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Institute of Education Sciences

the condition of education 2008

INDICATOR 13

Mathematics Performance of Students in Grades 4 and 8

The indicator and corresponding tables are taken directly from *The Condition of Education 2008*. Therefore, the page numbers may not be sequential.

Additional information about the survey data and supplementary notes can be found in the full report. For a copy of *The Condition of Education 2008*, visit the NCES website (http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2008031) or contact ED PUBs at 1-877-4ED-PUBS.

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U.S. Department of Education
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NCES 2008-031

Academic Outcomes

Mathematics Performance of Students in Grades 4 and 8

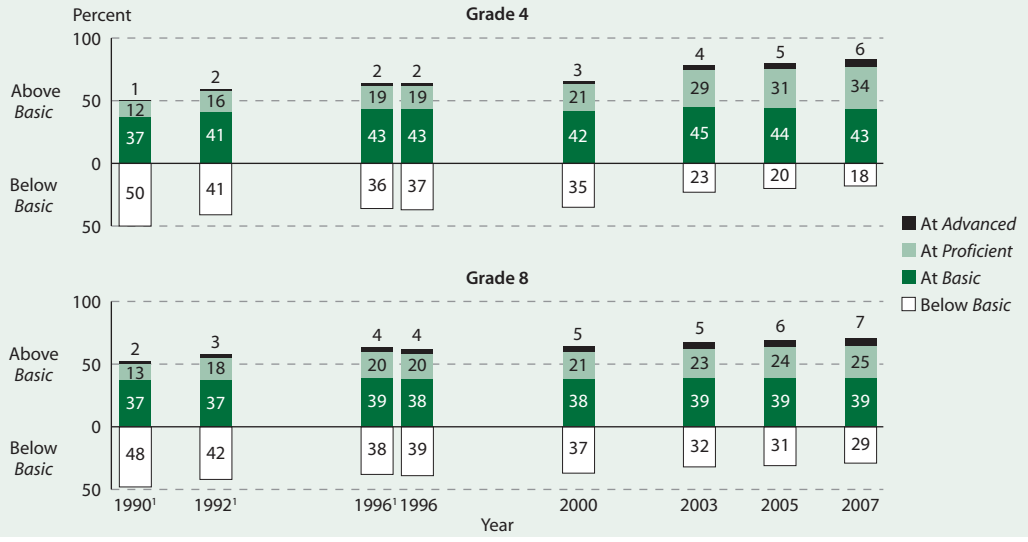
In 2007, students in grades 4 and 8 showed improvements from all previous assessments at all mathematics achievement levels.

The percentages of 4th- and 8th-grade students at or above *Basic*, at or above *Proficient*, and at *Advanced* achievement levels were higher in 2007 than the percentages for all previous mathematics assessments[1] (see supplemental table 13-1). For example, the percentage of 4th-grade students at or above *Proficient* increased by 3 percentage points from 2005 to 2007 and tripled from 1990 to 2007 (13 vs. 39 percent). For 8th-grade students, the percentage scoring at or above *Proficient* increased by 2 percentage points from 2005 to 2007 and doubled from 1990 to 2007 (15 vs. 32 percent).

From 1990 to 2007, the average NAEP mathematics scores increased 27 points for 4th-graders and 19 points for 8th-graders. Increases in scores were seen for both males and females and for most racial/ethnic groups. Both male and female 4th- and 8th-graders scored higher in 2007 than in any of the previous assessments (see supplemental table 13-2). In 2007, at each grade, males outscored females by 2 points; these score gaps were not measurably different from the gaps in either 2005 or 1990. For grade 4, average scores in 2007 for White, Black, Hispanic, and Asian/Pacific Islander students were higher than the scores in any of the previous assessments. Although the score for American Indian/Alaska Native 4th-graders increased over time, there was no measurable difference between their 2005 and 2007 scores. For grade 8, average scores in 2007 for White, Black, and Hispanic students were higher than in any of the previous assessments. The average score for 8th-grade Asian/Pacific Islander students was higher in 2007 than in 1990, but not measurably different from their 2005 score. No measurable differences were detected in the scores for American Indian/Alaska Native 8th-graders over the assessment years.

