	96	2,708
Texas	93	98	105	96	2,623
Utah	99	99	108	96	2,799
Vermont	—	—	—	—	—
Virginia	99	99	111	95	2,786
Washington	—	—	—	—	—
West Virginia	100	100	141	96	2,786
Wisconsin	100	100	122	96	2,797
Wyoming	97	97	143	96	2,605
DDESS	—	—	—	—	—
DoDDS	—	—	—	—	—
Guam ‡	94	94	20	95	1,933

National results are based on the national assessment samples, not on aggregated state assessment program samples.

‡ Indicates that the jurisdiction did not satisfy one or more of the guidelines for public school participation rates (see Appendix A).

— State or other jurisdiction did not participate in the NAEP assessment year presented in this table.

DDESS: Department of Defense Domestic Dependent Elementary and Secondary Schools

DoDDS: Department of Defense Dependents Schools (Overseas)

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1996 Mathematics Assessment.

Table A.2c

# NAEP 1992 School and Student Participation Rates by States Grade 8 Public Schools



	Weighted School Participation		Total Number of Schools Participating	Weighted Student Participation Rate	Total Number of Students Assessed
	Before Substitutes	After Substitutes			
<b>Nation</b>	<b>88</b>	<b>89</b>	<b>219</b>	<b>89</b>	<b>6,033</b>
Alabama ‡	66	92	102	95	2,623
Alaska	—	—	—	—	—
Arizona	99	99	103	93	2,617
Arkansas	89	97	97	94	2,556
California	93	98	104	92	2,537
Colorado	100	100	112	93	2,799
Connecticut	99	99	97	94	2,613
Delaware	100	100	28	92	1,934
District of Columbia	100	100	35	85	1,816
Florida	100	100	103	91	2,549
Georgia	99	99	102	93	2,589
Hawaii	100	100	51	90	2,454
Indiana	79	94	102	94	2,659
Iowa	99	99	105	95	2,816
Kentucky	96	98	104	96	2,756
Louisiana	100	100	101	92	2,582
Maine ‡	62	84	82	93	2,520
Maryland	89	91	95	92	2,399
Massachusetts	83	95	97	94	2,456
Michigan	78	94	101	94	2,616
Minnesota	81	92	93	94	2,471
Mississippi	99	100	99	95	2,498
Missouri	92	99	105	95	2,666
Montana	—	—	—	—	—
Nebraska ‡	75	85	85	96	2,285
Nevada	—	—	—	—	—
New Hampshire	80	92	73	94	2,582
New Jersey ‡	69	78	84	94	2,174
New Mexico	77	94	85	93	2,585
New York ‡	81	83	87	92	2,158
North Carolina	94	98	103	94	2,769
North Dakota	78	97	70	96	2,314
Oregon	—	—	—	—	—
Rhode Island	85	100	51	93	2,120
South Carolina	94	97	102	94	2,625
Tennessee	87	91	95	94	2,485
Texas	95	99	103	94	2,614
Utah	100	100	85	94	2,726
Vermont	—	—	—	—	—
Virginia	97	97	103	94	2,710
Washington	—	—	—	—	—
West Virginia	100	100	104	94	2,690
Wisconsin	100	100	107	94	2,814
Wyoming	99	99	54	95	2,444
DDESS	—	—	—	—	—
DoDDS	—	—	—	—	—
Guam	100	100	6	90	1,496

National results are based on the national assessment samples, not on aggregated state assessment program samples.

‡ Indicates that the jurisdiction did not satisfy one or more of the guidelines for public school participation rates (see Appendix A).

— State or other jurisdiction did not participate in the NAEP assessment year presented in this table.

DDESS: Department of Defense Domestic Dependent Elementary and Secondary Schools

DoDDS: Department of Defense Dependents Schools (Overseas)

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1996 Mathematics Assessment.

Table A.2d

# NAEP 1996 School and Student Participation Rates by States Grade 4 Public Schools



	Weighted School Participation		Total Number of Schools Participating	Weighted Student Participation Rate	Total Number of Students Assessed
	Before Substitutes	After Substitutes			
<b>Nation</b>	<b>83</b>	<b>83</b>	<b>209</b>	<b>95</b>	<b>5,215</b>
Alabama	79	93	99	96	2,541
Alaska ‡	91	91	113	91	2,304
Arizona	87	87	91	95	2,113
Arkansas ‡	76	78	81	96	2,047
California	80	94	99	94	2,063
Colorado	99	99	107	95	2,609
Connecticut	100	100	105	96	2,565
Delaware	100	100	51	94	1,984
District of Columbia	100	100	108	95	2,574
Florida	100	100	106	94	2,549
Georgia	98	98	103	95	2,542
Hawaii	100	100	106	95	2,578
Indiana	87	91	96	96	2,470
Iowa ‡	79	87	95	97	2,359
Kentucky	88	96	102	95	2,579
Louisiana	100	100	108	95	2,671
Maine	87	87	97	94	2,115
Maryland	93	93	99	96	2,465
Massachusetts	97	97	103	95	2,497
Michigan ‡	76	88	94	94	2,382
Minnesota	91	93	99	94	2,425
Mississippi	92	97	103	96	2,716
Missouri	96	99	107	95	2,643
Montana ‡	70	81	99	96	2,251
Nebraska	100	100	132	95	2,678
Nevada ‡	84	86	95	92	2,193
New Jersey ‡	73	73	78	95	1,961
New Mexico	100	100	107	94	2,389
New York ‡	73	86	90	94	2,248
North Carolina	97	97	106	96	2,658
North Dakota	75	96	120	96	2,666
Oregon	86	90	95	95	2,233
Pennsylvania ‡	73	86	90	95	2,347
Rhode Island	89	99	104	95	2,461
South Carolina ‡	87	88	92	95	2,364
Tennessee	94	94	98	96	2,473
Texas	95	97	104	96	2,413
Utah	100	100	106	95	2,625
Vermont ‡	78	81	100	96	2,136
Virginia	100	100	104	95	2,586
Washington	99	99	105	94	2,640
West Virginia	100	100	109	95	2,530
Wisconsin	92	94	99	95	2,437
Wyoming	100	100	115	96	2,758
DDESS	100	100	38	95	1,313
DoDDS	100	100	93	94	2,604
Guam	100	100	22	94	1,431

National results are based on the national assessment samples, not on aggregated state assessment program samples.

‡ Indicates that the jurisdiction did not satisfy one or more of the guidelines for public school participation rates (see Appendix A).

— State or other jurisdiction did not participate in the NAEP assessment year presented in this table.

DDESS: Department of Defense Domestic Dependent Elementary and Secondary Schools

DoDDS: Department of Defense Dependents Schools (Overseas)

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1996 Mathematics Assessment.

Table A.2e

# NAEP 1996 School and Student Participation Rates by States Grade 4 Nonpublic Schools



	Weighted School Participation		Total Number of Schools Participating	Weighted Student Participation Rate	Total Number of Students Assessed
	Before Substitutes	After Substitutes			
<b>Nation</b>	<b>79</b>	<b>79</b>	<b>77</b>	<b>97</b>	<b>1,412</b>
Alabama ‡	72	72	10	97	239
Alaska	—	—	—	—	—
Arizona ‡	78	87	10	99	185
Arkansas	86	86	8	97	174
California ‡	73	73	11	98	256
Colorado ‡	76	76	10	96	174
Connecticut ‡	75	75	13	96	245
Delaware ‡	41	43	13	95	337
District of Columbia ‡	63	66	18	96	395
Florida ‡	66	73	12	96	232
Georgia	99	99	13	94	251
Hawaii	—	—	—	—	—
Indiana ‡	79	86	15	96	297
Iowa ‡	82	82	15	96	284
Kentucky	87	87	13	97	300
Louisiana	86	86	19	97	444
Maine ‡	71	74	8	97	101
Maryland ‡	57	57	11	98	269
Massachusetts ‡	84	84	15	96	305
Michigan	86	94	18	97	342
Minnesota ‡	78	78	15	96	277
Mississippi ‡	79	79	11	96	268
Missouri	99	100	23	95	449
Montana	94	94	10	95	173
Nebraska	91	91	22	99	433
Nevada	91	100	9	96	173
New Jersey ‡	64	75	16	94	334
New Mexico	90	90	13	94	212
New York ‡	83	91	23	96	495
North Carolina	—	—	—	—	—
North Dakota ‡	68	68	12	95	152
Oregon ‡	34	34	4	96	69
Pennsylvania ‡	66	66	19	96	401
Rhode Island	—	—	—	—	—
South Carolina	—	—	—	—	—
Texas ‡	64	64	4	96	101
Utah ‡	81	81	7	95	146
Vermont ‡	74	74	9	97	145
Virginia	—	—	—	—	—
Washington	—	—	—	—	—
West Virginia	—	—	—	—	—
Wisconsin ‡	68	73	25	97	480
Wyoming	82	95	7	96	84
DDESS	—	—	—	—	—
DoDDS	—	—	—	—	—
Guam ‡	78	78	9	94	317

National results are based on the national assessments samples, not on aggregated state assessment program samples.

