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This report provides selected results for North Carolina's public school students at grades 4 and 8 from the National Assessment of Educational Progress (NAEP) assessment in mathematics. Results are reported by average scale scores and by achievement levels (*Basic*, *Proficient*, and *Advanced*).

State-level results in mathematics are available for eight assessment years (at grade 8 in 1990; and at both grades 4 and 8 in 1992, 1996, 2000, 2003, 2005, 2007, and 2009), although not all states may have participated or met the criteria for reporting in every year. All 50 states, the District of Columbia, and the Department of Defense Schools participated in the 2009 mathematics assessment at grades 4 and 8. For the first time in 2009, grade 12 mathematics results are also available for the 11 states that volunteered for the assessment and met the reporting criteria. Grade 12 results follow the grade 4 and 8 results in the NAEP reporting schedule.

For more information about the assessment, see the NAEP website <http://nces.ed.gov/nationsreportcard/> which contains

□□□ *The Nation's Report Card, Mathematics 2009*

- The full set of national and state results in an interactive database
- Released test questions, scoring guides, and question-level performance data

NAEP is a project of the National Center for Education Statistics (NCES), reporting on the academic achievement of elementary and secondary students in the United States.

## K E Y F I N D I N G S F O R 2 0 0 9

### Grade 4:

- In 2009, the average mathematics score for fourth-grade students in North Carolina was 244. This was higher than that of the nation's public schools (239).
- The average score for students in North Carolina in 2009 (244) was higher than that in 1992 (213) and was not significantly different from that in 2007 (242).
- In 2009, the percentage of students in North Carolina who performed at or above *Proficient* was 43 percent. This was greater than that for the nation's public schools (38 percent).
- The percentage of students in North Carolina who performed at or above *Proficient* in 2009 (43 percent) was greater than that in 1992 (13 percent) and was not significantly different from that in 2007 (41 percent).
- In 2009, the percentage of students in North Carolina who performed at or above *Basic* was 87 percent. This was greater than that for the nation's public schools (81 percent).
- The percentage of students in North Carolina who performed at or above *Basic* in 2009 (87 percent) was greater than that in 1992 (50 percent) and was not significantly different from that in 2007 (85 percent).

### Grade 8:

- In 2009, the average mathematics score for eighth-grade students in North Carolina was 284. This was higher than that of the nation's public schools (282).
- The average score for students in North Carolina in 2009 (284) was higher than that in 1990 (250) and was not significantly different from that in 2007 (284).
- In 2009, the percentage of students in North Carolina who performed at or above *Proficient* was 36 percent. This was not significantly different from that for the nation's public schools (33 percent).
- The percentage of students in North Carolina who performed at or above *Proficient* in 2009 (36 percent) was greater than that in 1990 (9 percent) and was not significantly different from that in 2007 (34 percent).
- In 2009, the percentage of students in North Carolina who performed at or above *Basic* was 74 percent. This was not significantly different from that for the nation's public schools (71 percent).
- The percentage of students in North Carolina who performed at or above *Basic* in 2009 (74 percent) was greater than that in 1990 (38 percent) and was not significantly different from that in 2007 (73 percent).

The U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP) has provided software that generated user-selectable data, statistical significance test result statements, and technical descriptions of the NAEP assessments for this report. Content may be added or edited by states or other jurisdictions. This document, therefore, is not an official publication of the National Center for Education Statistics.

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## Introduction

### What Was Assessed?

The content for each NAEP assessment is determined by the National Assessment Governing Board. The framework for each assessment documents the content and process areas to be measured and sets guidelines for the types of questions to be used. The mathematics frameworks were developed with the guidance of the Council of Chief State School Officers (CCSSO) and under the direction of the Governing Board. The current framework is available at the Governing Board's website <http://www.nagb.org/publications/frameworks/math-framework09.pdf>.

For grades 4 and 8, the mathematics framework for the 2009 assessment is similar to earlier versions that guided the 1990, 1992, 1996, 2000, 2003, 2005, and 2007 mathematics assessments. Although the frameworks are updated periodically, the mathematics content objectives for grades 4 and 8 have not changed, allowing students' performance in 2009 to be compared with previous years.

For 2005, the Governing Board adopted a new mathematics framework for grade 12 to reflect changes in high school standards and coursework. For 2009, the grade 12 mathematics framework was updated, adding objectives addressing mathematics content beyond that typically taught in a standard 3-year course of study in high school mathematics.

### Content Areas and Mathematical Complexity

The 2009 mathematics framework classifies assessment questions in two dimensions, *content area* and *mathematical complexity*, that are used to guide the assessment. Each question is designed to measure one of the five content areas. However, certain aspects of mathematics, such as computation, occur in all content areas. Although the names of the content areas (as well as some topics in those areas) have changed from one framework to the next, a consistent focus has remained on measuring student performance in all five content areas. The distribution of questions among each content area differs by grade to reflect the knowledge and skills appropriate for each grade level. At grade 12, the measurement and geometry content areas are combined into one for reporting purposes to reflect the fact that the majority of measurement topics suitable for grade 12 students are geometric in nature.

- **Number properties and operations** measures students' understanding of ways to represent, calculate, and estimate with numbers.
- **Measurement** measures students' knowledge of measurement attributes, such as capacity and temperature, and geometric attributes, such as length, area, and volume.
- **Geometry** measures students' knowledge and understanding of shapes in a plane and in space.
- **Data analysis, statistics, and probability** measures students' understanding of data representation, characteristics of data sets, experiments and samples, and probability.
- **Algebra** measures students' understanding of patterns, using variables, algebraic representation, and functions.

The mathematical complexity of a question refers to the level of cognitive demand it places on students. Each level of complexity includes aspects of knowing and doing mathematics, such as performing procedures, understanding concepts, or solving problems.

- **Low complexity** questions typically specify what a student is to do, which is often to carry out a routine mathematical procedure.
- **Moderate complexity** questions involve more flexibility of thinking and often require a response with multiple steps.
- **High complexity** questions make heavier demands and often require abstract reasoning or analysis in a novel situation.

## Assessment Design

Because of the breadth of the content covered in the NAEP mathematics assessment, each student took just a portion of the test, consisting of two 25-minute sections. Testing time was divided evenly between multiple-choice and constructed-response questions. Short constructed-response questions asked students to provide the answer for a numerical problem or to briefly describe the solution to a problem. Longer constructed-response questions required students to write both a solution and its justification, explanation, or interpretation. Released test questions, along with student performance data by state, are available on the NAEP website at <http://nces.ed.gov/nationsreportcard/itmrls/>.

Some questions in the 2009 assessment incorporated the use of calculators (four-function calculators at grade 4, and scientific or graphing calculators at grades 8 and 12), rulers, protractors (at grades 8 and 12), or manipulatives such as spinners and geometric shapes. Calculator use at all grades was permitted on approximately one-third of the assessment.

### Who Was Assessed?

All 50 states, the District of Columbia, and the Department of Defense Schools participated in the 2009 mathematics assessment at grades 4 and 8. For the first time in 2009, grade 12 mathematics results are also available for the following 11 states that met the reporting criteria: Arkansas, Connecticut, Florida, Idaho, Illinois, Iowa, Massachusetts, New Hampshire, New Jersey, South Dakota, and West Virginia.

The overall participation rates for schools and students must meet guidelines established by the National Center for Education Statistics (NCES) and the National Assessment Governing Board for assessment results to be reported publicly. A participation rate of at least 85 percent for schools in each subject and grade was required. Participation rates for the 2009 mathematics assessment are available on the NAEP website at [http://nationsreportcard.gov/math\\_2009/participation.asp](http://nationsreportcard.gov/math_2009/participation.asp).

The schools and students participating in NAEP assessments are selected to be representative both nationally and for public schools at the state level. The comparisons between national and state results in this report present the performance of public school students only. In NAEP reports, the category "nation (public)" does not include Department of Defense or Bureau of Indian Education schools.

## How Is Student Mathematics Performance Reported?

The 2009 state results are compared to results from six earlier assessments at grade 4 and from seven earlier assessments at grade 8. At grade 12, state results are available for 2009 only.

**Scale Scores:** Student performance is reported as an average score based on the NAEP mathematics scale, which ranges from 0 to 500 for grades 4 and 8, and from 0 to 300 for grade 12. Because NAEP scales are developed independently for each subject and for each content area within a subject, the scores cannot be compared across subjects or across content areas within the same subject. Results are also reported at five percentiles (10th, 25th, 50th, 75th, and 90th) to show trends in performance for lower-, middle-, and higher-performing students.

**Achievement Levels:** Based on recommendations from policymakers, educators, and members of the general public, the Governing Board sets specific achievement levels for each subject area and grade. Achievement levels are performance standards indicating what students should know and be able to do. They provide another perspective with which to interpret student performance. NAEP results are reported in terms of three achievement levels—*Basic*, *Proficient*, and *Advanced*—and are expressed in terms of the percentage of students who attained each level. The three achievement levels are defined as follows:

- *Basic* denotes partial mastery of prerequisite knowledge and skills that are fundamental for proficient work at each grade.
- *Proficient* represents solid academic performance for each grade assessed. Students reaching this level have demonstrated competency over challenging subject matter, including subject-matter knowledge, application of such knowledge to real-world situations, and appropriate analytical skills.
- *Advanced* represents superior performance.

The achievement levels are cumulative; therefore, students performing at the *Proficient* level also display the competencies associated with the *Basic* level, and students at the *Advanced* level also demonstrate the competencies associated with both the *Basic* and the *Proficient* levels.

As provided by law, NCES, upon review of congressionally mandated evaluations of NAEP, has determined that achievement levels are to be used on a trial basis and should be interpreted with caution. The NAEP achievement levels have been widely used by national and state officials. The mathematics achievement-level descriptions are summarized in figures 1-A and 1-B.

<b>Figure 1-A</b>	<b>The Nation's Report Card 2009 State Assessment</b>
	<b>Descriptions of fourth-grade achievement levels for 2009 NAEP mathematics assessment</b>

<b>Basic Level (214)</b>	Fourth-grade students performing at the <i>Basic</i> level should show some evidence of understanding the mathematical concepts and procedures in the five NAEP content areas.
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Fourth-graders performing at the *Basic* level should be able to estimate and use basic facts to perform simple computations with whole numbers, show some understanding of fractions and decimals, and solve some simple real-world problems in all NAEP content areas. Students at this level should be able to use—although not always accurately—four-function calculators, rulers, and geometric shapes. Their written responses are often minimal and presented without supporting information.