NAEP results also permit state-level comparisons of the abilities of 4th- and 8th-graders in public schools. There were 42 states that participated in both the 1992 and 2007 assessments for 4th grade and 38 states that participated in both the 1990 and 2007 assessments for 8th grade. For each of these participating states and at each grade level, there was an increase in the average score as well as in the percentages of students scoring at or above *Basic* and at or above *Proficient* (see supplemental table 13-3).

MATHEMATICS PERFORMANCE: Percentage distribution of 4th- and 8th-grade students across NAEP mathematics achievement levels: Selected years, 1990–2007



[1] Testing accommodations (e.g., extended time, small group testing) for children with disabilities and limited-English-proficient students were not permitted in 1990 and 1992, and students were tested with and without accommodations in 1996.

NOTE: The National Assessment of Educational Progress (NAEP) has assessed the mathematical abilities of students in grades 4 and 8 in public and private schools since 1990. NAEP mathematics scores range from 0 to 500. The achievement levels define what students should know and be able to do: *Basic* indicates partial mastery of fundamental skills; *Proficient* indicates demonstrated competency over challenging subject matter; and *Advanced* indicates superior performance. The percentage of students at or above *Proficient* includes students at the *Advanced* achievement level. Similarly, the percentage of students at or above *Basic* includes students at the *Basic*, those at the *Proficient*, and those at the *Advanced* achievement levels. See *supplemental note 4* for more information on NAEP. Calculations are based on unrounded numbers. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), selected years, 1990–2007 Mathematics Assessments, NAEP Data Explorer.

FOR MORE INFORMATION:

Supplemental Notes 1, 4

Supplemental Tables 13-1, 13-2, 13-3

NCES 2007-494

Indicator 16

Mathematics Performance of Students in Grades 4 and 8

Table 13-1. Average mathematics scale scores and percentage of students at each achievement level, by grade: Selected years, 1990–2007

Grade, scale score, and achievement level	1990[1]	1992[1]	1996[1]	1996	2000	2003	2005	2007
Grade 4								
Average scale score	213	220	224	224	226	235	238	240
Percentage at each achievement level								
Below *Basic*	50	41	36	37	35	23	20	18
At or above *Basic*	50	59	64	63	65	77	80	82
At or above *Proficient*	13	18	21	21	24	32	36	39
At *Advanced*	1	2	2	2	3	4	5	6
Grade 8								
Average scale score	263	268	272	270	273	278	279	281
Percentage at each achievement level								
Below *Basic*	48	42	38	39	37	32	31	29
At or above *Basic*	52	58	62	61	63	68	69	71
At or above *Proficient*	15	21	24	23	26	29	30	32
At *Advanced*	2	3	4	4	5	5	6	7
Grade 12								
Average scale score	([2])	([2])	([2])	([2])	([2])	([2])	150	—
Percentage at each achievement level								
Below *Basic*	([2])	([2])	([2])	([2])	([2])	([2])	39	—
At or above *Basic*	([2])	([2])	([2])	([2])	([2])	([2])	61	—
At or above *Proficient*	([2])	([2])	([2])	([2])	([2])	([2])	23	—
At *Advanced*	([2])	([2])	([2])	([2])	([2])	([2])	2	—

— Not available.

[1] Testing accommodations (e.g., extended time, small group testing) for children with disabilities and limited-English-proficient students were not permitted.

[2] The 2005 Grade 12 Mathematics Assessment was based on a new framework. The assessment includes more questions on algebra, data analysis, and probability to reflect changes in high school mathematics standards and coursework. Results could not be placed on the old National Assessment of Educational Progress (NAEP) scale and could not be directly compared with previous years; therefore, information on previous assessments are not shown. For more information on NAEP Grade 12 Mathematics Assessments, see http://www.nces.ed.gov/nationsreportcard/mathematics/.