‡ Indicates that the jurisdiction did not satisfy one or more of the guidelines for nonpublic school participation rates (see Appendix A).

— State or other jurisdiction did not participate in the NAEP assessment year presented in this table.

DDESS: Department of Defense Domestic Elementary and Secondary Schools

DoDDS: Department of Defense Dependents Schools (Overseas)

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1996 Mathematics Assessment.

Table A.2f

# NAEP 1996 School and Student Participation Rates by States Grade 8 Public Schools



	Weighted School Participation		Total Number of Schools Participating	Weighted Student Participation Rate	Total Number of Students Assessed
	Before Substitutes	After Substitutes			
<b>Nation</b>	<b>81</b>	<b>82</b>	<b>192</b>	<b>92</b>	<b>5,590</b>
Alabama	84	90	97	93	2,261
Alaska ‡	92	92	53	80	1,462
Arizona	87	87	93	91	2,136
Arkansas ‡	70	71	77	92	1,845
California	83	94	101	90	2,290
Colorado	100	100	108	91	2,530
Connecticut	100	100	102	91	2,485
Delaware	100	100	30	90	1,798
District of Columbia	100	100	32	85	1,693
Florida	100	100	104	91	2,401
Georgia	99	99	100	90	2,364
Hawaii	100	100	51	91	2,189
Indiana	88	91	96	93	2,347
Iowa ‡	74	84	93	93	2,169
Kentucky	88	92	101	94	2,461
Louisiana	100	100	112	89	2,599
Maine	90	90	93	92	2,258
Maryland ‡	86	86	89	91	2,137
Massachusetts	92	92	98	92	2,280
Michigan ‡	70	86	90	90	2,155
Minnesota	86	88	96	92	2,425
Mississippi	89	95	103	93	2,487
Missouri	93	96	105	91	2,386
Montana ‡	72	75	75	92	1,912
Nebraska	99	100	116	91	2,610
Nevada ‡	38	38	28	90	983
New Hampshire ‡	66	69	62	89	1,723
New Jersey ‡	64	65	69	93	1,655
New Mexico	100	100	90	90	2,371
New York ‡	71	80	84	91	1,962
North Carolina	100	100	107	91	2,638
North Dakota	83	95	108	94	2,602
Oregon	86	92	98	90	2,323
Rhode Island	90	90	42	89	2,055
South Carolina ‡	86	87	91	89	2,143
Tennessee	92	92	98	91	2,300
Texas	90	95	100	92	2,245
Utah	100	100	95	91	2,697
Vermont ‡	74	74	75	93	2,001
Virginia	100	100	106	91	2,545
Washington	94	95	103	90	2,434
West Virginia	100	100	106	92	2,578
Wisconsin ‡	78	78	90	92	2,165
Wyoming	100	100	70	93	2,696
DDESS	100	100	12	95	620
DoDDS	100	100	57	94	2,160
Guam	100	100	6	86	928

National results are based on the national assessments samples, not on aggregated state assessment program samples.

‡ Indicates that the jurisdiction did not satisfy one or more of the guidelines for public school participation rates (see Appendix A).

— State or other jurisdiction did not participate in the NAEP assessment year presented in this table.

DDESS: Department of Defense Domestic Dependent Elementary and Secondary Schools

DoDDS: Department of Defense Dependents Schools (Overseas)

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1996 Mathematics Assessment.

**Table A.2g**

**NAEP 1996 School and Student  
Participation Rates by States  
Grade 8 Nonpublic Schools**



	Weighted School Participation		Total Number of Schools Participating	Weighted Student Participation Rate	Total Number of Students Assessed
	Before Substitutes	After Substitutes			
<b>Nation</b>	<b>81</b>	<b>81</b>	<b>78</b>	<b>97</b>	<b>1,556</b>
Alabama ‡	64	64	9	92	119
Alaska	—	—	—	—	—
Arizona	—	—	—	—	—
Arkansas ‡	51	60	5	98	62
California ‡	75	75	13	97	232
Colorado	—	—	—	—	—
Connecticut ‡	63	65	19	94	265
Delaware ‡	38	40	12	96	281
District of Columbia ‡	47	47	16	95	222
Florida	—	—	—	—	—
Georgia	88	88	10	97	267
Hawaii	—	—	—	—	—
Indiana	—	—	—	—	—
Iowa	88	88	15	96	282
Kentucky ‡	67	67	11	98	218
Louisiana ‡	73	73	22	96	426
Maine	—	—	—	—	—
Maryland ‡	60	64	18	97	301
Massachusetts ‡	70	74	18	95	301
Michigan ‡	80	88	18	96	293
Minnesota ‡	75	75	15	96	250
Mississippi	—	—	—	—	—
Missouri	94	100	22	96	353
Montana ‡	78	78	9	95	121
Nebraska ‡	83	85	20	95	358
Nevada ‡	78	78	6	95	101
New Hampshire ‡	85	85	12	96	212
New Jersey ‡	68	71	22	94	320
New Mexico ‡	87	87	12	89	228
New York ‡	88	90	30	95	539
North Carolina	—	—	—	—	—
North Dakota	86	86	12	96	194
Oregon ‡	22	22	3	93	43
Rhode Island ‡	81	81	26	96	423
South Carolina ‡	76	76	10	96	164
Tennessee	—	—	—	—	—
Texas	93	93	9	92	166
Utah ‡	43	43	2	93	40
Vermont ‡	73	73	9	95	114
Virginia	—	—	—	—	—
Washington	86	86	9	97	182
West Virginia	—	—	—	—	—
Wisconsin ‡	68	73	28	94	362
Wyoming ‡	74	74	5	97	51
DDESS	—	—	—	—	—
DoDDS	—	—	—	—	—
Guam ‡	76	76	8	95	202

National results are based on the national assessments samples, not on aggregated state assessment program samples.

‡ Indicates that the jurisdiction did not satisfy one or more of the guidelines for nonpublic school participation rates (see Appendix A).

— State or other jurisdiction did not participate in the NAEP assessment year presented in this table.

DDESS: Department of Defense Domestic Dependent Elementary and Secondary Schools

DoDDS: Department of Defense Dependents Schools (Overseas)

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1996 Mathematics Assessment.

## *School and Student Participation Rates*

In carrying out the 1996 state assessment program, the National Center for Education Statistics (NCES) established participation rate standards that jurisdictions were required to meet in order for their results to be reported (see notations in Tables A.3a through A.3d). NCES also established additional standards that required the annotation of published results for jurisdictions whose sample participation rates were low enough to raise concerns about their representativeness.

No jurisdictions at grade 4 and three states at grade 8 (Nevada, New Hampshire, and New Jersey) failed to meet the initial public school participation rate of 70 percent. For these states, results for eighth-grade public school students are not reported in this or any report of NAEP 1996 mathematics findings. Several other jurisdictions whose results were published received a notation to indicate possible nonresponse bias.