<b>Proficient Level (249)</b>	Fourth-grade students performing at the <i>Proficient</i> level should consistently apply integrated procedural knowledge and conceptual understanding to problem solving in the five NAEP content areas.
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Fourth-graders performing at the *Proficient* level should be able to use whole numbers to estimate, compute, and determine whether results are reasonable. They should have a conceptual understanding of fractions and decimals; be able to solve real-world problems in all NAEP content areas; and use four-function calculators, rulers, and geometric shapes appropriately. Students performing at the *Proficient* level should employ problem-solving strategies such as identifying and using appropriate information. Their written solutions should be organized and presented both with supporting information and explanations of how they were achieved.

<b>Advanced Level (282)</b>	Fourth-grade students performing at the <i>Advanced</i> level should apply integrated procedural knowledge and conceptual understanding to complex and nonroutine real-world problem solving in the five NAEP content areas.
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Fourth-graders performing at the *Advanced* level should be able to solve complex and nonroutine real-world problems in all NAEP content areas. They should display mastery in the use of four-function calculators, rulers, and geometric shapes. These students are expected to draw logical conclusions and justify answers and solution processes by explaining why, as well as how, they were achieved. They should go beyond the obvious in their interpretations and be able to communicate their thoughts clearly and concisely.

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NOTE: The scores in parentheses indicate the cut point on the scale at which the achievement-level range begins.  
 SOURCE: National Assessment Governing Board. (2008). *Mathematics Framework for the 2009 National Assessment of Educational Progress*. Washington, DC: Author.

<b>Figure 1-B</b>	<b>The Nation's Report Card 2009 State Assessment</b>
	<b>Descriptions of eighth-grade achievement levels for 2009 NAEP mathematics assessment</b>

<b>Basic Level (262)</b>	Eighth-grade students performing at the <i>Basic</i> level should exhibit evidence of conceptual and procedural understanding in the five NAEP content areas. This level of performance signifies an understanding of arithmetic operations—including estimation—on whole numbers, decimals, fractions, and percents.
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Eighth-graders performing at the *Basic* level should complete problems correctly with the help of structural prompts such as diagrams, charts, and graphs. They should be able to solve problems in all NAEP content areas through the appropriate selection and use of strategies and technological tools—including calculators, computers, and geometric shapes. Students at this level also should be able to use fundamental algebraic and informal geometric concepts in problem solving.

As they approach the *Proficient* level, students at the *Basic* level should be able to determine which of the available data are necessary and sufficient for correct solutions and use them in problem solving. However, these eighth-graders show limited skill in communicating mathematically.

<b>Proficient Level (299)</b>	Eighth-grade students performing at the <i>Proficient</i> level should apply mathematical concepts and procedures consistently to complex problems in the five NAEP content areas.
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Eighth-graders performing at the *Proficient* level should be able to conjecture, defend their ideas, and give supporting examples. They should understand the connections among fractions, percents, decimals, and other mathematical topics such as algebra and functions. Students at this level are expected to have a thorough understanding of *Basic* level arithmetic operations—an understanding sufficient for problem solving in practical situations.

Quantity and spatial relationships in problem solving and reasoning should be familiar to them, and they should be able to convey underlying reasoning skills beyond the level of arithmetic. They should be able to compare and contrast mathematical ideas and generate their own examples. These students should make inferences from data and graphs, apply properties of informal geometry, and accurately use the tools of technology. Students at this level should understand the process of gathering and organizing data and be able to calculate, evaluate, and communicate results within the domain of statistics and probability.

<b>Advanced Level (333)</b>	Eighth-grade students performing at the <i>Advanced</i> level should be able to reach beyond the recognition, identification, and application of mathematical rules in order to generalize and synthesize concepts and principles in the five NAEP content areas.
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Eighth-graders performing at the *Advanced* level should be able to probe examples and counterexamples in order to shape generalizations from which they can develop models. Eighth-graders performing at the *Advanced* level should use number sense and geometric awareness to consider the reasonableness of an answer. They are expected to use abstract thinking to create unique problem-solving techniques and explain the reasoning processes underlying their conclusions.

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NOTE: The scores in parentheses indicate the cut point on the scale at which the achievement-level range begins.  
 SOURCE: National Assessment Governing Board. (2008). *Mathematics Framework for the 2009 National Assessment of Educational Progress*. Washington, DC: Author.

### Assessing Students With Disabilities and/or English Language Learners

Testing accommodations, such as extra testing time or individual (rather than group) administration, are provided for students with disabilities (SD) or English language learners (ELL) who could not fairly and accurately demonstrate their abilities without modified test administration procedures. In 1996, administration procedures were introduced at the national level allowing certain accommodations for students requiring such accommodations to participate.

In state NAEP mathematics assessments prior to 2000, no testing accommodations or adaptations were permitted for SD or ELL students. In 2000, NAEP was administered using a split sample of schools—one sample in which accommodations were permitted for special-needs students who normally received them and another sample in which accommodations were not permitted. Therefore, there were two different sets of results available for 2000, and both are shown in the tables in this report. Results for the assessment years where accommodations were not permitted in state NAEP assessments (1990, 1992, 1996) are reported in the same tables as the results where accommodations were permitted (2000, 2003, 2005, 2007, 2009).

Even with the availability of accommodations, however, some students may still be excluded from the NAEP assessment. Due to differences in policies and practices regarding the identification and inclusion of SD and ELL students, variations in exclusion and accommodation rates should be considered when comparing students' performance over time and across states. The types of accommodations used in the 2009 NAEP mathematics assessment are available on the NAEP website at [http://nationsreportcard.gov/math\\_2009/type\\_accomm.asp](http://nationsreportcard.gov/math_2009/type_accomm.asp)

## **Interpreting Results**

The scores and percentages in this report are estimates based on samples of students rather than on entire populations. In addition, the collection of questions used at each grade level is only a sample of the many questions that could have been asked to assess the skills and abilities described in the NAEP framework. Therefore, the results are subject to a measure of uncertainty, reflected in the standard error of the estimates—a range of up to a few points above or below the score or percentage—which takes into account potential score fluctuation due to sampling error and measurement error. Statistical tests that factor in these standard errors are used to determine whether the differences between average scores or percentages are significant. All differences were tested for statistical significance at the .05 level using unrounded numbers.

NAEP sample sizes have increased since 2002 compared to previous years, resulting in smaller standard errors. As a consequence, smaller differences are detected as statistically significant than were detected in previous assessments. In addition, estimates based on smaller groups are likely to have relatively large standard errors. Thus, some seemingly large differences may not be statistically significant. That is, it cannot be determined whether these differences are due to sampling error, or to true differences in the population of interest.

Differences between scores or between percentages are discussed in this report only when they are significant from a statistical perspective. Significant differences between 2009 and prior assessments are marked with a notation (\*) in the tables. Any differences in scores within a year or across years that are mentioned in the text as "higher," "lower," "greater," or "smaller" are statistically significant.

The reader is cautioned against making simple causal inferences between student performance and the other variables (e.g., race/ethnicity, gender, and type of school location) discussed in this report. A statistically significant relationship between a variable and measures of student performance does not imply that the variable causes differences in how well students perform. The relationship may be influenced by a number of other variables not accounted for in this report, such as family income, parental involvement, or student attitudes.

## NAEP 2009 Mathematics Overall Scale Score and Achievement-Level Results for Public School Students

Overall mathematics results are reported in this section for public school students from North Carolina along with regional and national results.

Prior to 2000, testing accommodations were not provided for students with special needs in NAEP state mathematics assessments. For 2000, results are displayed for both the sample in which accommodations were permitted and the sample in which they were not permitted. Subsequent assessment results were based on the more inclusive samples. In the text of this report, comparisons to 2000 results refer only to the sample in which accommodations were permitted.

### Overall Scale Score Results

Student performance is reported as an average score based on the NAEP mathematics scale, which ranges from 0 to 500 for grades 4 and 8, and from 0 to 300 for grade 12.

Tables 1-A and 1-B show the overall performance results of grades 4 and 8 public school students in North Carolina, the nation (public), and the region. The list of states making up a given region for NAEP prior to 2003 differed from the list used by the U.S. Census Bureau, which has been used in NAEP from 2003 onward. Therefore, the data for the state's region are given only for 2003, 2005, 2007, and 2009. The first column of results presents the average score on the NAEP mathematics scale. The remaining columns show the scores at selected percentiles. A percentile indicates the percentages of students whose scores fell at or below a particular score. For example, the 25th percentile demarks the cut point for the lowest 25 percent of students within the distribution of scale scores.

### Grade 4 Scale Score Results

- In 2009, the average scale score for students in North Carolina was 244. This was higher than that of students across the nation (239).
- In North Carolina, the average scale score for students in 2009 was not significantly different from that in 2007 (242). Similarly, the average scale score for students in public schools across the nation in 2009 was not significantly different from that in 2007 (239).
- In North Carolina, the average scale score for students in 2009 was higher than the scores in 1992, 1996, 2000, and 2005. However, it was not significantly different from the scores in 2003 and 2007.

### Grade 8 Scale Score Results

- In 2009, the average scale score for students in North Carolina was 284. This was higher than that of students across the nation (282).
- In North Carolina, the average scale score for students in 2009 was not significantly different from that in 2007 (284). However, the average scale score for students in public schools across the nation in 2009 was higher than that in 2007 (280).
- In North Carolina, the average scale score for students in 2009 was higher than the scores in 1990, 1992, 1996, and 2000. However, it was not significantly different from the scores in 2003, 2005, and 2007.

**Table  
1-A**

Average scale scores and selected percentile scores in NAEP mathematics for fourth-grade public school students, by assessment year and jurisdiction: Various years, 1992–2009

Year and jurisdiction		Average scale score	10th percentile	25th percentile	50th percentile	75th percentile	90th percentile
1992 <sup>1</sup>	Nation (public)	219*	176*	197*	220*	241*	259*
	North Carolina	213*	170*	190*	214*	235*	253*
1996 <sup>1</sup>	Nation (public)	222*	180*	201*	224*	244*	261*
	North Carolina	224*	184*	204*	225*	245*	263*
2000 <sup>1</sup>	Nation (public)	226*	185*	206*	228*	249*	265*
	North Carolina	232*	198*	215*	233*	251*	267*
2000	Nation (public)	224*	183*	203*	225*	247*	264*
	North Carolina	230*	195*	212*	231*	249*	265*
2003	Nation (public)	234*	196*	215*	235*	254*	270*
	South <sup>2</sup>	233*	197*	215*	234*	253*	268*
	North Carolina	242	207	224*	243	261	276
2005	Nation (public)	237*	199*	219*	239*	257*	272*
	South <sup>2</sup>	237*	201*	219*	238*	256*	271*
	North Carolina	241*	205	223*	242	260	276
2007	Nation (public)	239	201	221	241	259	274
	South <sup>2</sup>	239	203	221	240	257	272
	North Carolina	242	206	224	243	261	275*
2009	Nation (public)	239	201	221	241	259	275
	South <sup>2</sup>	238	203	221	239	257	273
	North Carolina	244	209	226	244	262	279

\*Value is significantly different ( $p < .05$ ) from the value for the same jurisdiction in 2009.