NOTE: The NAEP mathematics scale ranges from 0 to 500 for grades 4 and 8 and ranges from 0 to 300 for grade 12. Beginning in 2003, the NAEP national sample for grades 4 and 8 was obtained by aggregating the samples from each state and the District of Columbia, rather than by obtaining an independently selected national sample. As a consequence, the size of the national samples for grades 4 and 8 increased, and smaller differences between years or between types of students were found to be statistically significant than would have been detected in previous assessments. The 2007 NAEP Mathematics Assessment was not administered to 12th-grade students. See *supplemental note 4* for more information on NAEP.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), selected years, 1990–2007 Mathematics Assessments, NAEP Data Explorer.

Mathematics Performance of Students in Grades 4 and 8

Table 13-2. Average mathematics scale scores, by grade and selected student and school characteristics: Selected years, 1990–2007

	Grade 4				Grade 8				Grade 12
Student or school characteristic	1990[1]	2000	2005	2007	1990[1]	2000	2005	2007	2005
Total	**213**	**226**	**238**	**240**	**263**	**273**	**279**	**281**	**150**
Sex									
Male	214	227	239	241	263	274	280	282	151
Female	213	224	237	239	262	272	278	280	149
Race/ethnicity[2]									
White	220	234	246	248	270	284	289	291	157
Black	188	203	220	222	237	244	255	260	127
Hispanic	200	208	226	227	246	253	262	265	133
Asian/Pacific Islander	225	‡	251	253	275	288	295	297	163
American Indian/Alaska Native	‡	208	226	228	‡	259	264	264	134
Parents' education									
Did not finish high school	—	—	—	—	242	253	259	263	130
Graduated from high school	—	—	—	—	255	261	267	270	138
Some education after high school	—	—	—	—	267	277	280	283	148
Graduated from college	—	—	—	—	274	286	290	292	161
Locale									
Metro-centric codes									
Central city	—	220	233	—	—	266	273	—	147
Urban fringe/large town	—	230	241	—	—	277	283	—	154
Rural/small town	—	226	238	—	—	275	279	—	148
Urban-centric codes									
City	—	—	—	235	—	—	—	275	—
Suburban	—	—	—	244	—	—	—	286	—
Town	—	—	—	238	—	—	—	280	—
Rural	—	—	—	240	—	—	—	282	—
Students in school eligible for free or reduced-price lunch									
10 percent or less	—	—	254	256	—	—	298	300	162
11–25 percent	—	—	247	248	—	—	289	292	155
26–50 percent	—	—	240	242	—	—	280	282	147
51–75 percent	—	—	232	234	—	—	268	271	136
More than 75 percent	—	—	220	222	—	—	254	259	122

— Not available.

‡ Reporting standards not met (too few cases).

[1] Testing accommodations (e.g., extended time, small group testing) for children with disabilities and limited-English-proficient students were not permitted.

[2] Race categories exclude persons of Hispanic ethnicity.

NOTE: The National Assessment of Educational Progress (NAEP) mathematics scale ranges from 0 to 500 for grades 4 and 8 and ranges from 0 to 300 for grade 12. Beginning in 2003, the NAEP national sample for grades 4 and 8 was obtained by aggregating the samples from each state and the District of Columbia, rather than by obtaining an independently selected national sample. As a consequence, the size of the national samples for grades 4 and 8 increased, and smaller differences between years or between types of students were found to be statistically significant than would have been detected in previous assessments. The 2007 NAEP Mathematics Assessment was not administered to 12th-grade students. See *supplemental note 4* for more information on NAEP.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), selected years, 1990–2007 Mathematics Assessments, NAEP Data Explorer.