The following 10 jurisdictions failed to meet the initial nonpublic school participation rate of 70 percent at grade 4: Delaware, the District of Columbia, Florida, Maryland, New Jersey, North Dakota, Oregon, Pennsylvania, Texas, and Wisconsin. Twelve jurisdictions failed to meet the initial nonpublic school participation rate of 70 percent at grade 8: Alabama, Arkansas, Connecticut, Delaware, the District of Columbia, Kentucky, Maryland, New Jersey, Oregon, Utah, Wisconsin, and Wyoming. For these jurisdictions, results for fourth- or eighth-grade nonpublic school students are not reported in this or any report of NAEP 1996 mathematics findings. As with public schools, several other jurisdictions whose nonpublic school results were published received a notation to indicate nonresponse bias.

NCES standards require weighted school participation rates before substitution of at least 85 percent to guard against potential bias due to school nonresponse. The NCES standards do not explicitly address the use of substitute schools to replace initially selected schools that declined to participate in the assessment. However, considerable technical consideration has been given to this issue. Even though the characteristics of the substitute schools were matched as closely as possible to the characteristics of the initially selected schools, substitution does not entirely eliminate the possibility of bias because of the nonparticipation of initially selected schools. Thus, for the weighted school participation rates that included substitute schools, the guideline was set at 90 percent. This is expressed in the following guideline:

*A jurisdiction will receive a notation if its weighted participation rate for the initial sample of schools was below 85 percent AND the weighted school participation rate after substitution was below 90 percent.*

In 1996, nine states did not meet this guideline for public schools at grade 4: Arkansas, Iowa, Michigan, Montana, Nevada, New Jersey, New York, Pennsylvania, and Vermont. Fourteen jurisdictions did not meet this guideline for nonpublic schools at grade 4: Alabama, Arizona, California, Colorado, Connecticut, Guam, Indiana, Iowa, Maine, Massachusetts, Minnesota, Mississippi, Utah, and Vermont. Seven jurisdictions did not meet this guideline for public schools at grade 8: Arkansas, Iowa, Michigan, Montana, New York, Vermont, and Wisconsin. Twelve jurisdictions did not meet this guideline for nonpublic schools at grade 8: California, Guam, Louisiana, Massachusetts, Michigan, Minnesota, Montana, Nebraska, Nevada, Rhode Island, South Carolina, and Vermont.



To help ensure adequate sample representation for each jurisdiction participating in the 1996 state assessment program, NAEP provided substitutes for nonparticipating public and nonpublic schools. (When possible, a substitute school was provided for each initially selected school that declined participation.) For jurisdictions that used substitute schools, the assessment results were based on the student data from all schools participating from both the original sample and the list of substitutes (unless an initial school and its substitute eventually participated, in which case only the data from the initial school were used). For jurisdictions that did not use substitute schools, the participation rates were based on participating schools from the original sample.

The NCES standards specify that attention should be given to the representativeness of the sample coverage. Thus, inadequate representation of an important segment of a jurisdiction's population is of concern, regardless of the overall participation rate. At grade 4, Alaska and South Carolina (for public schools) and New York (for nonpublic schools) failed to meet the following NCES guideline concerning strata-specific participation rates. At grade 8, Alaska, Maryland, and South Carolina (for public schools) and New Hampshire, New Mexico, and New York (for nonpublic schools) failed to meet this NCES guideline.

*A jurisdiction that is not already receiving a notation for problematic overall school or student participation rates will receive a notation if the sampled students within participating schools included a class of students with similar characteristics that had a weighted student response rate of below 80 percent, and from which the nonresponding students together accounted for more than five percent of the jurisdiction's weighted assessable student sample. Student groups from which a jurisdiction needed minimum levels of participation were determined by the age of the students, whether or not the student was classified as a student with a disability (SD) or of limited English proficiency (LEP), and the type of assessment session (monitored or unmonitored). In addition, for public schools, classes of schools were determined by school level of urbanization, minority enrollment, and median household income of the area in which the school is located. For nonpublic schools, classes of schools were determined by type and location of schools.*

This guideline addresses the concern that if nonparticipating schools were concentrated within a particular class of schools, the potential for substantial bias remained, even though the overall level of school participation appeared to be satisfactory. Nonresponse adjustment cells for schools were formed within each jurisdiction, and the schools within each cell were similar in terms of minority enrollment, degree of urbanization, and/or median household income for public schools, and school type and location for nonpublic schools, as appropriate for each jurisdiction. If more than 5 percent (weighted) of the sample schools (after substitution) were nonparticipants from a single adjustment cell, then the potential for nonresponse bias was too great.

In one state (Alaska), the public school student participation rate for grade 8 fell below the NCES-prescribed criteria of 85 percent. No other notations related to student participation rates appear in NAEP 1996 mathematics reports.

## ***Students with Disabilities (SD) and Limited English Proficient (LEP) Students***

It is NAEP's intent to assess all selected students. Therefore, every effort is made to ensure that all selected students who are capable of participating in the assessment are assessed. Some students sampled for participation in NAEP can be excluded from the sample according to carefully defined criteria. These criteria are described in Chapter 4 of the *NAEP 1996 Mathematics Report Card for the Nation and the States*.<sup>4</sup> The reporting samples used inclusion criteria equivalent to those used for the 1990 and 1992 assessments to allow for comparability of results across assessments. Sample information for the SD and LEP populations for the reporting samples are presented in Tables A.3a. through A.3d.

### ***Scoring***

Materials from the 1996 assessment were shipped to National Computer Systems, where trained staff evaluated the responses to the constructed-response questions using scoring rubrics or guides prepared by the Educational Testing Service (ETS). Each constructed-response question had a unique scoring rubric that defined the criteria used to evaluate students' responses. The extended constructed-response questions were evaluated with four- or five-level rubrics, while the short constructed-response questions first appearing in the 1996 assessment were rated according to three-level rubrics that permitted partial credit. Other short constructed-response questions that appeared in previous assessments were scored as either correct or incorrect.

For the national and state mathematics assessments more than 4.8 million constructed responses were scored. This number includes rescoring to monitor inter-rater reliability and trend reliability. In other words, scoring reliability was calculated within year (1996) and across years (1990, 1992, and 1996). The overall within-year percentages of agreement for the 1996 national reliability samples were 96 percent at grade 4 and 96 percent at grade 8. The percentages of agreement across the assessment years for the national inter-year reliability sample were 96 percent (1990 to 1996) and 94 percent (1992 to 1996) at grade 4, 95 percent (1990 to 1996) and 94 percent (1992 to 1996) at grade 8.

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<sup>4</sup> Reese, C.M., Miller, K.E., Mazzeo, J. & Dorsey, J.A. (1997). *NAEP 1996 mathematics report card for the nation and the states*. Washington, DC: National Center for Education Statistics.