<sup>1</sup>Accommodations were not permitted for this assessment.

<sup>2</sup>Region in which jurisdiction is located. Regional data are not provided for years prior to 2003 to be consistent with the U.S. Census Bureau defined regions.

NOTE: The NAEP grade 4 mathematics scale ranges from 0 to 500.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 1992–2009 Mathematics Assessments.

**Table  
1-B**

Average scale scores and selected percentile scores in NAEP mathematics for eighth-grade public school students, by assessment year and jurisdiction: Various years, 1990–2009

Year and jurisdiction		Average scale score	10th percentile	25th percentile	50th percentile	75th percentile	90th percentile
1990 <sup>1</sup>	Nation (public)	262*	214*	237*	263*	288*	307*
	North Carolina	250*	204*	225*	251*	275*	296*
1992 <sup>1</sup>	Nation (public)	267*	219*	242*	268*	293*	314*
	North Carolina	258*	213*	235*	259*	283*	303*
1996 <sup>1</sup>	Nation (public)	271*	222*	247*	272*	296*	316*
	North Carolina	268*	222*	244*	268*	293*	314*
2000 <sup>1</sup>	Nation (public)	274*	225*	250*	276*	300*	321*
	North Carolina	280*	236	257	281	304*	323*
2000	Nation (public)	272*	221*	247*	274*	299*	320*
	North Carolina	276*	229*	253*	278*	302*	322*
2003	Nation (public)	276*	228*	253*	278*	301*	321*
	South <sup>2</sup>	274*	228*	251*	275*	298*	318*
	North Carolina	281	232*	258	283	306*	327
2005	Nation (public)	278*	230*	254*	279*	303*	323*
	South <sup>2</sup>	276*	230*	253*	277*	300*	321*
	North Carolina	282	235	259	283	306*	327
2007	Nation (public)	280*	234	257*	281*	305*	325*
	South <sup>2</sup>	279*	235	256	280	303*	323*
	North Carolina	284	239	260	285	308	329
2009	Nation (public)	282	235	258	283	307	328
	South <sup>2</sup>	281	236	257	281	305	325
	North Carolina	284	237	260	285	310	331

\*Value is significantly different ( $p < .05$ ) from the value for the same jurisdiction in 2009.

<sup>1</sup>Accommodations were not permitted for this assessment.

<sup>2</sup>Region in which jurisdiction is located. Regional data are not provided for years prior to 2003 to be consistent with the U.S. Census Bureau defined regions.

NOTE: The NAEP grade 8 mathematics scale ranges from 0 to 500.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 1990–2009 Mathematics Assessments.

## **Overall Achievement-Level Results**

Student results are reported as the percentages of students performing relative to performance standards set by the National Assessment Governing Board. These performance standards for what students should know and be able to do were based on the recommendations of broadly representative panels of educators and members of the public.

Tables 2-A and 2-B show the percentage of students at grades 4 and 8 who performed below *Basic*, at or above *Basic*, at or above *Proficient*, and at *Advanced*. Because the percentages are cumulative from *Basic* to *Proficient* to *Advanced*, they may sum to more than 100 percent. Only the percentage of students performing at or above *Basic* (which includes the students at *Proficient* and *Advanced*) plus the students below *Basic* will sum to 100 percent.

### **Grade 4 Achievement-Level Results**

- In 2009, the percentage of North Carolina's students who performed at or above *Proficient* was 43 percent. This was greater than the percentage of the nation's public school students who performed at or above *Proficient* (38 percent).
- In North Carolina, the percentage of students who performed at or above *Proficient* in 2009 was greater than the percentages in 1992, 1996, and 2000, but was not significantly different from the percentages in 2003, 2005, and 2007.
- In 2009, the percentage of North Carolina's students who performed at or above *Basic* was 87 percent. This was greater than the percentage of the nation's public school students who performed at or above *Basic* (81 percent).
- In North Carolina, the percentage of students who performed at or above *Basic* in 2009 was greater than the percentages in 1992, 1996, 2000, and 2005, but was not significantly different from the percentages in 2003 and 2007.

### **Grade 8 Achievement-Level Results**

- In 2009, the percentage of North Carolina's students who performed at or above *Proficient* was 36 percent. This was not significantly different from the percentage of the nation's public school students who performed at or above *Proficient* (33 percent).
- In North Carolina, the percentage of students who performed at or above *Proficient* in 2009 was greater than the percentages in 1990, 1992, 1996, and 2000, but was not significantly different from the percentages in 2003, 2005, and 2007.
- In 2009, the percentage of North Carolina's students who performed at or above *Basic* was 74 percent. This was not significantly different from the percentage of the nation's public school students who performed at or above *Basic* (71 percent).
- In North Carolina, the percentage of students who performed at or above *Basic* in 2009 was greater than the percentages in 1990, 1992, 1996, and 2000, but was not significantly different from the percentages in 2003, 2005, and 2007.

**Table  
2-A**

Percentage of fourth-grade public school students at or above NAEP mathematics achievement levels, by assessment year and jurisdiction: Various years, 1992–2009

Year and jurisdiction		Below <i>Basic</i>	At or above <i>Basic</i>	At or above <i>Proficient</i>	At <i>Advanced</i>
1992 <sup>1</sup>	Nation (public)	43*	57*	17*	2*
	North Carolina	50*	50*	13*	1*
1996 <sup>1</sup>	Nation (public)	38*	62*	20*	2*
	North Carolina	36*	64*	21*	2*
2000 <sup>1</sup>	Nation (public)	33*	67*	25*	2*
	North Carolina	24*	76*	28*	3*
2000	Nation (public)	36*	64*	22*	2*
	North Carolina	27*	73*	25*	3*
2003	Nation (public)	24*	76*	31*	4*
	South <sup>2</sup>	24*	76*	29*	3*
	North Carolina	15	85	41	6*
2005	Nation (public)	21*	79*	35*	5*
	South <sup>2</sup>	20*	80*	34*	4
	North Carolina	17*	83*	40	7
2007	Nation (public)	19	81	39	5
	South <sup>2</sup>	18	82	36	5
	North Carolina	15	85	41	6*
2009	Nation (public)	19	81	38	6
	South <sup>2</sup>	18	82	36	5
	North Carolina	13	87	43	8

\*Value is significantly different ( $p < .05$ ) from the value for the same jurisdiction in 2009.

<sup>1</sup>Accommodations were not permitted for this assessment.

<sup>2</sup>Region in which jurisdiction is located. Regional data are not provided for years prior to 2003 to be consistent with the U.S. Census Bureau defined regions.

NOTE: The NAEP grade 4 mathematics scale ranges from 0 to 500. Achievement levels correspond to the following points on the NAEP mathematics scales: below *Basic*, 213 or lower; *Basic*, 214–248; *Proficient*, 249–281; and *Advanced*, 282 and above. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 1992–2009 Mathematics Assessments.

**Table  
2-B**

Percentage of eighth-grade public school students at or above NAEP mathematics achievement levels, by assessment year and jurisdiction: Various years, 1990–2009

Year and jurisdiction		Below <i>Basic</i>	At or above <i>Basic</i>	At or above <i>Proficient</i>	At <i>Advanced</i>
1990 <sup>1</sup>	Nation (public)	49*	51*	15*	2*
	North Carolina	62*	38*	9*	1*
1992 <sup>1</sup>	Nation (public)	44*	56*	20*	3*
	North Carolina	53*	47*	12*	1*
1996 <sup>1</sup>	Nation (public)	39*	61*	23*	4*
	North Carolina	44*	56*	20*	3*
2000 <sup>1</sup>	Nation (public)	35*	65*	26*	5*
	North Carolina	30	70	30*	6*
2000	Nation (public)	38*	62*	25*	5*
	North Carolina	33*	67*	27*	5*
2003	Nation (public)	33*	67*	27*	5*
	South <sup>2</sup>	36*	64*	24*	4*
	North Carolina	28	72	32	7
2005	Nation (public)	32*	68*	28*	6*
	South <sup>2</sup>	34*	66*	26*	5*
	North Carolina	28	72	32	7
2007	Nation (public)	30*	70*	31*	7*
	South <sup>2</sup>	30	70	29*	6*
	North Carolina	27	73	34	8
2009	Nation (public)	29	71	33	7
	South <sup>2</sup>	29	71	30	7
	North Carolina	26	74	36	9

\*Value is significantly different ( $p < .05$ ) from the value for the same jurisdiction in 2009.

<sup>1</sup>Accommodations were not permitted for this assessment.

<sup>2</sup>Region in which jurisdiction is located. Regional data are not provided for years prior to 2003 to be consistent with the U.S. Census Bureau defined regions.

NOTE: The NAEP grade 8 mathematics scale ranges from 0 to 500. Achievement levels correspond to the following points on the NAEP mathematics scales: below *Basic*, 261 or lower; *Basic*, 262–298; *Proficient*, 299–332; and *Advanced*, 333 and above. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 1990–2009 Mathematics Assessments.

## Comparisons Between North Carolina, the Nation, and Participating States and Jurisdictions

All 50 states, the District of Columbia, and the Department of Defense Schools participated in the 2009 mathematics assessment at grades 4 and 8. For the first time in 2009, grade 12 mathematics results are also available for 11 states that met the reporting criteria. References to "jurisdictions" in the results statements may include states, the District of Columbia, and/or Department of Defense Schools.

### Comparisons by Average Scale Scores

Figures 2-A and 2-B compare North Carolina's 2009 overall mathematics scale scores at grades 4 and 8 with those of public schools in the nation and all other participating states and jurisdictions. The different shadings indicate whether the average score of the nation (public), a state, or a jurisdiction was found to be higher than, lower than, or not significantly different from that of North Carolina in the NAEP 2009 mathematics assessment.