Mathematics Performance of Students in Grades 4 and 8

Table 13-3. Average mathematics scale scores and achievement-level results for public school 4th- and 8th-graders, by state: 1990, 1992, and 2007

	Grade 4						Grade 8					
			Percentage of students						Percentage of students			
	Average score		At or above *Basic*		At or above *Proficient*		Average score		At or above *Basic*		At or above *Proficient*	
State	1992[1]	2007	1992[1]	2007	1992[1]	2007	1990[1]	2007	1990[1]	2007	1990[1]	2007
United States	**219**	**239***	**57**	**81***	**17**	**39***	**262**	**280***	**51**	**70***	**15**	**31***
Alabama	208	229*	43	70*	10	26*	253	266*	40	55*	9	18*
Alaska	—	237	—	79	—	38	—	283	—	73	—	32
Arizona	215	232*	53	74*	13	31*	260	276*	48	66*	13	26*
Arkansas	210	238*	47	81*	10	37*	256	274*	44	65*	9	24*
California	208	230*	46	70*	12	30*	256	270*	45	59*	12	24*
Colorado	221	240*	61	82*	17	41*	267	286*	57	75*	17	37*
Connecticut	227	243*	67	84*	24	45*	270	282*	60	73*	22	35*
Delaware	218	242*	55	87*	17	40*	261	283*	48	74*	14	31*
District of Columbia	193	214*	23	49*	5	14*	231	248*	17	34*	3	8*
Florida	214	242*	52	86*	13	40*	255	277*	43	68*	12	27*
Georgia	216	235*	53	79*	15	32*	259	275*	47	64*	14	25*
Hawaii	214	234*	52	77*	15	33*	251	269*	40	59*	12	21*
Idaho	222	241*	63	85*	16	40*	271	284*	63	75*	18	34*
Illinois	—	237	—	79	—	36	261	280*	50	70*	15	31*
Indiana	221	245*	60	89*	16	46*	267	285*	56	76*	17	35*
Iowa	230	243*	72	87*	26	43*	278	285*	70	77*	25	35*
Kansas	—	248	—	89	—	51	—	290	—	81	—	40
Kentucky	215	235*	51	79*	13	31*	257	279*	43	69*	10	27*
Louisiana	204	230*	39	73*	8	24*	246	272*	32	64*	5	19*
Maine	232	242*	75	85*	27	42*	—	286	—	78	—	34
Maryland	217	240*	55	80*	18	40*	261	286*	50	74*	17	37*
Massachusetts	227	252*	68	93*	23	58*	—	298	—	85	—	51
Michigan	220	238*	61	80*	18	37*	264	277*	53	66*	16	29*
Minnesota	228	247*	71	87*	26	51*	275	292*	67	81*	23	43*
Mississippi	202	228*	36	70*	6	21*	—	265	—	54	—	14
Missouri	222	239*	62	82*	19	38*	—	281	—	72	—	30
Montana	—	244	—	88	—	44	280	287*	74	79*	27	38*
Nebraska	225	238*	67	80*	22	38*	276	284*	68	74*	24	35*
Nevada	—	232	—	74	—	30	—	271	—	60	—	23
New Hampshire	230	249*	72	91*	25	52*	273	288*	65	78*	20	38*
New Jersey	227	249*	68	90*	25	52*	270	289*	58	77*	21	40*
New Mexico	213	228*	50	70*	11	24*	256	268*	43	57*	10	17*
New York	218	243*	57	85*	17	43*	261	280*	50	70*	15	30*
North Carolina	213	242*	50	85*	13	41*	250	284*	38	73*	9	34*
North Dakota	229	245*	72	91*	22	46*	281	292*	75	86*	27	41*
Ohio	219	245*	57	87*	16	46*	264	285*	53	76*	15	35*
Oklahoma	220	237*	60	82*	14	33*	263	275*	52	66*	13	21*
Oregon	—	236	—	79	—	35	271	284*	62	73*	21	35*
Pennsylvania	224	244*	65	85*	22	47*	266	286*	56	77*	17	38*

See notes at end of table.