**Table A.3a**

**NAEP 1996 SD and LEP Participation Rates  
by States Grade 4 Public Schools**



	Total Percentage of Students — SD and LEP		Percentage of Students — SD		Percentage of Students — LEP	
	Identified	Excluded	Identified	Excluded	Identified	Excluded
<b>Nation</b>	<b>15</b>	<b>6</b>	<b>11</b>	<b>5</b>	<b>4</b>	<b>2</b>
Alabama	11	6	11	6	0	0
Alaska	21	4	13	3	9	1
Arizona	22	13	10	7	13	7
Arkansas	9	7	9	6	0	0
California	33	16	9	6	26	13
Colorado	16	9	13	7	4	2
Connecticut	15	8	12	6	3	2
Delaware	14	7	11	5	2	2
District of Columbia	14	11	9	7	6	5
Florida	19	10	14	7	6	3
Georgia	13	7	12	6	2	1
Hawaii	14	6	9	4	5	1
Indiana	11	5	11	5	1	0
Iowa	12	5	10	4	2	1
Kentucky	10	6	10	6	0	0
Louisiana	13	7	13	7	1	0
Maine	16	8	15	8	0	0
Maryland	14	8	13	7	1	1
Massachusetts	16	8	14	7	2	2
Michigan	12	7	10	6	2	1
Minnesota	13	6	10	4	3	1
Mississippi	7	5	7	5	0	0
Missouri	15	5	14	5	1	0
Montana	10	5	10	5	0	0
Nebraska	16	5	14	5	2	1
Nevada	15	8	10	6	6	3
New Jersey	10	6	9	5	2	1
New Mexico	22	12	14	8	10	5
New York	17	9	10	6	7	4
North Carolina	15	7	13	7	2	1
North Dakota	11	4	10	3	0	0
Oregon	20	9	13	6	7	3
Pennsylvania	10	5	9	4	1	1
Rhode Island	18	6	13	5	5	2
South Carolina	13	6	12	6	0	0
Tennessee	14	7	12	6	1	1
Texas	25	11	13	8	14	5
Utah	13	6	11	5	2	1
Vermont	14	6	14	6	1	0
Virginia	14	7	12	6	2	1
Washington	14	6	11	5	3	1
West Virginia	13	8	13	8	0	0
Wisconsin	12	8	11	8	2	1
Wyoming	12	4	12	4	1	0
DDESS	9	4	8	3	1	1
DoDDS	10	5	9	4	2	1
Guam	16	13	7	6	9	7

National results are based on the national assessments samples, not on aggregated state assessment program samples.

SD = Students with Disabilities (the term previously used was IEP).

LEP = Limited English Proficient student.

To be excluded, a student was supposed to be classified as SD or as LEP and judged incapable of participating in the assessment.

A student reported as belonging to both SD and LEP classifications is counted once in the overall rate (first column), once in the overall excluded rate (second column), and separately in the remaining columns.

DDESS: Department of Defense Domestic Dependent Elementary and Secondary Schools

DoDDS: Department of Defense Dependents Schools (Overseas)

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1996 Mathematics Assessment.

**Table A.3b**

**NAEP 1996 SD and LEP Participation Rates  
by States Grade 4 Nonpublic Schools**



	Total Percentage of Students — SD and LEP		Percentage of Students — SD		Percentage of Students — LEP	
	Identified	Excluded	Identified	Excluded	Identified	Excluded
<b>Nation</b>	<b>2</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>0</b>	<b>0</b>
Alabama	0	0	0	0	0	0
Alaska	—	—	—	—	—	—
Arizona	43	3	3	3	43	3
Arkansas	4	2	2	1	1	1
California	0	0	0	0	0	0
Colorado	5	5	5	5	0	0
Connecticut	7	1	5	0	3	1
Delaware	1	1	1	1	0	0
District of Columbia	1	0	0	0	1	0
Florida	1	1	1	1	0	0
Georgia	5	2	5	2	0	0
Hawaii	—	—	—	—	—	—
Indiana	3	1	2	0	1	1
Iowa	2	1	2	1	0	0
Kentucky	2	1	2	1	0	0
Louisiana	7	2	7	1	0	0
Maine	3	0	3	0	0	0
Maryland	0	0	0	0	0	0
Massachusetts	6	1	6	1	0	0
Michigan	3	0	2	0	0	0
Minnesota	5	1	5	1	0	0
Mississippi	8	0	8	0	0	0
Missouri	3	0	3	0	0	0
Montana	0	0	0	0	0	0
Nebraska	2	0	1	0	1	0
Nevada	0	0	0	0	0	0
New Jersey	3	0	3	0	0	0
New Mexico	15	7	7	7	12	4
New York	14	1	1	1	14	1
North Carolina	—	—	—	—	—	—
North Dakota	4	2	4	2	0	0
Oregon	0	0	0	0	0	0
Pennsylvania	2	1	2	1	0	0
Rhode Island	—	—	—	—	—	—
South Carolina	—	—	—	—	—	—
Tennessee	—	—	—	—	—	—
Texas	3	3	3	3	0	0
Utah	0	0	0	0	0	0
Vermont	0	0	0	0	0	0
Virginia	—	—	—	—	—	—
Washington	—	—	—	—	—	—
West Virginia	—	—	—	—	—	—
Wisconsin	0	0	0	0	0	0
Wyoming	4	4	4	4	0	0
DDESS	—	—	—	—	—	—
DoDDS	—	—	—	—	—	—
Guam	3	2	0	0	3	2

National results are based on the national assessments samples, not on aggregated state assessment program samples.  
 SD = Students with Disabilities (the term previously used was IEP).  
 LEP = Limited English Proficient student.  
 To be excluded, a student was supposed to be classified as SD or as LEP and judged incapable of participating in the assessment.  
 A student reported as belonging to both SD and LEP classifications is counted once in the overall rate (first column), once in the overall excluded rate (second column), and separately in the remaining columns.  
 DDESS: Department of Defense Domestic Dependent Elementary and Secondary Schools  
 DoDDS: Department of Defense Dependents Schools (Overseas)  
 SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1996 Mathematics Assessment.

Table A.3c

# NAEP 1996 SD and LEP Participation Rates by States Grade 8 Public Schools



	Total Percentage of Students — SD and LEP		Percentage of Students — SD		Percentage of Students — LEP	
	Identified	Excluded	Identified	Excluded	Identified	Excluded
<b>Nation</b>	<b>11</b>	<b>5</b>	<b>9</b>	<b>4</b>	<b>3</b>	<b>1</b>
Alabama	15	8	15	8	0	0
Alaska	15	5	10	5	5	1
Arizona	17	9	9	5	9	4
Arkansas	12	7	11	7	1	1
California	20	10	8	4	13	6
Colorado	11	4	10	4	2	1
Connecticut	16	9	14	7	3	2
Delaware	12	8	11	8	1	0
District of Columbia	12	9	9	7	3	2
Florida	15	9	12	7	3	2
Georgia	9	6	8	5	1	1
Hawaii	13	6	10	5	4	2
Indiana	12	5	11	5	1	0
Iowa	11	4	10	4	0	0
Kentucky	10	5	10	5	0	0
Louisiana	9	5	8	5	1	0
Maine	10	4	9	4	0	0
Maryland	12	6	10	5	1	1
Massachusetts	15	7	14	6	1	1
Michigan	9	5	8	4	1	0
Minnesota	11	3	10	3	1	0
Mississippi	11	7	11	7	0	0
Missouri	12	8	12	7	1	1
Montana	10	3	9	3	0	0
Nebraska	11	4	10	4	1	1
Nevada	21	10	13	7	9	4
New Hampshire	15	4	15	4	0	0
New Jersey	12	6	9	5	3	2
New Mexico	18	8	12	4	7	4
New York	13	7	11	6	3	2
North Carolina	9	4	8	4	1	1
North Dakota	11	4	11	4	1	0
Oregon	12	4	11	4	1	1
Rhode Island	16	7	13	5	3	2
South Carolina	10	6	9	5	0	0
Tennessee	11	4	11	4	0	0
Texas	16	8	11	6	6	3
Utah	12	6	10	5	2	2
Vermont	13	5	12	4	1	0
Virginia	13	7	11	6	1	1
Washington	12	5	10	5	2	1
West Virginia	12	8	12	8	0	0
Wisconsin	12	7	11	7	1	1
Wyoming	8	1	8	1	0	0
DDESS	12	4	11	3	1	1
DoDDS	6	2	6	2	1	1
Guam	9	4	6	2	3	2

National results are based on the national assessments samples, not on aggregated state assessment program samples.

SD = Students with Disabilities (the term previously used was IEP).

LEP = Limited English Proficient student.

To be excluded, a student was supposed to be classified as SD or as LEP and judged incapable of participating in the assessment.

A student reported as belonging to both SD and LEP classifications is counted once in the overall rate (first column), once in the overall excluded rate (second column), and separately in the remaining columns.

DDESS: Department of Defense Domestic Dependent Elementary and Secondary Schools

DoDDS: Department of Defense Dependents Schools (Overseas)

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1996 Mathematics Assessment.