#### ***Grade 4 Scale Score Comparison Results***

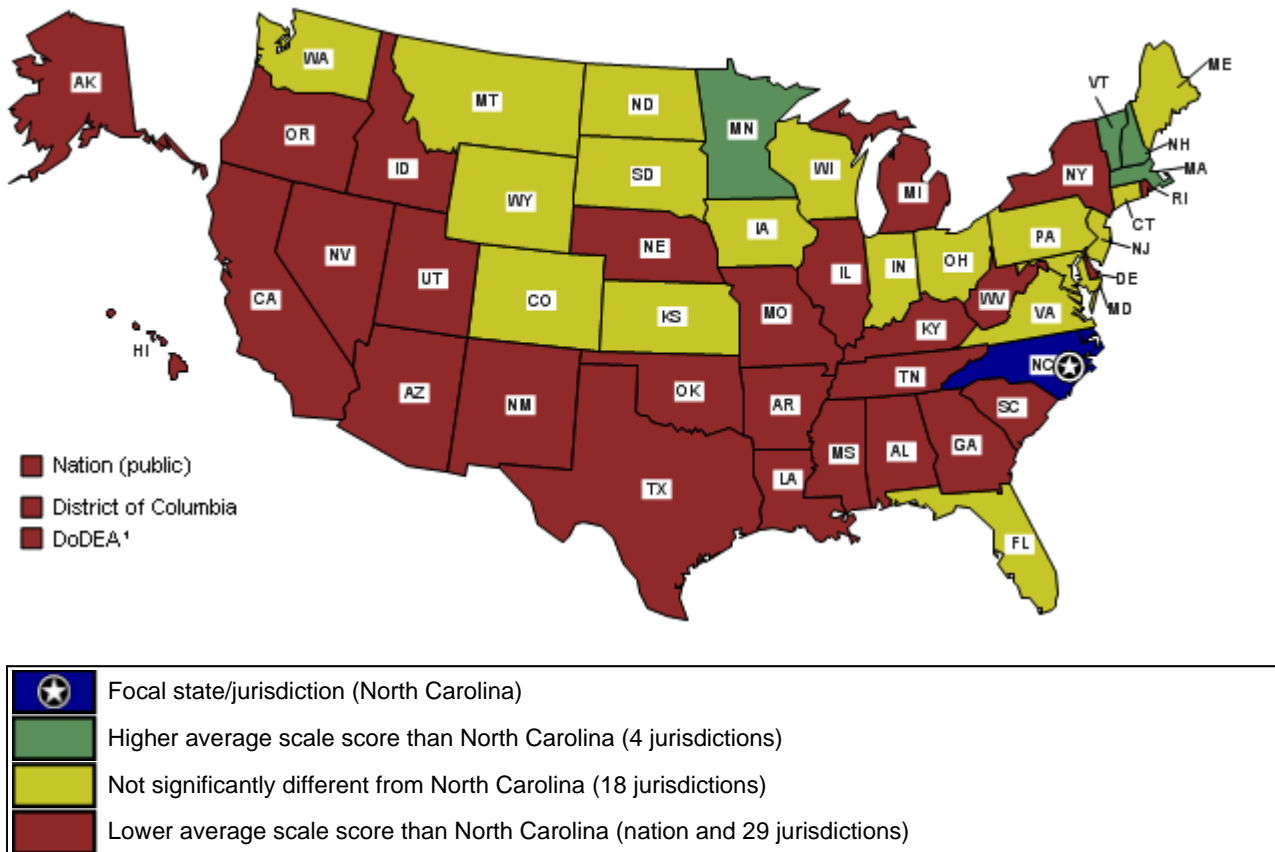
- Students' average score in North Carolina was higher than the score in 29 jurisdictions, not significantly different from those in 18 jurisdictions, and lower than those in 4 jurisdictions.

#### ***Grade 8 Scale Score Comparison Results***

- Students' average score in North Carolina was higher than the score in 19 jurisdictions, not significantly different from those in 18 jurisdictions, and lower than those in 14 jurisdictions.

**Figure 2-A**

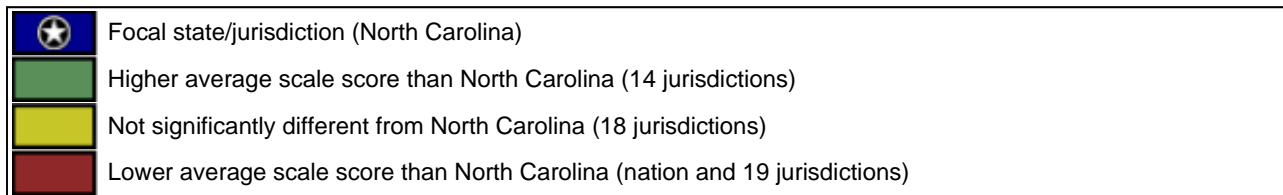
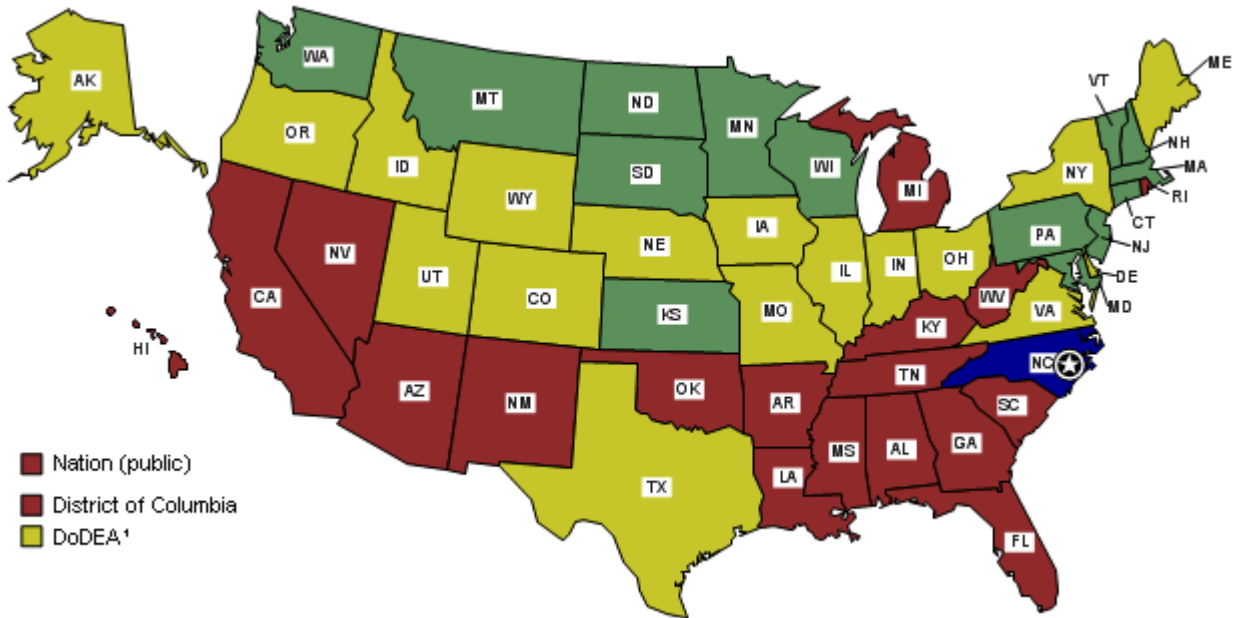
North Carolina's average scale score in NAEP mathematics for fourth-grade public school students compared with scores for the nation and other participating jurisdictions: 2009



<sup>1</sup> Department of Defense Education Activity schools (domestic and overseas).  
 SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2009 Mathematics Assessment.

**Figure 2-B**

North Carolina's average scale score in NAEP mathematics for eighth-grade public school students compared with scores for the nation and other participating jurisdictions: 2009



<sup>1</sup> Department of Defense Education Activity schools (domestic and overseas).

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2009 Mathematics Assessment.

**Comparisons by Achievement Levels**

Figures 3-A and 3-B permit comparisons of all jurisdictions (and the nation) participating in the NAEP 2009 mathematics assessment in terms of percentages of grades 4 and 8 students performing at or above *Proficient*. The participating states and jurisdictions are grouped into categories reflecting whether the percentage of their students performing at or above *Proficient* (including *Advanced*) was found to be higher than, not significantly different from, or lower than the percentage in North Carolina.

Note that the selected state is listed first in its category, and the other states and jurisdictions within each category are listed alphabetically; statistical comparisons among jurisdictions in each of the three categories are not included in this report. However, statistical comparisons among states by achievement level can be calculated online by using the NAEP Data Explorer at <http://nces.ed.gov/nationsreportcard/naepdata/>.

**Grade 4 Achievement-Level Comparison Results**

- The percentage of students performing at or above *Proficient* level in North Carolina was higher than the percentage in 24 jurisdictions, not significantly different from those in 22 jurisdictions, and lower than those in 5 jurisdictions.
- The percentage of students performing at or above *Basic* level in North Carolina was higher than the percentage in 26 jurisdictions, not significantly different from those in 22 jurisdictions, and lower than those in 3 jurisdictions (data not shown).

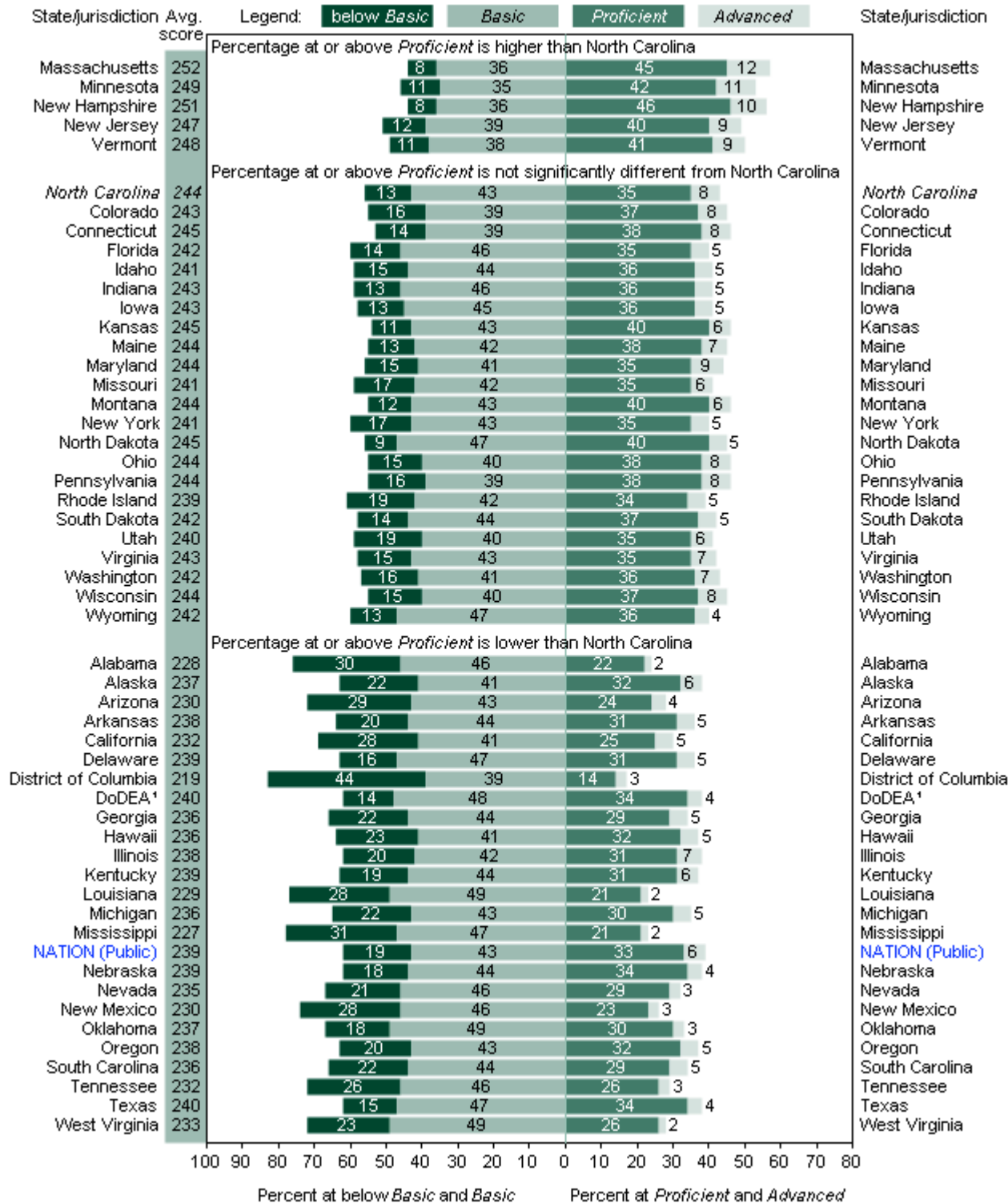
**Grade 8 Achievement-Level Comparison Results**