Mathematics Performance of Students in Grades 4 and 8

Table 13-3. Average mathematics scale scores and achievement-level results for public school 4th- and 8th-graders, by state: 1990, 1992, and 2007 —Continued

	Grade 4						Grade 8					
			Percentage of students						Percentage of students			
	Average score		At or above *Basic*		At or above *Proficient*		Average score		At or above *Basic*		At or above *Proficient*	
State	1992[1]	2007	1992[1]	2007	1992[1]	2007	1990[1]	2007	1990[1]	2007	1990[1]	2007
Rhode Island	215	236*	54	80*	13	34*	260	275*	49	65*	15	28*
South Carolina	212	237*	48	80*	13	36*	—	282	—	71	—	32
South Dakota	—	241	—	86	—	41	—	288	—	81	—	39
Tennessee	211	233*	47	76*	10	29*	—	274	—	64	—	23
Texas	218	242*	56	87*	15	40*	258	286*	45	78*	13	35*
Utah	224	239*	66	83*	19	39*	—	281	—	72	—	32
Vermont	—	246	—	89	—	49	—	291	—	81	—	41
Virginia	221	244*	59	87*	19	42*	264	288*	52	77*	17	37*
Washington	—	243	—	84	—	44	—	285	—	75	—	36
West Virginia	215	236*	52	81*	12	33*	256	270*	42	61*	9	19*
Wisconsin	229	244*	71	85*	24	47*	274	286*	66	76*	23	37*
Wyoming	225	244*	69	88*	19	44*	272	287*	64	80*	19	36*

— Not available (state did not participate in assessment).

* Change in score is statistically significant from 1990 or 1992 ($p < .05$).

[1] Testing accommodations (e.g., extended time, small group testing) for children with disabilities and limited-English-proficient students were not permitted.

NOTE: State samples were not collected for grade 12; therefore, state results for grade 12 are not available. At the state level, the National Assessment of Educational Progress (NAEP) includes only students in public schools, while other reported national results in this indicator include both public and private school students. Variations or changes in exclusion rates for students with disabilities and limited-English-proficient students in the NAEP samples may affect comparative performance results. The 2007 NAEP national sample for grades 4 and 8 was obtained by aggregating the samples from each state and the District of Columbia, rather than by obtaining an independently selected national sample. As a consequence, the size of the national samples for grades 4 and 8 increased, and smaller differences between years or between types of students were found to be statistically significant than would have been detected in previous assessments. See *supplemental note 4* for more information on testing accommodations and on NAEP.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 2007 Mathematics Assessments, NAEP Data Explorer.

Mathematics Performance of Students in Grades 4 and 8

Table S13-1. Standard errors for the average mathematics scale scores and percentage of students at each achievement level, by grade: Selected years, 1990–2007

Grade, scale score, and achievement level	1990[1]	1992[1]	1996[1]	1996	2000	2003	2005	2007
Grade 4								
Average scale score	0.9	0.7	0.9	1.0	0.9	0.2	0.1	0.2
Percentage at each achievement level								
Below *Basic*	1.4	1.0	1.2	1.3	1.3	0.3	0.2	0.2
At or above *Basic*	1.4	1.0	1.2	1.3	1.3	0.3	0.2	0.2
At or above *Proficient*	1.2	1.0	0.9	1.1	1.0	0.3	0.2	0.3
At *Advanced*	0.4	0.3	0.3	0.3	0.3	0.1	0.1	0.1
Grade 8								
Average scale score	1.3	0.9	1.1	0.9	0.8	0.3	0.2	0.3
Percentage at each achievement level								
Below *Basic*	1.4	1.1	1.1	1.0	0.9	0.3	0.2	0.3
At or above *Basic*	1.4	1.1	1.1	1.0	0.9	0.3	0.2	0.3
At or above *Proficient*	1.1	1.0	1.1	1.0	0.8	0.3	0.2	0.3
At *Advanced*	0.3	0.4	0.5	0.4	0.4	0.1	0.1	0.2
Grade 12								
Average scale score	(2)	(2)	(2)	(2)	(2)	(2)	0.6	†
Percentage at each achievement level								
Below *Basic*	(2)	(2)	(2)	(2)	(2)	(2)	0.8	†
At or above *Basic*	(2)	(2)	(2)	(2)	(2)	(2)	0.8	†
At or above *Proficient*	(2)	(2)	(2)	(2)	(2)	(2)	0.7	†
At *Advanced*	(2)	(2)	(2)	(2)	(2)	(2)	0.2	†

†Not applicable.