Table A.3d

## NAEP 1996 SD and LEP Participation Rates by States Grade 8 Nonpublic Schools



	Total Percentage of Students — SD and LEP		Percentage of Students — SD		Percentage of Students — LEP	
	Identified	Excluded	Identified	Excluded	Identified	Excluded
<b>Nation</b>	<b>3</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>1</b>	<b>0</b>
Alabama	1	0	1	0	0	0
Alaska	—	—	—	—	—	—
Arizona	—	—	—	—	—	—
Arkansas	0	0	0	0	0	0
California	1	0	1	0	0	0
Colorado	—	—	—	—	—	—
Connecticut	5	0	4	0	1	0
Delaware	2	0	2	0	0	0
District of Columbia	1	0	0	0	1	0
Florida	—	—	—	—	—	—
Indiana	—	—	—	—	—	—
Alaska	—	—	—	—	—	—
Georgia	3	1	3	1	0	0
Iowa	2	0	2	0	0	0
Kentucky	2	0	2	0	0	0
Louisiana	4	2	4	2	0	0
Maine	—	—	—	—	—	—
Maryland	1	1	1	1	0	0
Massachusetts	2	1	2	1	0	0
Michigan	2	0	2	0	0	0
Minnesota	2	0	1	0	1	0
Mississippi	—	—	—	—	—	—
Missouri	3	1	3	1	0	0
Montana	7	1	6	1	1	0
Nebraska	1	0	1	0	0	0
Nevada	0	0	0	0	0	0
New Hampshire	4	1	3	0	1	1
New Jersey	7	3	5	1	2	2
New Mexico	0	0	0	0	0	0
New York	0	0	0	0	0	0
North Carolina	—	—	—	—	—	—
North Dakota	2	0	2	0	0	0
Oregon	0	0	0	0	0	0
Rhode Island	1	0	1	0	0	0
South Carolina	0	0	0	0	0	0
Tennessee	—	—	—	—	—	—
Texas	1	1	1	1	0	0
Utah	4	4	4	4	0	0
Vermont	3	0	3	0	0	0
Virginia	—	—	—	—	—	—
Washington	0	0	0	0	0	0
West Virginia	—	—	—	—	—	—
Wisconsin	1	0	1	0	0	0
Wyoming	6	0	6	0	0	0
DDESS	—	—	—	—	—	—
DoDDS	—	—	—	—	—	—
Guam	1	0	0	0	1	0

National results are based on the national assessments samples, not on aggregated state assessment program samples.

SD = Students with Disabilities (the term previously used was IEP).

LEP = Limited English Proficient student.

To be excluded, a student was supposed to be classified as SD or as LEP and judged incapable of participating in the assessment.

A student reported as belonging to both SD and LEP classifications is counted once in the overall rate (first column), once in the overall excluded rate (second column), and separately in the remaining columns.

DDESS: Department of Defense Domestic Dependent Elementary and Secondary Schools

DoDDS: Department of Defense Dependents Schools (Overseas)

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1996 Mathematics Assessment.

## ***Data Analysis and IRT Scaling***

Subsequent to the professional scoring, all information was transcribed to the NAEP database at ETS. Each processing activity was conducted with rigorous quality control. After the assessment information had been compiled in the database, the data were weighted according to the population structure. The weighting for the national and state samples reflected the probability of selection for each student as a result of the sampling design, adjusted for nonresponse. Through stratification, the weighting assured that the representation of certain subpopulations corresponded to figures from the U.S. Census and the Current Population Survey.<sup>5</sup>

Analysis were then conducted to determine the percentages of students who gave various responses to each cognitive and background question. In determining these percentages for the cognitive questions, a distinction was made between missing responses at the end of a block (i.e., missing responses subsequent to the last question the student answered) and missing responses prior to the last observed response. Missing responses before the last observed response were considered intentional omissions. Missing responses at the end of the block were considered “not reached” and treated as if the questions had not been presented to the student. In calculating response percentages for each question, only students classified as having been presented the question were included in the denominator of the statistic.

It is standard ETS practice to treat all nonrespondents to the last question in a block as if they had not reached the question. For multiple-choice and short constructed response questions, this practice produces a reasonable pattern of results in that the proportion reaching the last question is not dramatically smaller than the proportion reaching the next-to-last question. However, for blocks that ended with extended constructed-response questions, the standard ETS practice would result in extremely large drops in the proportion of students attempting the final question. Therefore, for blocks ending with an extended constructed-response question, students who answered the next-to-last question but did not respond to the extended constructed-response question were classified as having intentionally omitted the last question.

Item response theory (IRT) was used to estimate average mathematics scale scores for the nation, for various subgroups of interest within the nation, and for the states and territories. IRT models the probability of answering a question in a certain way as a mathematical function of proficiency or skill. The main purpose of IRT analysis is to provide a common scale on which performance can be compared across groups such as those defined by grades and characteristics, including gender and race/ethnicity.

Because of the BIB-spiraling design used by NAEP, students do not receive enough questions about a specific topic to provide reliable information about individual performance. Traditional test scores for individual students, even those based on IRT, would lead to misleading estimates of population characteristics, such as subgroup means and percentages of students at or above a certain scale score level. Consequently, NAEP constructs sets of plausible values designed to represent the distribution of performance in the population.

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<sup>5</sup> For additional information about the use of weighting procedures in NAEP, see Johnson, E.G. (1989, December). *Journal of Educational Statistics*, 14(4), 303-334.



A plausible value for an individual is not a scale score for that individual but may be regarded as a representative value from the distribution of potential scale scores for all students in the population with similar characteristics and identical patterns of item response. Statistics describing performance on the NAEP mathematics scale are based on the plausible values. They estimate values that would have been obtained had individual scale scores been observed—that is, had each student responded to a sufficient number of cognitive questions so that scores could be precisely estimated.<sup>6</sup>

For the 1990, 1992, and 1996 mathematics assessments, a scale ranging from 0 to 500 was created to report performance for each content strand. The scales summarize student performance across all three question types in the assessment (multiple-choice, short constructed-response, and extended constructed-response).

Each content strand scale is based on the distribution of student performance across all three grades in the national assessment (grades 4, 8, and 12). The scales have an average of 250 and a standard deviation of 50. In addition, a composite scale was created as an overall measure of students' mathematical performance. This composite scale is a weighted average of the separate scales for the content strands. The weight for each content strand corresponds to the relative importance of each strand in the NAEP 1996 mathematics framework.

In producing the mathematics scales, three distinct IRT models were used. Multiple-choice questions were scaled using the three-parameter logistic (3PL) model; short constructed-response questions rated as correct or incorrect were scaled using the two-parameter logistic (2PL) model; and short constructed-response questions rated according to a three-level rubric, as well as extended constructed-response questions rated on a four- or five-level rubric, were scaled using a generalized partial-credit (GPC) model.<sup>7</sup> Developed by ETS and first used in 1992, the GPC model permits the scaling of questions scored according to multipoint rating schemes. The model takes full advantage of the information available from each of the student response categories used for these more complex constructed-response questions.

The mathematics scale is composed of three types of questions: multiple-choice, constructed-response (scored dichotomously as correct or incorrect) and constructed-response (scored according to a partial-credit model). One natural question about the scale concerns the amount of information contributed by each type of question. Unfortunately, this question has no simple answer for the NAEP mathematics assessment, due to the complex procedures used to form the composite mathematics scale.

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<sup>6</sup> For theoretical and empirical justification of the procedures employed, see Mislevy, R.J. (1988). Randomization-based inferences about latent variables from complex samples. *Psychometrika*, 56(2), 177-196.

For computational details, see National Assessment of Educational Progress. (1990). *Focusing the new design: NAEP 1988 technical report*, and the *1990 NAEP technical report*. Princeton, NJ: Educational Testing Service.

<sup>7</sup> Muraki, E. (1992). A generalized partial credit model: Application of an EM algorithm. *Applied Psychological Measurement*, 16(2), 159-176.