- The percentage of students performing at or above *Proficient* level in North Carolina was higher than the percentage in 20 jurisdictions, not significantly different from those in 23 jurisdictions, and lower than those in 8 jurisdictions.
- The percentage of students performing at or above *Basic* level in North Carolina was higher than the percentage in 16 jurisdictions, not significantly different from those in 17 jurisdictions, and lower than those in 18 jurisdictions (data not shown).

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Figure 3-A

Average scale scores in NAEP mathematics for fourth-grade public school students, percentage within each achievement level, and North Carolina's percentage at or above *Proficient* compared with the nation and other participating states/jurisdictions: 2009



<sup>1</sup> Department of Defense Education Activity schools (domestic and overseas).

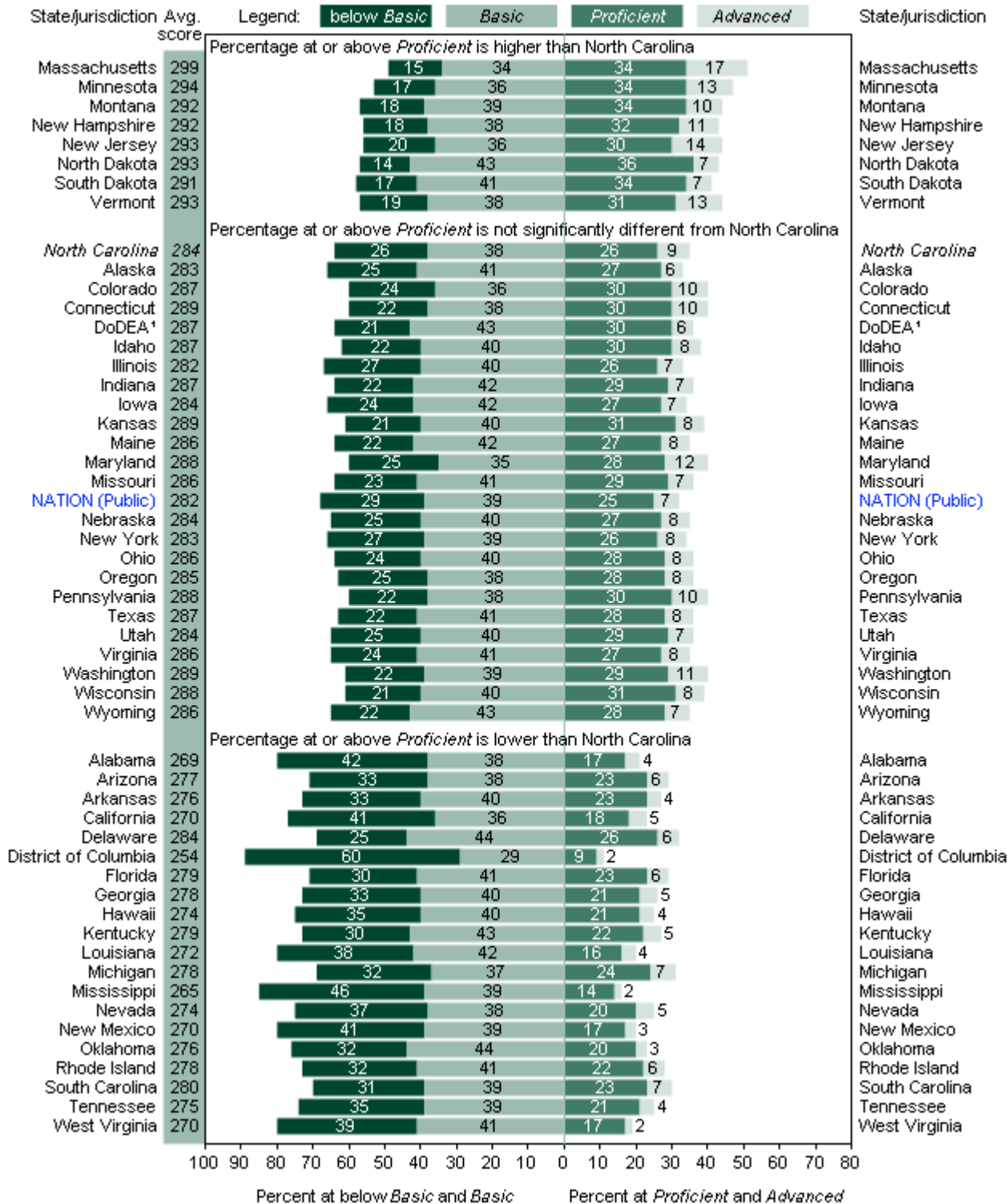
NOTE: The bars above contain percentages of students in each NAEP mathematics achievement level. Achievement levels corresponding to each population of students are aligned at the point where the *Proficient* category begins, so that they may be compared at *Proficient* and above. Detail may not sum to totals because of rounding. The shaded bars are graphed using unrounded numbers. Significance tests used a multiple-comparison procedure based on all jurisdictions that participated.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2009 Mathematics Assessment.

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Figure 3-B

Average scale scores in NAEP mathematics for eighth-grade public school students, percentage within each achievement level, and North Carolina's percentage at or above *Proficient* compared with the nation and other participating states/jurisdictions: 2009



<sup>1</sup> Department of Defense Education Activity schools (domestic and overseas).

NOTE: The bars above contain percentages of students in each NAEP mathematics achievement level. Achievement levels corresponding to each population of students are aligned at the point where the *Proficient* category begins, so that they may be compared at *Proficient* and above. Detail may not sum to totals because of rounding. The shaded bars are graphed using unrounded numbers. Significance tests used a multiple-comparison procedure based on all jurisdictions that participated.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2009 Mathematics Assessment.

## Mathematics Performance of Selected Student Groups

This section of the report presents trend results for public school students in North Carolina and the nation by demographic characteristics. Student performance data are reported for

- race/ethnicity
- gender
- student eligibility for the National School Lunch Program
- type of school location (for 2007 and 2009 only)
- parents' highest level of education

Results for each of the variables are reported in tables that include the percentage of students in each group in the first column, and the average scale score in the second column. The columns to the right show the percentage of students below *Basic* and at or above each achievement level.

Two sets of results from the 2000 mathematics assessment are included in the tables for grades 4 and 8: one obtained from student samples for which accommodations were permitted and one for which accommodations were not permitted. Comparisons to the 2000 results made in the summary statements, however, are based solely on the sample for which accommodations were permitted.

Results by students' race/ethnicity and gender include statements about score point differences between student groups (e.g., between White and Black or White and Hispanic students, or between male and female students) in 2009 and in the first assessment year. Because these differences are calculated using unrounded values, they may differ slightly from what would be obtained by subtracting the rounded values that appear in the tables. Statements indicating a narrowing or widening of the gap in students' scores are only made if the change in the gap from the first assessment year to 2009 was found to be statistically significant.

The reader is cautioned against making simple causal inferences about group differences, as a complex mix of educational and socioeconomic factors may affect student performance. NAEP collects information on many additional variables, including school and home factors related to achievement. This information is in an interactive database available on the NAEP website <http://nces.ed.gov/nationsreportcard/naepdata/>.

**Race/Ethnicity**

Schools reported the race/ethnicity that best described each student. The six mutually exclusive categories are White, Black, Hispanic, Asian/Pacific Islander, American Indian/Alaska Native, and Unclassified. Black includes African American, Hispanic includes Latino, and Pacific Islander includes Native Hawaiian. Race categories exclude Hispanic origin. Tables 3-A and 3-B show average scale scores and achievement-level data for public school students at grades 4 and 8 in North Carolina and the nation, by race/ethnicity.

**Grade 4 Scale Score Results by Race/Ethnicity**

- In 2009, White students in North Carolina had an average scale score that was higher than the scores of Black, Hispanic, and American Indian/Alaska Native students, but not found to be significantly different from the score of Asian/Pacific Islander students.
- In 2009, the average scale score of Hispanic students in North Carolina was higher than the score in 2000, but not found to be significantly different from the scores of their corresponding peers in 2003, 2005, and 2007.
- In 2009, the average scale score of Asian/Pacific Islander students in North Carolina was not found to be significantly different from the scores of their corresponding peers in 2003, 2005, and 2007.
- In 2009, the average scale score of American Indian/Alaska Native students in North Carolina was not found to be significantly different from the scores of their corresponding peers in 2005 and 2007.
- In 2009, the average scale scores of White and Black students in North Carolina were higher than the scores of their corresponding peers in 1992, 1996, and 2000, but not found to be significantly different from the scores of their corresponding peers in 2003, 2005, and 2007.
- In 2009, Black students in North Carolina had an average score that was lower than that of White students by 27 points. In 1992, the average score for Black students was lower than that of White students by 30 points.
- In 2009, Hispanic students in North Carolina had an average score that was lower than that of White students by 18 points. Data are not reported for Hispanic students in 1992, because reporting standards were not met.