[1] Testing accommodations (e.g., extended time, small group testing) for children with disabilities and limited-English-proficient students were not permitted.

[2] The 2005 Grade 12 Mathematics Assessment was based on a new framework. The assessment includes more questions on algebra, data analysis, and probability to reflect changes in high school mathematics standards and coursework. Results could not be placed on the old National Assessment of Educational Progress (NAEP) scale and could not be directly compared with previous years; therefore, information on previous assessments are not shown. For more information on NAEP Grade 12 Mathematics Assessments, see http://www.nces.ed.gov/nationsreportcard/mathematics/.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), selected years, 1990–2007 Mathematics Assessments, NAEP Data Explorer.

Mathematics Performance of Students in Grades 4 and 8

Table S13-2. Standard errors for the average mathematics scale scores, by grade and selected student and school characteristics: Selected years, 1990–2007

	Grade 4				Grade 8				Grade 12
Student or school characteristic	1990	2000	2005	2007	1990	2000	2005	2007	2007
Total	**0.9**	**0.9**	**0.1**	**0.2**	**1.3**	**0.8**	**0.2**	**0.3**	**0.6**
Sex									
Male	1.2	1.0	0.2	0.2	1.6	0.9	0.2	0.3	0.7
Female	1.1	0.9	0.2	0.2	1.3	0.9	0.2	0.3	0.7
Race/ethnicity									
White	1.0	0.8	0.1	0.2	1.3	0.8	0.2	0.3	0.6
Black	1.8	1.2	0.3	0.3	2.7	1.2	0.4	0.4	1.1
Hispanic	2.2	1.5	0.3	0.3	4.3	1.3	0.4	0.4	1.3
Asian/Pacific Islander	4.1	†	0.7	0.8	5.0	3.5	0.9	0.9	2.0
American Indian/Alaska Native	†	3.5	0.9	0.7	†	7.5	0.9	1.2	4.1
Parents' education									
Did not finish high school	†	†	†	†	2.0	1.4	0.5	0.5	1.5
Graduated from high school	†	†	†	†	1.6	1.0	0.3	0.4	1.1
Some education after high school	†	†	†	†	1.6	1.1	0.3	0.4	0.8
Graduated from college	†	†	†	†	1.5	1.0	0.2	0.3	0.6
Locale									
Metro-centric codes									
Central city	†	1.7	0.3	†	†	1.9	0.4	†	1.2
Urban fringe/large town	†	1.6	0.2	†	†	1.3	0.3	†	0.9
Rural/small town	†	1.4	0.3	†	†	1.6	0.4	†	1.0
Urban-centric codes									
City	†	†	†	0.4	†	†	†	0.5	†
Suburban	†	†	†	0.3	†	†	†	0.4	†
Town	†	†	†	0.5	†	†	†	0.6	†
Rural	†	†	†	0.3	†	†	†	0.5	†
Students in school eligible for free or reduced-price lunch									
10 percent or less	†	†	0.4	0.5	†	†	0.6	0.8	2.0
11–25 percent	†	†	0.3	0.4	†	†	0.5	0.5	1.4
26–50 percent	†	†	0.3	0.3	†	†	0.3	0.4	1.0
51–75 percent	†	†	0.3	0.3	†	†	0.4	0.6	1.3
More than 75 percent	†	†	0.3	0.4	†	†	0.6	0.7	2.4

† Not applicable.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), selected years, 1990–2007 Mathematics Assessments, NAEP Data Explorer.