The information provided by a given question is determined by the IRT model used to scale the question and is a function of its item parameters.<sup>8</sup> Thus, the answer to the query “How much information do the different types of questions provide?” will differ for each level of mathematics performance. When considering the composite mathematics scale, the answer is even more complicated. The mathematics data are scaled separately by the content strands. The composite scale is a weighted combination of these subscales. IRT information functions are only strictly comparable when they are derived from the same calibration. Because the composite scale is based on five separate calibrations, there is no direct way to compare the information provided by the questions on the composite scale.

### ***NAEP Reporting Groups***

In this report, results are provided for groups of students defined by shared characteristics—region of the country, gender, race or ethnicity, parental education, type of school, participation in Title I programs, and eligibility for the Free/Reduced-Price School Lunch program. Based on criteria described later in this appendix, results are reported for subpopulations only when sufficient numbers of students and adequate school representation are present. For public school students, the minimum requirement is at least 62 students in a particular subgroup from at least 5 primary sampling units (PSUs).<sup>9</sup> For nonpublic school students, the minimum requirement is 62 students from at least 6 different schools for the state assessment program or from at least 5 PSUs for the national assessment. However, the data for all students, regardless of whether their subgroup was reported separately, were included in computing overall results. Definitions of the subpopulations referred to in this report are presented below.

#### ***Region***

Results are reported for four regions of the nation: Northeast, Southeast, Central, and West. Figure A.2 shows how states are subdivided into these regions. All 50 states and the District of Columbia are listed. Territories and the two Department of Defense Educational Activities jurisdictions are not assigned to any region.

Regional results are based on national assessment samples, not on aggregated state assessment program samples. Thus, the regional results are based on a sample that is different and separate from that used to report the state results.

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<sup>8</sup> Donoghue, J.R. (1994). An empirical examination of the IRT information of polytomously scored reading items under the generalized partial credit model. *Journal of Educational Measurement*, 31(4), 295-311.

Muraki, E. (1993). Information functions of the generalized partial credit model. *Applied Psychological Measurement*, 17(4), 351-363.

<sup>9</sup> For the national assessment, a PSU is a selected geographic region (a county, group of counties, or metropolitan statistical area.). For the state assessment program, a PSU is most often a single school.

**Figure A.2****Regions of the Country**

Northeast	Southeast	Central	West
Connecticut	Alabama	Illinois	Alaska
Delaware	Arkansas	Indiana	Arizona
District of Columbia	Florida	Iowa	California
Maine	Georgia	Kansas	Colorado
Maryland	Kentucky	Michigan	Hawaii
Massachusetts	Louisiana	Minnesota	Idaho
New Hampshire	Mississippi	Missouri	Montana
New Jersey	North Carolina	Nebraska	Nevada
New York	South Carolina	North Dakota	New Mexico
Pennsylvania	Tennessee	Ohio	Oklahoma
Rhode Island	Virginia*	South Dakota	Oregon
Vermont	West Virginia	Wisconsin	Texas
Virginia*			Utah
			Washington
			Wyoming

\* Note: The part of Virginia that is included in the Washington, DC metropolitan area is included in the Northeast region; the remainder of the state is included in the Southeast region.

***Gender***

Results are reported separately for males and females.

***Race/Ethnicity***

The race/ethnicity variable is derived from two questions asked of students and school records, and it is used for race/ethnicity subgroup comparisons. Two questions from the set of general student background questions were used to determine race/ethnicity:

If you are Hispanic, what is your Hispanic background?

- I am not Hispanic
- Mexican, Mexican American, or Chicano
- Puerto Rican
- Cuban
- Other Spanish or Hispanic background

Students who responded to this question by filling in the second, third, fourth, or fifth oval were considered Hispanic. For students who filled in the first oval, did not respond to the question, or provided information that was illegible or could not be classified, responses to the following question were examined to determine their race/ethnicity.

<p>Which best describes you?</p> <ul style="list-style-type: none"><li><input type="radio"/> White (not Hispanic)</li><li><input type="radio"/> Black (not Hispanic)</li><li><input type="radio"/> Hispanic (“Hispanic” means someone who is Mexican, Mexican American, Chicano, Puerto Rican, Cuban, or other Spanish or Hispanic background)</li><li><input type="radio"/> Asian or Pacific Islander (“Asian or Pacific Islander” means someone who is from a Chinese, Japanese, Korean, Filipino, Vietnamese, or other Asian or Pacific Islander background.)</li><li><input type="radio"/> American Indian or Alaskan Native (“American Indian or Alaskan Native” means someone who is from one of the American Indian tribes or one of the original people of Alaska.)</li><li><input type="radio"/> Other (specify) _____</li></ul>
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Students’ race/ethnicity was then assigned on the basis of their responses. For students who filled in the seventh oval (“Other”) and provided illegible information or information that could not be classified or who did not respond at all, race/ethnicity was assigned as determined by school records.<sup>10</sup>

Race/ethnicity could not be determined for students who did not respond to either of the demographic questions and whose schools did not provide information about race/ethnicity.

Details of how race/ethnicity classifications were derived is presented so that readers can determine how useful the results are for their particular purposes. Also, some students indicated that they were from a Hispanic background (e.g., Puerto Rican or Cuban) and that a racial/ethnic category other than Hispanic best described them. These students were classified as Hispanic based on the rules described above. Furthermore, information from the schools did not always correspond to how students described themselves. Therefore, the racial/ethnic results presented in this report attempt to provide a clear picture based on several sources of information.

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<sup>10</sup>The procedure for assigning race/ethnicity was modified for Hawaii. See the forthcoming *NAEP 1996 Technical Report for the State Assessment Program in Mathematics* for details.

### ***Parents' Highest Level of Education***

The variable representing the level of parental education is derived from responses to two questions from the set of general student background questions. Students were asked to indicate the extent of their mother's education.

How far in school did your mother go?

- She did not finish high school.
- She graduated from high school.
- She had some education after high school.
- She graduated from college.
- I don't know.

Students were asked a similar question about their father's education level.

How far in school did your father go?

- He did not finish high school.
- He graduated from high school.
- He had some education after high school.
- He graduated from college.
- I don't know.

The information was combined into one parental education reporting variable determined through the following process. If a student indicated the extent of education for only one parent, that level was included in the data. If a student indicated the extent of education for both parents, the higher of the two levels was included in the data. If a student did not know the level of education for both parents or did not know the level for one parent and did not respond for the other, the parental education level was classified as "I don't know." If the student did not respond for either parent, the student was recorded as having provided no response. (Nationally, 36 percent of fourth graders and 11 percent of eighth graders reported that they did not know the education level of either of their parents.)

### ***Type of School***

Results are reported by the type of school that the student attends—public or nonpublic. Nonpublic schools include Catholic and other private schools. Although Bureau of Indian Affairs (BIA) schools and Department of Defense Domestic Dependent Elementary and Secondary Schools (DDESS) are not included in either the public or nonpublic categories, they are included in the overall national results. (A separate sample for DDESS was included as a jurisdiction in the state assessment.)

### ***Title I Participation***

Based on available school records, students were classified either as currently participating in a Title I program or receiving Title I services or as not receiving such services. The classification applies only to the school year when the assessment was administered (i.e., the 1995–96 school year) and is not based on participation in previous years. If the school does not offer any Title I programs or services, all students in that school would be classified as not participating.

### ***Eligibility for the Free/Reduced-Price School Lunch Program***

Based on available school records, students were classified as either currently eligible for the free/reduced-price lunch component of the Department of Agriculture’s National School Lunch Program or not eligible. The classification applies only to the school year when the assessment was administered (i.e., the 1995–96 school year) and is not based on eligibility in previous years. If school records were not available, the student was classified as “Information not available.” If the school did not participate in the program, all students in that school were classified as “Information not available.”