**Grade 4 Achievement-Level Results by Race/Ethnicity**

- In North Carolina in 2009, the percentage of White students performing at or above *Proficient* was greater than the corresponding percentages of Black, Hispanic, and American Indian/Alaska Native students, but not found to be significantly different from the percentage of Asian/Pacific Islander students.
- In 2009, the percentage of Hispanic students in North Carolina performing at or above *Proficient* was greater than the percentage in 2000, but not found to be significantly different from the percentages of their respective peers in 2003, 2005, and 2007.
- In 2009, the percentage of Asian/Pacific Islander students in North Carolina performing at or above *Proficient* was not found to be significantly different from the percentages of their respective peers in 2003, 2005, and 2007.
- In 2009, the percentage of American Indian/Alaska Native students in North Carolina performing at or above *Proficient* was not found to be significantly different from the percentages of their respective peers in 2005 and 2007.
- In 2009, the percentages of White and Black students in North Carolina performing at or above *Proficient* were greater than the percentages of their respective peers in 1992, 1996, and 2000, but not found to be significantly different from the percentages of their respective peers in 2003, 2005, and 2007.

**Table  
3-A**

Percentage of fourth-grade public school students, average scale score, and percentage at or above achievement levels in NAEP mathematics, by race/ethnicity, year and jurisdiction, assessment year and jurisdiction: Various years, 1992–2009

Race/ethnicity, year and jurisdiction		Percentage of students	Average scale score	Below Basic	At or above Basic	At or above Proficient	At Advanced
<b>White</b>							
1992 <sup>1</sup>	Nation (public)	72 *	227 *	32 *	68 *	22 *	2 *
	North Carolina	65 *	223 *	36 *	64 *	18 *	2 *
1996 <sup>1</sup>	Nation (public)	71 *	230 *	27 *	73 *	25 *	3 *
	North Carolina	68 *	233 *	23 *	77 *	29 *	3 *
2000 <sup>1</sup>	Nation (public)	67 *	234 *	22 *	78 *	32 *	3 *
	North Carolina	62 *	240 *	14 *	86 *	37 *	4 *
2000	Nation (public)	62 *	233 *	24 *	76 *	30 *	3 *
	North Carolina	61 *	238 *	16 *	84 *	34 *	4 *
2003	Nation (public)	58 *	243 *	13 *	87 *	42 *	5 *
	North Carolina	58 *	251	6	94	55	9
2005	Nation (public)	57 *	246 *	11 *	89 *	47 *	7 *
	North Carolina	59 *	250	8	92	52	10
2007	Nation (public)	55 *	248	9	91	51	8
	North Carolina	55	251	6	94	56	9
2009	Nation (public)	54	248	10	90	50	8
	North Carolina	54	254	5	95	59	13
<b>Black</b>							
1992 <sup>1</sup>	Nation (public)	18 *	192 *	78 *	22 *	2 *	#
	North Carolina	31	193 *	77 *	23 *	2 *	#
1996 <sup>1</sup>	Nation (public)	17	199 *	70 *	30 *	4 *	#
	North Carolina	28	204 *	64 *	36 *	4 *	#
2000 <sup>1</sup>	Nation (public)	17	204 *	64 *	36 *	5 *	#
	North Carolina	32	217 *	44 *	56 *	9 *	#
2000	Nation (public)	17	203 *	65 *	35 *	4 *	#
	North Carolina	31	215 *	48 *	52 *	9 *	#
2003	Nation (public)	17 *	216 *	46 *	54 *	10 *	# *
	North Carolina	30	225	32	68	14	#
2005	Nation (public)	17 *	220 *	40 *	60 *	13 *	1
	North Carolina	27	225	34	66	17	1
2007	Nation (public)	17	222	37	63	15	1
	North Carolina	28	224	32	68	15	1
2009	Nation (public)	16	222	37	63	15	1
	North Carolina	27	226	29	71	18	1

See notes at end of table.

**Table  
3-A**

Percentage of fourth-grade public school students, average scale score, and percentage at or above achievement levels in NAEP mathematics, by race/ethnicity, year and jurisdiction, assessment year and jurisdiction: Various years, 1992–2009–Continued

Race/ethnicity, year and jurisdiction		Percentage of students	Average scale score	Below Basic	At or above Basic	At or above Proficient	At Advanced
<b>Hispanic</b>							
1992 <sup>1</sup>	Nation (public)	7*	201*	68*	32*	5*	#
	North Carolina	1*	‡	‡	‡	‡	‡
1996 <sup>1</sup>	Nation (public)	9*	204*	63*	37*	7*	#
	North Carolina	1*	‡	‡	‡	‡	‡
2000 <sup>1</sup>	Nation (public)	11*	209*	55*	45*	8*	#
	North Carolina	3*	‡	‡	‡	‡	‡
2000	Nation (public)	16*	207*	59*	41*	7*	#*
	North Carolina	3*	220*	35*	65*	12*	#
2003	Nation (public)	19*	221*	38*	62*	15*	1*
	North Carolina	6*	235	21	79	30	2
2005	Nation (public)	20*	225*	33*	67*	19*	1
	North Carolina	8*	234	20	80	26	1
2007	Nation (public)	21	227	31	69	22	1
	North Carolina	10	235	16	84	28	2
2009	Nation (public)	22	227	30	70	21	1
	North Carolina	11	236	16	84	27	2
<b>Asian/Pacific Islander</b>							
1992 <sup>1</sup>	Nation (public)	3*	231*	26*	74*	27*	4*
	North Carolina	1*	‡	‡	‡	‡	‡
1996 <sup>1</sup>	Nation (public)	3*	225*	35*	65*	20*	5*
	North Carolina	2	‡	‡	‡	‡	‡
2000 <sup>1</sup>	Nation (public)	‡	‡	‡	‡	‡	‡
	North Carolina	1*	‡	‡	‡	‡	‡
2000	Nation (public)	‡	‡	‡	‡	‡	‡
	North Carolina	1	‡	‡	‡	‡	‡
2003	Nation (public)	4*	246*	13*	87*	48*	10*
	North Carolina	2	255	7	93	60	13
2005	Nation (public)	4*	251*	11*	89*	54*	14
	North Carolina	2	256	6	94	63	16
2007	Nation (public)	5	254	9	91	59	16
	North Carolina	2	253	9	91	60	14
2009	Nation (public)	5	255	9	91	61	18
	North Carolina	2	259	7	93	62	25

See notes at end of table.

# NAEP 2009 Mathematics Report for North Carolina (Embargoed)

## The Nation's Report Card 2009 State Assessment

**Table  
3-A**

Percentage of fourth-grade public school students, average scale score, and percentage at or above achievement levels in NAEP mathematics, by race/ethnicity, year and jurisdiction, assessment year and jurisdiction: Various years, 1992–2009–Continued

Race/ethnicity, year and jurisdiction		Percentage of students	Average scale score	Below Basic	At or above Basic	At or above Proficient	At Advanced
<b>American Indian/Alaska Native</b>							
1992 <sup>1</sup>	Nation (public)	1	‡	‡	‡	‡	‡
	North Carolina	2	‡	‡	‡	‡	‡
1996 <sup>1</sup>	Nation (public)	1*	‡	‡	‡	‡	‡
	North Carolina	1	‡	‡	‡	‡	‡
2000 <sup>1</sup>	Nation (public)	1	‡	‡	‡	‡	‡
	North Carolina	2	‡	‡	‡	‡	‡
2000	Nation (public)	1	207*	61*	39*	8*	#
	North Carolina	2	‡	‡	‡	‡	‡
2003	Nation (public)	1	224	35	65	18*	1
	North Carolina	1	‡	‡	‡	‡	‡
2005	Nation (public)	1	227	31	69	22	2
	North Carolina	2	221	42	58	19	1
2007	Nation (public)	1	229	28	72	26	3
	North Carolina	1	229	27	73	24	3
2009	Nation (public)	1	227	32	68	23	2
	North Carolina	1	232	23	77	30	2
<b>Unclassified<sup>2</sup></b>							
1992 <sup>1</sup>	Nation (public)	#*	‡	‡	‡	‡	‡
	North Carolina	#*	‡	‡	‡	‡	‡
1996 <sup>1</sup>	Nation (public)	1*	‡	‡	‡	‡	‡
	North Carolina	#*	‡	‡	‡	‡	‡
2000 <sup>1</sup>	Nation (public)	1*	‡	‡	‡	‡	‡
	North Carolina	1*	‡	‡	‡	‡	‡
2000	Nation (public)	1*	‡	‡	‡	‡	‡
	North Carolina	1*	‡	‡	‡	‡	‡
2003	Nation (public)	1*	236*	20*	80*	32*	3*
	North Carolina	2*	246	9	91	48	4
2005	Nation (public)	1*	240	18	82	38	5
	North Carolina	2*	238	17	83	35	3
2007	Nation (public)	1*	240	16	84	39	6
	North Carolina	4	239	16	84	38	6
2009	Nation (public)	2	242	14	86	41	6
	North Carolina	4	246	10	90	47	7

#Rounds to zero.

‡Reporting standards not met.

\*Value is significantly different ( $p < .05$ ) from the value for the same jurisdiction and student group in 2009.

<sup>1</sup>Accommodations were not permitted for this assessment.

<sup>2</sup>The Unclassified category includes students whose school-reported race/ethnicity was "other" or unavailable, or was missing, and whose race/ethnicity category could not be determined from self-reported information.

NOTE: The NAEP grade 4 mathematics scale ranges from 0 to 500. Achievement levels correspond to the following points on the NAEP mathematics scales: below *Basic*, 213 or lower; *Basic*, 214–248; *Proficient*, 249–281; and *Advanced*, 282 and above. Black includes African American, Hispanic includes Latino, and Pacific Islander includes Native Hawaiian. Race categories exclude Hispanic origin. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 1992–2009 Mathematics Assessments.

**Grade 8 Scale Score Results by Race/Ethnicity**

- In 2009, White students in North Carolina had an average scale score that was higher than the scores of Black, Hispanic, and American Indian/Alaska Native students, but lower than the score of Asian/Pacific Islander students.
- In 2009, the average scale score of White students in North Carolina was higher than the scores of their corresponding peers in 1990, 1992, 1996, 2000, and 2005, but not found to be significantly different from the scores of their corresponding peers in 2003 and 2007.
- In 2009, the average scale score of Black students in North Carolina was higher than the scores of their corresponding peers in 1990, 1992, 1996, and 2000, but not found to be significantly different from the scores of their corresponding peers in 2003, 2005, and 2007.
- In 2009, the average scale score of American Indian/Alaska Native students in North Carolina was higher than the score in 1990, but not found to be significantly different from the scores of their corresponding peers in 2003 and 2007.
- In 2009, the average scale score of Hispanic students in North Carolina was higher than the scores of their corresponding peers in 2003 and 2005, but not found to be significantly different from the score in 2007.
- In 2009, the average scale score of Asian/Pacific Islander students in North Carolina was not found to be significantly different from the scores of their corresponding peers in 2003, 2005, and 2007.
- In 2009, Black students in North Carolina had an average score that was lower than that of White students by 34 points. In 1990, the average score for Black students was lower than that of White students by 30 points.
- In 2009, Hispanic students in North Carolina had an average score that was lower than that of White students by 23 points. Data are not reported for Hispanic students in 1990, because reporting standards were not met.

