



U.S. Department of Education

# Sample Questions



General Information about the Nation's Report Card

(good)

experience or study (an educated guess).

education /éjəkáyshən/ n. 1 a the act or propertience of the stage and educated; systematic instead education that is a particular of the knowledge gained from this. 2 a particular powers and education (a classical education of or stage in education (a classical education education).

education of stage in or aspect of this (trous education for you). 

powers. b a stage in or aspect of this (trous education for you). 

education for you). 

education education education education education education education education for you).

2007
Mathematics
Reading
Writing

**Grade 8** 

NAED	National				
NAEP	Assessment				
	of Educational				
	Progress				
	> "				
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Admin Schedule Line # from Session #

2007 **Grade 8**  **SECTION** R3 R11 3 D1RB1

**BOOK R021** 

School a	School and Teacher Information							
scho	OOL#	TEACHER #						
	Admin Code (Col. P)	Total Time For Accommodation (74 - EXT)						
	ADDITIONAL ACCOMMODATIONS OFFERED							
	(Code All That Apply)							
	<ul><li>No Additional Accom.</li><li>✓ 71 - BIB</li></ul>							
	♥ 71 - BIB ♥ 72 - BID							
	○ 72 5.5 ○ 73 - LRG							
	Ø 76 - 8							
	Ø 79 - 0							
	<b>⊘</b> 80 - E							
	♡ 81 - 1	MAG						
	♥ 82 - 8	SSA						

PLACE LABEL HERE

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A project of the Institute of Education Sciences.
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### **National Assessment of Educational Progress**

#### 2007 Sample Questions Booklet

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## **About This Sample Questions Booklet**

On behalf of the National Assessment of Educational Progress (NAEP), I want to thank you for your participation in this essential measure of student achievement in America. NAEP tells us what students in our country know and can do. In the coming year, fourth-, eighth- and twelfth-graders will participate in NAEP. Eighth-graders will participate in tests for mathematics, reading, and writing.

Assessments require about 90 minutes of a student's time, and each student answers questions in only one subject. The test booklet contains 50 minutes of test questions and a brief section of background questions.

NAEP is voluntary and confidential. Answers to all student questions are confidential, and before the materials leave the school, student names are removed from all assessment materials. Individual student scores are not reported.

Results of the mathematics and reading assessments will be released in *The Nation's Report Card*<sup>TM</sup> in the fall of 2007; writing results will be released in the spring of 2008. Assessment results are widely discussed in the press and are used by policymakers, educators, and researchers to make decisions about education policy and funding.

The usefulness of the national assessment results increases when parents, educators, and policymakers are able to study the proficiencies (or scores) along with information about student experience, the school environment, and opportunities for students to learn. Included in this booklet are all of the general student background questions for reading, writing, and mathematics. The student background questions provide educators and policymakers with valuable insight into the conditions and factors that influence student learning so that decision can be made that may maximize achievement for all students. Also included in this booklet are sample questions and selected responses to help give you a better understanding of what the assessment is like.

If you have any questions or comments regarding NAEP or would like to view previous Nation's Report Cards, please visit the NAEP web site at <a href="http://nces.ed.gov/nationsreportcard">http://nces.ed.gov/nationsreportcard</a>. Also available through the website is a Questions Tool (<a href="http://nces.ed.gov/nationsreportcard/itmrls">http://nces.ed.gov/nationsreportcard/itmrls</a>) which will allow you to review additional sample questions with sample answers.

Peggy G. Carr, Associate Commissioner Education Assessment National Center for Education Statistics

NAEP is administered by NCES, a principal component of the U.S. Department of Education's Institute of Education Sciences. Policy for the assessment, including its content and standards, is set by the independent, bipartisan National Assessment Governing Board (www.nagb.org).

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#### The Mathematics Assessment

The NAEP mathematics assessment measures students' ability to solve problems in five mathematics content strands: Number Properties and Operations; Measurement; Geometry; Data Analysis and Probability; and Algebra. Within each of these five content strands, students are asked questions that involve low, moderate, and high mathematical complexity.

The NAEP mathematics assessment includes multiple-choice questions, short-answer constructed-response questions, and extended constructed-response questions. The extended exercises allow students to communicate their ideas and demonstrate the reasoning they used to solve problems. The short-answer and extended-response questions make up approximately 50 percent of student assessment time. The assessment also incorporates the use of calculators, rulers, protractors, and ancillary materials such as spinners and geometric shapes in some parts of the assessment, but not all.

Scientific calculator use is permitted on approximately one-third of the test questions. NAEP provides calculators for all students. For more information regarding the mathematics assessment framework please visit <a href="http://nagb.org">http://nagb.org</a>.

### NAEP Mathematics Framework Distribution of Questions Across Content Strands

	Grade 8
Number Properties and Operations	20%
Measurement	15%
Geometry	20%
Data Analysis and Probability	15%
Algebra	30%

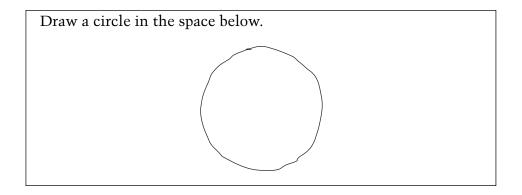
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#### **Mathematics Booklet Directions**

This assessment uses many different booklets. Each booklet has different questions. Do not worry if the person next to you is working on questions that do not look like those you are working on.

Read each question carefully and answer it as well as you can. Do not spend too much time on any one question.

For some of the questions you may need to write or draw the answer. You can see how this is done in the example below.



You may be given a calculator to use for at least one part of your booklet. If you are given a calculator, you will have to decide when to use it in each section where its use is permitted. For some questions using the calculator is helpful, but for other questions the calculator may not be helpful. After each question you will be asked to indicate whether you used the calculator.

When you receive the calculator, make sure you know how to use it. There are instructions on the back cover of this booklet to help you. If the calculator does not work or if you do not know how to use it, raise your hand and ask for help.

#### **REMEMBER:**

Read each question CAREFULLY.

Fill in only ONE OVAL for each question or write your answer in the space provided.

If you change your answer, ERASE your first answer COMPLETELY.

CHECK OVER your work if you finish a section early.



Do not go past the STOP sign at the end of each section until you are told to do so.



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## **Sample Mathematics Questions**Grade 8

1.	Of the foll	owing, v	vhich is	s the be	st unit	to use	when	measuring	the	growth	of a
	plant every	y other c	lay duri	ing a 2-	week pe	eriod?					

- Centimeter
- Meter
- Kilometer
- Foot
- Yard

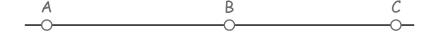
**2.** Jaime knows the following facts about points *A*, *B*, and *C*.

- Points *A*, *B*, and *C* are on the same line, but might not be in that order.
- Point *C* is twice as far from point *A* as it is from point *B*.

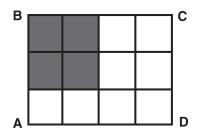
Jaime concluded that point *C* is always between points *A* and *B*.

Is Jaime's conclusion correct?

In the space provided, use a diagram to explain your answer.



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- **3.** In the figure above, what fraction of rectangle ABCD is shaded?
  - $\bigcirc \frac{1}{6}$
  - $\mathbb{B} \frac{1}{5}$
  - $\bigcirc \frac{1}{4}$
  - $\bullet$   $\frac{1}{3}$