### ***Cautions in Interpretations***

As described earlier, the NAEP mathematics scale makes it possible to examine relationships between students’ performance and various background factors measured by NAEP. However, a relationship that exists between achievement and another variable does not reveal its underlying cause, which may be influenced by a number of other variables. Similarly, the assessments do not capture the influence of unmeasured variables. The results are most useful when they are considered in combination with other knowledge about the student population and the educational system, such as trends in instruction, changes in the school-age population, and societal demands and expectations.

### ***Guidelines for Analysis and Reporting***

This report describes mathematics performance for fourth and eighth graders and compares the results for various groups of students within these populations (e.g., those who have certain demographic characteristics or who responded to a specific background question in a particular way.) It also examines the results for individual demographic groups and individual background questions. However, it does not include an analysis of the relationships among combinations of these subpopulations or background questions.

### ***Estimating Variability***

Because the statistics presented in this report are estimates of group and subgroup performance based on samples of students rather than the estimates that could be calculated if every student in the nation answered every question, the degree of uncertainty associated with the estimates should be taken into account. Two components of uncertainty are accounted for in the variability of statistics based on student ability: (1) the uncertainty due to sampling only a relatively small number of students and (2) the uncertainty due to sampling only a relatively small number of cognitive questions. The first component accounts for the variability associated with the estimated percentages of students who had certain background characteristics or who answered a certain cognitive question correctly.

Because NAEP uses complex sampling procedures, conventional formulas for estimating sampling variability that assume simple random sampling are inappropriate. NAEP uses a jackknife replication procedure to estimate standard errors. The jackknife standard error provides a reasonable measure of uncertainty for any student information that can be observed without error. However, because each student typically responds to only a few questions within any content strand, the scale score for any single student would be imprecise. In this case, plausible values technology can be used to describe the performance of groups and subgroups of students, but the underlying imprecision involved in this step adds another component of variability to statistics based on NAEP scale scores.<sup>11</sup>

Typically, when the standard error is based on a small number of students or when the group of students is enrolled in a small number of schools, the amount of uncertainty associated with the standard errors may be quite large. Throughout this report, estimates of standard errors subject to a large degree of uncertainty are followed by the “!” symbol. In such cases, the standard errors—and any confidence intervals or significance tests involving these standard errors—should be interpreted cautiously. Additional details concerning procedures for identifying such standard errors are discussed in the forthcoming NAEP 1996 *Technical Report*.

The reader is reminded that, like findings from all surveys, NAEP results are subject to other kinds of error, including the effects of imperfect adjustment for student and school nonresponse and unknowable effects associated with the particular instrumentation and data collection methods. Nonsampling errors can be attributed to a number of sources—inability to obtain complete information about all selected schools in the sample (some students or schools refused to participate, or students participated but answered only certain questions); ambiguous definitions; differences in interpreting questions; inability or unwillingness to give correct information; mistakes in recording, coding, or scoring data; and other errors in collecting, processing, sampling, and estimating missing data. The extent of nonsampling error is difficult to estimate, and because of their nature, the impact of such errors cannot be reflected in the data-based estimates of uncertainty provided in NAEP reports.

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<sup>11</sup> For further details, see Johnson, E.G., & Rust, K.F. (1992). Population inferences and variance estimation for NAEP data. *Journal of Educational Statistics*, 17(2), 175-190.

### ***Drawing Inferences from the Results***

Because the percentages of students in these subpopulations and their average scale scores are based on samples rather than on the entire population of fourth or eighth graders in the nation or a jurisdiction, the numbers reported are estimates. As such, they are subject to a measure of uncertainty, reflected in the standard error of the estimate. When the percentages or average scale scores of certain groups are compared, the standard error should be taken into account, and observed similarities or differences should not be relied on solely. Therefore, the comparisons discussed in this report are based on statistical tests that consider the standard errors of those statistics and the magnitude of the difference among the averages or percentages.

The results from the sample taking into account the uncertainty associated with all samples are used to make inferences about the population. Using confidence intervals based on the standard errors provides a way to make inferences about the population averages and percentages in a manner that reflects the uncertainty associated with the sample estimates. An estimated sample average scale score  $\pm 2$  standard errors approximates a 95-percent confidence interval for the corresponding population quantity. This statement means that one can conclude with approximately a 5 percent level of significance that the average performance of the entire population of interest (e.g., all fourth-grade students in public schools in a jurisdiction) is within  $\pm 2$  standard errors of the sample average.

As an example, suppose that the average mathematics scale score of the students in a particular group was 256 with a standard error of 1.2. A 95-percent confidence interval for the population quantity would be as follows:

$$\begin{aligned} & \text{Average} \pm 2 \text{ standard errors} \\ & 256 \pm 2 \times 1.2 \\ & 256 \pm 2.4 \\ & 253.6, 258.4 \end{aligned}$$

Thus, one can conclude with a 5 percent level of significance that the average scale score for the entire population of students in that group is between 253.6 and 258.4.

Similar confidence intervals can be constructed for percentages, if the percentages are not extremely large or extremely small. For extreme percentages, confidence intervals constructed in the above manner may not be appropriate, and accurate confidence intervals can be constructed only by using procedures that are quite complicated.

Extreme percentages, defined by both the magnitude of the percentage and the size of the sample from which it was derived, should be interpreted with caution. (The forthcoming *NAEP 1996 Technical Report* contains a more complete discussion of extreme percentages.)

### **Analyzing Group Differences in Averages and Percentages**

The statistical tests determine whether the evidence, based on the data from the groups in the sample, is strong enough to conclude that the averages or percentages are actually different for those groups in the population. If the evidence is strong (i.e., the difference is statistically significant), the report describes the group averages or percentages as being different (e.g., one group performed higher than or lower than another group), regardless of whether the sample averages or percentages appear to be approximately the same. If the evidence is not sufficiently strong (i.e., the difference is not statistically significant), the averages or percentages are described as being not significantly different, regardless of whether the sample averages or percentages appear to be approximately the same or widely discrepant.

The reader is cautioned to rely on the results of the statistical tests rather than on the apparent magnitude of the difference between sample averages or percentages when determining whether the sample differences are likely to represent actual differences among the groups in the population.

To determine whether a real difference exists between the average scale scores (or percentages of a certain attribute) for two groups in the population, one needs to obtain an estimate of the degree of uncertainty associated with the difference between the averages (or percentages) of these groups for the sample. This estimate of the degree of uncertainty, called the standard error of the difference between the groups, is obtained by taking the square of each group's standard error, summing the squared standard errors, and taking the square root of that sum.

$$\text{Standard Error of the Difference} = SE_{A-B} = \sqrt{SE_A^2 + SE_B^2}$$

Similar to how the standard error for an individual group average or percentage is used, the standard error of the difference can be used to help determine whether differences among groups in the population are real. The difference between the averages or percentages of the two groups  $\pm$  two standard errors of the difference represents an approximate 95-percent confidence interval. If the resulting interval includes zero, there is insufficient evidence to claim a real difference between the groups in the population. If the interval does not contain zero, the difference between the groups is statistically significant (different) at the 0.05 level. In this report, differences among groups that involve poorly defined variability estimates (i.e., denoted with a !) or extreme percentages are not discussed.

As an example, to determine whether the average mathematics scale score of Group A is higher than that of Group B, suppose that the sample estimates of the average scale scores and standard errors were as follows:

<b>Group</b>	<b>Average Scale Score</b>	<b>Standard Error</b>
A	218	0.9
B	216	1.1



The difference between the estimates of the average scale scores of Groups A and B is two points (218 - 216). The standard error of this difference is

$$\sqrt{0.9^2 + 1.1^2} = 1.4$$

Thus, an approximate 95-percent confidence interval for this difference is

Difference  $\pm$  2 standard errors of the difference

$$2 \pm 2 \times 1.4$$

$$2 \pm 2.8$$

$$-0.8, 4.8$$

The value zero is within the confidence interval, therefore, there is insufficient evidence to claim that Group A outperformed Group B.