**Grade 8 Achievement-Level Results by Race/Ethnicity**

- In North Carolina in 2009, the percentage of White students performing at or above *Proficient* was greater than the corresponding percentages of Black, Hispanic, and American Indian/Alaska Native students, but smaller than the percentage of Asian/Pacific Islander students.
- In 2009, the percentages of Hispanic and Asian/Pacific Islander students in North Carolina performing at or above *Proficient* were not found to be significantly different from the percentages of their respective peers in 2003, 2005, and 2007.
- In 2009, the percentage of American Indian/Alaska Native students in North Carolina performing at or above *Proficient* was not found to be significantly different from the percentages of their respective peers in 1990, 2003, and 2007.
- In 2009, the percentages of White and Black students in North Carolina performing at or above *Proficient* were greater than the percentages of their respective peers in 1990, 1992, 1996, and 2000, but not found to be significantly different from the percentages of their respective peers in 2003, 2005, and 2007.

**Table  
3-B**

Percentage of eighth-grade public school students, average scale score, and percentage at or above achievement levels in NAEP mathematics, by race/ethnicity, year and jurisdiction, assessment year and jurisdiction: Various years, 1990–2009

Race/ethnicity, year and jurisdiction		Percentage of students	Average scale score	Below Basic	At or above Basic	At or above Proficient	At Advanced
<b>White</b>							
1990 <sup>1</sup>	Nation (public)	73 *	269 *	41 *	59 *	18 *	3 *
	North Carolina	63 *	261 *	51 *	49 *	12 *	1 *
1992 <sup>1</sup>	Nation (public)	72 *	276 *	34 *	66 *	25 *	3 *
	North Carolina	70 *	266 *	44 *	56 *	16 *	2 *
1996 <sup>1</sup>	Nation (public)	70 *	280 *	28 *	72 *	29 *	5 *
	North Carolina	66 *	277 *	32 *	68 *	27 *	4 *
2000 <sup>1</sup>	Nation (public)	69 *	284 *	24 *	76 *	33 *	6 *
	North Carolina	65 *	290 *	18	82	40 *	8 *
2000	Nation (public)	63 *	283 *	25 *	75 *	33 *	6 *
	North Carolina	65 *	287 *	21 *	79 *	37 *	7 *
2003	Nation (public)	62 *	287 *	21 *	79 *	36 *	7 *
	North Carolina	59	294	15	85	44	10
2005	Nation (public)	60 *	288 *	21 *	79 *	37 *	7 *
	North Carolina	60 *	292 *	18	82	42	10
2007	Nation (public)	58 *	290 *	19 *	81 *	41 *	9 *
	North Carolina	56	295	15	85	46	12
2009	Nation (public)	56	292	18	82	43	10
	North Carolina	55	297	15	85	49	14
<b>Black</b>							
1990 <sup>1</sup>	Nation (public)	16	236 *	79 *	21 *	5 *	#
	North Carolina	32	231 *	83 *	17 *	2 *	#
1992 <sup>1</sup>	Nation (public)	17 *	236 *	81 *	19 *	2 *	#
	North Carolina	28	238 *	77 *	23 *	3 *	#
1996 <sup>1</sup>	Nation (public)	16	241 *	74 *	26 *	4 *	#
	North Carolina	29	247 *	69 *	31 *	5 *	#
2000 <sup>1</sup>	Nation (public)	14 *	245 *	70 *	30 *	5 *	# *
	North Carolina	28	257 *	57 *	43 *	7 *	1
2000	Nation (public)	17	243 *	70 *	30 *	5 *	# *
	North Carolina	29	252 *	60 *	40 *	7 *	#
2003	Nation (public)	17 *	252 *	61 *	39 *	7 *	# *
	North Carolina	30	260	51	49	11	1
2005	Nation (public)	17 *	254 *	59 *	41 *	8 *	1 *
	North Carolina	29	263	47	53	12	1
2007	Nation (public)	17 *	259	53 *	47 *	11	1
	North Carolina	30	266	47	53	14	1
2009	Nation (public)	16	260	51	49	12	1
	North Carolina	28	262	47	53	12	1

See notes at end of table.

**Table  
3-B**

Percentage of eighth-grade public school students, average scale score, and percentage at or above achievement levels in NAEP mathematics, by race/ethnicity, year and jurisdiction, assessment year and jurisdiction: Various years, 1990–2009–Continued

Race/ethnicity, year and jurisdiction		Percentage of students	Average scale score	Below Basic	At or above Basic	At or above Proficient	At Advanced
<b>Hispanic</b>							
1990 <sup>1</sup>	Nation (public)	7*	245*	67*	33*	7*	1*
	North Carolina	1*	‡	‡	‡	‡	‡
1992 <sup>1</sup>	Nation (public)	8*	247*	67*	33*	6*	#*
	North Carolina	1*	‡	‡	‡	‡	‡
1996 <sup>1</sup>	Nation (public)	9*	250*	62*	38*	8*	1
	North Carolina	2*	‡	‡	‡	‡	‡
2000 <sup>1</sup>	Nation (public)	11*	252*	60*	40*	8*	#*
	North Carolina	2*	‡	‡	‡	‡	‡
2000	Nation (public)	14*	252*	60*	40*	8*	#*
	North Carolina	2*	‡	‡	‡	‡	‡
2003	Nation (public)	15*	258*	53*	47*	11*	1
	North Carolina	5*	263*	45	55	16	1
2005	Nation (public)	17*	261*	50*	50*	13*	1*
	North Carolina	6*	265*	41	59	16	1
2007	Nation (public)	19*	264	46	54	15	2
	North Carolina	8	273	39	61	23	4
2009	Nation (public)	21	266	44	56	17	2
	North Carolina	10	274	33	67	24	2
<b>Asian/Pacific Islander</b>							
1990 <sup>1</sup>	Nation (public)	2*	275*	36*	64*	30*	6*
	North Carolina	1*	‡	‡	‡	‡	‡
1992 <sup>1</sup>	Nation (public)	2*	290	25	75	43	14
	North Carolina	1*	‡	‡	‡	‡	‡
1996 <sup>1</sup>	Nation (public)	‡	‡	‡	‡	‡	‡
	North Carolina	2	‡	‡	‡	‡	‡
2000 <sup>1</sup>	Nation (public)	4*	286*	27*	73*	40*	12*
	North Carolina	2	‡	‡	‡	‡	‡
2000	Nation (public)	4*	287*	27*	73*	40*	12
	North Carolina	2	‡	‡	‡	‡	‡
2003	Nation (public)	4*	289*	23*	77*	42*	12*
	North Carolina	2	297	13	87	48	15
2005	Nation (public)	5*	294*	19*	81*	46*	16*
	North Carolina	2	303	13	87	53	25
2007	Nation (public)	5	296	18	82	49	17
	North Carolina	3	299	15	85	50	18
2009	Nation (public)	5	300	16	84	53	20
	North Carolina	2	311	13	87	65	36

See notes at end of table.

# NAEP 2009 Mathematics Report for North Carolina (Embargoed)

## The Nation's Report Card 2009 State Assessment

**Table  
3-B**

Percentage of eighth-grade public school students, average scale score, and percentage at or above achievement levels in NAEP mathematics, by race/ethnicity, year and jurisdiction, assessment year and jurisdiction: Various years, 1990–2009–Continued

Race/ethnicity, year and jurisdiction		Percentage of students	Average scale score	Below Basic	At or above Basic	At or above Proficient	At Advanced
<b>American Indian/Alaska Native</b>							
1990 <sup>1</sup>	Nation (public)	1	‡	‡	‡	‡	‡
	North Carolina	2	229*	86*	14*	2	#
1992 <sup>1</sup>	Nation (public)	1	‡	‡	‡	‡	‡
	North Carolina	1	‡	‡	‡	‡	‡
1996 <sup>1</sup>	Nation (public)	1	‡	‡	‡	‡	‡
	North Carolina	2	‡	‡	‡	‡	‡
2000 <sup>1</sup>	Nation (public)	1	264	47	53	14	2
	North Carolina	2	‡	‡	‡	‡	‡
2000	Nation (public)	1	263	47	53	13	3
	North Carolina	2	‡	‡	‡	‡	‡
2003	Nation (public)	1	265	46	54	16*	2
	North Carolina	2	259	52	48	13	#
2005	Nation (public)	1	266	45	55	14*	2*
	North Carolina	1	‡	‡	‡	‡	‡
2007	Nation (public)	1*	265	44	56	17	2
	North Carolina	1	261	49	51	17	1
2009	Nation (public)	1	267	43	57	20	3
	North Carolina	1	256	55	45	14	2
<b>Unclassified<sup>2</sup></b>							
1990 <sup>1</sup>	Nation (public)	#*	‡	‡	‡	‡	‡
	North Carolina	1	‡	‡	‡	‡	‡
1992 <sup>1</sup>	Nation (public)	1	258*	55*	45*	8*	#
	North Carolina	#*	‡	‡	‡	‡	‡
1996 <sup>1</sup>	Nation (public)	#*	‡	‡	‡	‡	‡
	North Carolina	#*	‡	‡	‡	‡	‡
2000 <sup>1</sup>	Nation (public)	#*	‡	‡	‡	‡	‡
	North Carolina	1*	‡	‡	‡	‡	‡
2000	Nation (public)	1*	‡	‡	‡	‡	‡
	North Carolina	1*	‡	‡	‡	‡	‡
2003	Nation (public)	1*	276*	30	70	24*	3
	North Carolina	1*	‡	‡	‡	‡	‡
2005	Nation (public)	1*	278*	31	69	29	7
	North Carolina	2*	‡	‡	‡	‡	‡
2007	Nation (public)	1*	282	28	72	32	8
	North Carolina	2	281	29	71	37	7
2009	Nation (public)	1	283	28	72	33	7
	North Carolina	3	289	19	81	34	9

#Rounds to zero.

‡Reporting standards not met.

\*Value is significantly different ( $p < .05$ ) from the value for the same jurisdiction and student group in 2009.

<sup>1</sup>Accommodations were not permitted for this assessment.

<sup>2</sup>The Unclassified category includes students whose school-reported race/ethnicity was "other" or unavailable, or was missing, and whose race/ethnicity category could not be determined from self-reported information.

NOTE: The NAEP grade 8 mathematics scale ranges from 0 to 500. Achievement levels correspond to the following points on the NAEP mathematics scales: below *Basic*, 261 or lower; *Basic*, 262–298; *Proficient*, 299–332; and *Advanced*, 333 and above. Black includes African American, Hispanic includes Latino, and Pacific Islander includes Native Hawaiian. Race categories exclude Hispanic origin. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 1990–2009 Mathematics Assessments.