Mathematics Performance of Students in Grades 4 and 8

Table S13-3. Standard errors for the average mathematics scale scores and achievement-level results for public school 4th- and 8th-graders, by state: 1990, 1992, and 2007

	Grade 4						Grade 8					
			Percentage of students						Percentage of students			
	Average score		At or above *Basic*		At or above *Proficient*		Average score		At or above *Basic*		At or above *Proficient*	
State	1992	2007	1992	2007	1992	2007	1990	2007	1990	2007	1990	2007
United States	**0.8**	**0.2**	**1.2**	**0.2**	**1.1**	**0.3**	**1.4**	**0.3**	**1.5**	**0.3**	**1.1**	**0.3**
Alabama	1.6	1.3	2.1	1.7	1.2	1.7	1.1	1.5	1.7	1.7	0.7	1.5
Alaska	†	1.0	†	1.2	†	1.5	†	1.1	†	1.3	†	1.4
Arizona	1.1	1.0	1.6	1.4	0.9	1.2	1.3	1.2	1.8	1.5	0.9	1.2
Arkansas	0.9	1.1	1.5	1.5	0.7	1.6	0.9	1.1	1.2	1.3	0.7	1.1
California	1.6	0.7	1.9	0.8	1.2	0.9	1.3	0.8	1.7	1.0	1.1	0.8
Colorado	1.0	1.0	1.4	1.3	1.0	1.6	0.9	0.9	1.2	1.0	1.0	1.2
Connecticut	1.1	1.1	1.6	1.3	1.4	1.6	1.0	1.5	1.4	1.6	0.9	1.6
Delaware	0.8	0.4	1.0	0.9	0.9	0.9	0.9	0.6	1.5	1.1	0.8	1.1
District of Columbia	0.5	0.8	0.9	1.4	0.3	0.7	0.9	0.9	1.0	1.2	0.6	0.6
Florida	1.5	0.8	1.7	0.8	1.4	1.4	1.2	1.3	1.4	1.4	0.9	1.4
Georgia	1.2	0.8	1.7	1.0	1.2	1.3	1.3	1.0	1.5	1.5	1.2	1.0
Hawaii	1.3	0.8	1.8	1.0	0.9	1.2	0.8	0.8	1.0	1.0	0.7	0.7
Idaho	1.0	0.7	1.7	0.9	1.0	1.3	0.8	0.9	1.2	1.1	1.1	1.3
Illinois	†	1.1	†	1.2	†	1.6	1.7	1.1	2.0	1.6	1.3	1.5
Indiana	1.0	0.8	1.7	0.9	1.1	1.5	1.2	1.1	1.5	1.4	1.1	1.4
Iowa	1.0	0.8	1.5	1.0	1.2	1.3	1.1	0.9	1.2	1.1	1.4	1.4
Kansas	†	0.9	†	0.8	†	1.7	†	1.1	†	1.1	†	1.5
Kentucky	1.0	0.9	1.5	1.0	1.2	1.4	1.2	1.1	1.7	1.5	0.8	1.2
Louisiana	1.5	1.0	2.0	1.4	0.8	1.3	1.2	1.1	1.6	1.8	0.6	1.2
Maine	1.0	0.8	1.5	1.0	1.5	1.3	†	0.8	†	1.1	†	1.2
Maryland	1.3	0.9	1.6	1.3	1.2	1.3	1.4	1.2	1.6	1.2	1.2	1.4
Massachusetts	1.2	0.8	1.6	0.7	1.5	1.5	†	1.3	†	1.1	†	1.7
Michigan	1.7	1.3	2.2	1.5	1.7	1.6	1.2	1.4	1.7	1.7	1.2	1.4
Minnesota	0.9	1.0	1.6	1.1	1.3	1.6	0.9	1.0	1.1	0.8	1.2	1.6
Mississippi	1.1	1.0	1.3	1.8	0.6	1.3	†	0.8	†	1.3	†	1.0
Missouri	1.2	0.9	1.7	1.0	1.3	1.5	†	1.0	†	1.5	†	1.3
Montana	†	0.8	†	0.8	†	1.4	0.9	0.7	1.5	1.0	1.4	1.1
Nebraska	1.2	1.1	1.8	1.4	1.6	1.6	1.0	1.0	1.3	1.2	1.2	1.4
Nevada	†	0.9	†	1.3	†	1.4	†	0.8	†	1.2	†	1.0
New Hampshire	1.2	0.8	1.6	0.7	1.6	1.5	0.9	0.7	1.5	1.0	1.2	1.1
New Jersey	1.5	1.1	2.1	0.9	1.5	2.0	1.1	1.2	1.5	1.4	1.1	1.6
New Mexico	1.4	0.9	2.0	1.4	1.3	1.3	0.7	0.9	1.2	1.6	0.9	1.1
New York	1.2	0.8	1.8	0.9	1.3	1.5	1.4	1.2	1.7	1.4	0.9	1.2
North Carolina	1.1	0.8	1.6	1.0	0.8	1.4	1.1	1.1	1.4	1.4	0.7	1.3
North Dakota	0.8	0.5	1.3	0.7	1.1	1.2	1.2	0.7	1.6	0.9	1.8	1.2
Ohio	1.2	1.0	1.7	1.1	1.2	1.6	1.0	1.2	1.6	1.4	1.1	1.5
Oklahoma	1.0	0.8	1.7	1.0	1.2	1.4	1.3	0.9	1.8	1.5	1.2	1.2
Oregon	†	1.0	†	1.1	†	1.5	1.0	1.1	1.4	1.1	1.1	1.3
Pennsylvania	1.3	0.8	2.0	0.9	1.5	1.3	1.6	1.1	2.0	1.3	1.3	1.3