The procedures described in this section and the certainty ascribed to intervals (e.g., a 95-percent confidence interval) are based on statistical theory that assumes that only one confidence interval or test of statistical significance is being performed. However, throughout this compendium 1996 results are statistically compared to 1992 and 1990 results for all jurisdictions that have available data. Thus, large sets of confidence intervals are being simultaneously analyzed. In sets of confidence intervals, statistical theory indicates that the certainty associated with the entire set of intervals is less than that attributable to each individual comparison from the set. To hold the significance level for the set of comparisons at a particular level (e.g., 0.05), adjustments (called multiple comparison procedures) must be made to the methods described above.

For the cross-state trend comparisons reported here, the False Discovery Rate (FDR) procedure<sup>12</sup> was used to control the certainty level. Unlike some of the more familiar multiple comparison procedures (e.g. the Bonferroni method<sup>13</sup>) which controls the familywise error rate (i.e., the probability of making even one false rejection in the set of comparisons), the FDR procedure controls the expected proportion of falsely rejected hypotheses. Procedures like the Bonferroni method are considered conservative for large families of comparisons.<sup>14</sup> The FDR procedure is more suitable for cross-state comparisons where large numbers of statistical tests are being simultaneously analyzed. A detailed description of the FDR procedure appears in *NAEP 1996 Technical Report* and *NAEP 1996 Technical Report for the State Assessment Program in Mathematics*.

### ***Revisions to the NAEP 1990 and 1992 Mathematics Findings***

After the NAEP 1994 assessment has been conducted, two technical problems were discovered in the procedures used to develop the NAEP mathematics scale and achievement levels determined for the 1990 and 1992 mathematics assessments. These errors affected the

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<sup>12</sup> Benjamini, Y., & Hochberg, Y. (1995). Controlling the false discovery rate: A practical and powerful approach to multiple testing. *Journal of the Royal Statistical Society, Series B*, 57(1), 289-300.

<sup>13</sup> Miller, R.G. (1966). *Simultaneous statistical inference*. New York: Springer-Verlag.

<sup>14</sup> Williams, V.S.L., Jones, L.V., & Tukey, J.W. (1994, December). *Controlling error in multiple comparisons with special attention to the National Assessment of Educational Progress*. Research Triangle Park, NC: National Institute of Statistical Sciences.

mathematics scale scores reported in 1992 and the achievement level results reported in 1990 and 1992. The National Center for Education Statistics (NCES) and the National Assessment Governing Board (NAGB) have evaluated the impact of these errors and have reanalyzed and reported the revised results from both mathematics assessments. The technical errors have been corrected and the revised national and state scale score results for 1992 and achievement level results for 1990 and 1992 are presented in the NAEP 1996 mathematics reports.

Although the two technical problems that were discovered are discussed in greater detail in the *NAEP 1996 Technical Report* and *NAEP 1996 Technical Report of the State Assessment in Mathematics*, a brief summary is presented below.

The first technical problem resulted from an error in the computer program used to compute NAEP scale score results. The error occurred in the convention used to handle omitted responses in the item response theory (IRT) scaling of the partial-credit constructed-response questions, and it was limited only to those questions. In analyses of the NAEP 1992 mathematics assessment, this error caused all blank responses to partial-credit constructed-response questions (both omitted and not-reached responses) to be treated as missing—an acceptable treatment, but not the conventional choice for NAEP. (Because the NAEP 1990 mathematics assessment did not include these types of questions, the error did not occur.) The national and state assessments results were recalculated using the intended convention for the treatment of omitted responses.

In general, the effect of this technical problem on the previously reported NAEP 1992 mathematics findings was minimal, and it had little impact on policy-related interpretations. The recalculated 1992 mathematics scale score results, at the national and state levels, are quite similar to those published in the 1992 mathematics reports.

The second technical problem involved the development of the NAEP mathematics achievement level cut scores, and it concerned the mapping of the NAGB-approved achievement levels onto the NAEP mathematics scale. This error affected the achievement level results reported for the 1990 and 1992 mathematics assessments. In deriving the final levels recommended to NAGB, panelists' ratings for the multiple-choice and constructed-response questions were combined to obtain an overall rating for the questions. When combined, the ratings were weighted based on the amount of information provided by each type of question. In other words, some of the questions "counted more" toward the overall cut scores than others. However, because the weighting was carried out incorrectly, the constructed-response questions received more weight than intended. Therefore, the cut scores established by mapping the achievement levels onto the NAEP mathematics scale were incorrect, and the percentages of students at or above these levels were incorrectly estimated.

The program that mapped the achievement levels to the NAEP scale was corrected to appropriately weight the constructed-response questions, and revised mathematics achievement level cut scores were developed based on the corrected scaling procedures. As a result, the cut scores for the three achievement levels at each grade were raised, and the percentages of students at or above the achievement levels were recalculated based on the corrected cut scores. Revised 1990 and 1992 percentages, for the national and state assessments, are presented in this report.

# Acknowledgments

This compendium is the culmination of the efforts of many individuals who contributed their considerable knowledge, experience, and creativity to the NAEP 1996 mathematics assessment. The NAEP 1996 mathematics state assessment was a collaborative effort among staff from the National Center for Education Statistics (NCES), the National Assessment Governing Board (NAGB), Educational Testing Service (ETS), Westat, Inc., and National Computer Systems (NCS). In addition, the program benefited from the contributions of hundreds of individuals at the state and local levels — governors, chief state school officers, state and district test directors, state coordinators, and district administrators — who provided their wisdom, experience, and hard work. Most importantly, NAEP is grateful to the over 239,000 students and the teachers and administrators in over 9,700 schools in 48 jurisdictions who made the assessment possible by contributing considerable amounts of time and effort.

The NAEP 1996 mathematics state assessment was funded through NCES, in the Office of Educational Research and Improvement of the U.S. Department of Education. The Commissioner of Education Statistics, Pascal D. Forgione, Jr., and the NCES staff — Peggy Carr, Arnold Goldstein, Steven Gorman, Gary W. Phillips, Maureen Treacy, and Shi-Chang Wu — worked collegially with the authors to produce this compendium. In particular, the authors appreciate the thorough review provided by Shi-Chang Wu and thank him for his comments and critical feedback.

The NAEP project at ETS is housed in the Center for the Assessment of Educational Progress under the direction of Paul Williams. The NAEP 1996 assessments were directed by Stephen Lazer and John Mazzeo. Jeff Haberstroh directed the scoring operations for the 1996 mathematics assessment. Sampling and data collection activities were conducted by Westat under the direction of Rene Slobasky, Nancy Caldwell, Keith Rust, Debby Vivari, and Dianne Walsh. Printing, distribution, scoring, and processing activities were conducted by NCS under the direction of Brad Thayer, Patrick Bourgeacq, Charles Brungardt, Mathilde Kennel, Linda Reynolds, and Connie Smith.

The complex statistical and psychometric activities necessary to report results for the NAEP 1996 mathematics assessment were directed by Nancy Allen, John Barone, James Carlson, and Juliet Shaffer. John Mazzeo and Gene Johnson provided direction on several critical psychometric issues. The analyses presented in this compendium were led by Frank Jenkins and Edward Kulick, with assistance from Hua Chang, Steve Wang, Xiaohui Wang, Hong Zhou, Jiahe Qian, Kate Pashley, David Freund, and Norma Norris.

Jennifer Nelson was responsible for the development and creation of the computer-generated tables, with assistance from Norma Norris and Sharon M. Davis-Johnson. A large group of NAEP staff at ETS — Karen Damiano, Alice Kass, Kellie Keiser, Donna Lembeck, Craig Pizzuti, and Barbette Tardugno — checked the data, text, and tables. Editorial review was provided by Christine Zelanak.

Cover design and production of the print version was directed by Carol Errickson, with the assistance of Sharon M. Davis-Johnson and Barbette Tardugno. The World Wide Web version of the compendium was produced by Pat O'Reilly and Phillip Leung, with assistance from Debbie Kline. The *NAEP 1996 Mathematics Data Compendium* for all participating jurisdictions is available via <http://nces.ed.gov/naep>.