See notes at end of table.

Mathematics Performance of Students in Grades 4 and 8

Table S13-3. Standard errors for the average mathematics scale scores and achievement-level results for public school 4th- and 8th-graders, by state: 1990, 1992, and 2007—Continued

	Grade 4						Grade 8					
			Percentage of students						Percentage of students			
	Average score		At or above *Basic*		At or above *Proficient*		Average score		At or above *Basic*		At or above *Proficient*	
State	1992	2007	1992	2007	1992	2007	1990	2007	1990	2007	1990	2007
Rhode Island	1.5	0.9	2.2	1.1	1.1	1.2	0.6	0.7	1.0	1.1	0.7	1.0
South Carolina	1.1	0.8	1.7	1.0	1.1	1.2	†	1.0	†	1.1	†	1.4
South Dakota	†	0.7	†	1.0	†	1.1	†	0.8	†	1.0	†	1.5
Tennessee	1.4	0.9	2.0	1.3	1.0	1.2	†	1.1	†	1.4	†	1.4
Texas	1.2	0.7	1.6	0.8	1.2	1.2	1.4	1.0	1.6	1.1	1.1	1.3
Utah	1.0	0.9	1.7	1.0	1.1	1.6	†	0.9	†	1.1	†	1.2
Vermont	†	0.5	†	0.7	†	1.3	†	0.7	†	1.0	†	1.3
Virginia	1.3	0.9	1.4	0.8	1.5	1.5	1.5	1.1	1.7	1.3	1.6	1.4
Washington	†	1.0	†	1.2	†	1.4	†	1.0	†	1.3	†	1.2
West Virginia	1.1	0.9	1.5	1.1	0.9	1.4	1.0	1.0	1.1	1.4	0.8	0.9
Wisconsin	1.1	0.9	1.4	1.0	1.4	1.5	1.3	1.1	1.6	1.4	1.4	1.3
Wyoming	0.9	0.5	1.4	0.7	1.1	1.0	0.7	0.7	1.3	1.1	0.9	1.6

† Not applicable.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 2007 Mathematics Assessments, NAEP Data Explorer.