**Gender**

Information on student gender is reported by the student's school when rosters of the students eligible to be assessed are submitted to NAEP.

Tables 4-A and 4-B show average scale scores and achievement-level data for public school students at grades 4 and 8 in North Carolina and the nation, by gender.

**Grade 4 Scale Score Results by Gender**

- In 2009, male students in North Carolina had an average score that was not found to be significantly different from that of female students. In 1992, male students in North Carolina had an average score that was not found to be significantly different from that of female students.
- In 2009, male students in North Carolina had an average scale score in mathematics (244) that was higher than that of male students in public schools across the nation (240). Similarly, female students in North Carolina had an average scale score (244) that was higher than that of female students across the nation (238).
- In North Carolina, the average scale score of male students in 2009 was higher than the scores of male students in 1992, 1996, and 2000, but not found to be significantly different from the scores of male students in 2003, 2005, and 2007.
- In North Carolina, the average scale score of female students in 2009 was higher than the scores of female students in 1992, 1996, 2000, 2005, and 2007, but not found to be significantly different from the score of female students in 2003.

**Grade 4 Achievement-Level Results by Gender**

- The percentage of male students in North Carolina's public schools who were at or above *Proficient* in 2009 (44 percent) was greater than that of male students in the nation (40 percent).
- The percentage of female students in North Carolina's public schools who were at or above *Proficient* in 2009 (42 percent) was greater than that of female students in the nation (37 percent).
- In North Carolina, the percentage of male students performing at or above *Proficient* in 2009 was greater than the corresponding percentages of students in 1992, 1996, and 2000, but not significantly different from the corresponding percentages of students in 2003, 2005, and 2007.
- In North Carolina, the percentage of female students performing at or above *Proficient* in 2009 was greater than the corresponding percentages of students in 1992, 1996, and 2000, but not significantly different from the corresponding percentages of students in 2003, 2005, and 2007.

**Table  
4-A**

Percentage of fourth-grade public school students, average scale score, and percentage at or above achievement levels in NAEP mathematics, by gender, year and jurisdiction, assessment year and jurisdiction: Various years, 1992–2009

Gender, year and jurisdiction		Percentage of students	Average scale score	Below Basic	At or above Basic	At or above Proficient	At Advanced
<b>Male</b>							
1992 <sup>1</sup>	Nation (public)	50	220*	41*	59*	19*	2*
	North Carolina	51	213*	50*	50*	13*	2*
1996 <sup>1</sup>	Nation (public)	51	224*	37*	63*	22*	3*
	North Carolina	50	224*	36*	64*	22*	3*
2000 <sup>1</sup>	Nation (public)	51	227*	32*	68*	27*	3*
	North Carolina	49*	234*	24*	76*	30*	4*
2000	Nation (public)	51	225*	35*	65*	25*	3*
	North Carolina	50	230*	27*	73*	26*	3*
2003	Nation (public)	51	235*	23*	77*	34*	5*
	North Carolina	50	243	15	85	42	7
2005	Nation (public)	51	238*	20*	80*	37*	6*
	North Carolina	51	242	17	83	41	7
2007	Nation (public)	51*	240	18	82	41	7
	North Carolina	50	243	16	84	43	7
2009	Nation (public)	51	240	19	81	40	7
	North Carolina	51	244	14	86	44	8
<b>Female</b>							
1992 <sup>1</sup>	Nation (public)	50	218*	44*	56*	16*	1*
	North Carolina	49	213*	49*	51*	12*	1*
1996 <sup>1</sup>	Nation (public)	49	221*	39*	61*	17*	1*
	North Carolina	50	224*	35*	65*	20*	2*
2000 <sup>1</sup>	Nation (public)	49	225*	34*	66*	22*	2*
	North Carolina	51*	231*	25*	75*	26*	2*
2000	Nation (public)	49	223*	38*	62*	20*	1*
	North Carolina	50	230*	26*	74*	24*	2*
2003	Nation (public)	49	233*	25*	75*	29*	3*
	North Carolina	50	241	15	85	40	5*
2005	Nation (public)	49	236*	21*	79*	33*	4*
	North Carolina	49	241*	16	84	38	6
2007	Nation (public)	49*	238	19	81	36	4
	North Carolina	50	241*	15	85	39	5*
2009	Nation (public)	49	238	19	81	37	5
	North Carolina	49	244	13	87	42	8

\*Value is significantly different ( $p < .05$ ) from the value for the same jurisdiction and student group in 2009.

<sup>1</sup>Accommodations were not permitted for this assessment.

NOTE: The NAEP grade 4 mathematics scale ranges from 0 to 500. Achievement levels correspond to the following points on the NAEP mathematics scales: below *Basic*, 213 or lower; *Basic*, 214–248; *Proficient*, 249–281; and *Advanced*, 282 and above. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 1992–2009 Mathematics Assessments.

**Grade 8 Scale Score Results by Gender**

- In 2009, male students in North Carolina had an average score that was not found to be significantly different from that of female students. In 1990, male students in North Carolina had an average score that was not found to be significantly different from that of female students.
- In 2009, male students in North Carolina had an average scale score in mathematics (284) that was not significantly different from that of male students in public schools across the nation (283). However, female students in North Carolina had an average scale score (284) that was higher than that of female students across the nation (281).
- In North Carolina, the average scale score of male students in 2009 was higher than the scores of male students in 1990, 1992, 1996, and 2000, but not found to be significantly different from the scores of male students in 2003, 2005, and 2007.
- In North Carolina, the average scale score of female students in 2009 was higher than the scores of female students in 1990, 1992, 1996, and 2000, but not found to be significantly different from the scores of female students in 2003, 2005, and 2007.

**Grade 8 Achievement-Level Results by Gender**

- The percentage of male students in North Carolina's public schools who were at or above *Proficient* in 2009 (37 percent) was not significantly different from that of male students in the nation (34 percent).
- The percentage of female students in North Carolina's public schools who were at or above *Proficient* in 2009 (34 percent) was not significantly different from that of female students in the nation (31 percent).
- In North Carolina, the percentage of male students performing at or above *Proficient* in 2009 was greater than the corresponding percentages of students in 1990, 1992, 1996, and 2000, but not significantly different from the corresponding percentages of students in 2003, 2005, and 2007.
- In North Carolina, the percentage of female students performing at or above *Proficient* in 2009 was greater than the corresponding percentages of students in 1990, 1992, 1996, and 2000, but not significantly different from the corresponding percentages of students in 2003, 2005, and 2007.

# NAEP 2009 Mathematics Report for North Carolina (Embargoed)

## The Nation's Report Card 2009 State Assessment

**Table  
4-B**

Percentage of eighth-grade public school students, average scale score, and percentage at or above achievement levels in NAEP mathematics, by gender, year and jurisdiction, assessment year and jurisdiction: Various years, 1990–2009

Gender, year and jurisdiction		Percentage of students	Average scale score	Below Basic	At or above Basic	At or above Proficient	At Advanced
<b>Male</b>							
1990 <sup>1</sup>	Nation (public)	51	262*	49*	51*	17*	2*
	North Carolina	51	250*	62*	38*	9*	1*
1992 <sup>1</sup>	Nation (public)	52	266*	45*	55*	20*	3*
	North Carolina	50	259*	52*	48*	14*	1*
1996 <sup>1</sup>	Nation (public)	52*	270*	40*	60*	24*	4*
	North Carolina	48*	270*	41*	59*	23*	4*
2000 <sup>1</sup>	Nation (public)	50	276*	34*	66*	29*	6*
	North Carolina	49	282	27	73	31	7
2000	Nation (public)	50	273*	38*	62*	26*	5*
	North Carolina	51	277*	32	68	28*	6*
2003	Nation (public)	50	277*	33*	67*	29*	6*
	North Carolina	50	281	29	71	32	7
2005	Nation (public)	51	278*	32*	68*	30*	6*
	North Carolina	51	281	29	71	32	7
2007	Nation (public)	51	281*	29*	71*	33*	8*
	North Carolina	50	285	26	74	36	9
2009	Nation (public)	51	283	28	72	34	8
	North Carolina	51	284	27	73	37	9
<b>Female</b>							
1990 <sup>1</sup>	Nation (public)	49	261*	49*	51*	14*	2*
	North Carolina	49	251*	62*	38*	8*	1*
1992 <sup>1</sup>	Nation (public)	48	267*	44*	56*	20*	3*
	North Carolina	50	257*	54*	46*	10*	1*
1996 <sup>1</sup>	Nation (public)	48*	271*	39*	61*	21*	3*
	North Carolina	52*	266*	46*	54*	18*	3*
2000 <sup>1</sup>	Nation (public)	50	273*	36*	64*	24*	4*
	North Carolina	51	278*	32*	68*	29*	5*
2000	Nation (public)	50	271*	38*	62*	23*	4*
	North Carolina	49	275*	35*	65*	26*	4*
2003	Nation (public)	50	275*	34*	66*	26*	4*
	North Carolina	50	282	28	72	32	7
2005	Nation (public)	49	277*	33*	67*	27*	5*
	North Carolina	49	282	26	74	32	7
2007	Nation (public)	49	279*	30	70	29*	6*
	North Carolina	50	283	28	72	33	7
2009	Nation (public)	49	281	29	71	31	7
	North Carolina	49	284	25	75	34	9

\*Value is significantly different ( $p < .05$ ) from the value for the same jurisdiction and student group in 2009.

<sup>1</sup>Accommodations were not permitted for this assessment.

NOTE: The NAEP grade 8 mathematics scale ranges from 0 to 500. Achievement levels correspond to the following points on the NAEP mathematics scales: below *Basic*, 261 or lower; *Basic*, 262–298; *Proficient*, 299–332; and *Advanced*, 333 and above. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 1990–2009 Mathematics Assessments.

**Student Eligibility for the National School Lunch Program**

NAEP collects data on eligibility for the federal program providing free or reduced-price school lunches. The free/reduced-price lunch component of the National School Lunch Program (NSLP) offered through the U.S. Department of Agriculture (USDA) is designed to ensure that children near or below the poverty line receive nourishing meals. Eligibility is determined through the USDA's Income Eligibility Guidelines, and results for this category of students are included as an indicator of lower family income. NAEP first collected information on participation in this program in 1996; therefore, cross-year comparisons to assessments prior to 1996 cannot be made.

Tables 5-A and 5-B show average scale scores and achievement-level data for public school students at grades 4 and 8 in North Carolina and the nation, by student eligibility for the NSLP.

**Grade 4 Scale Score Results by Free/Reduced-Price School Lunch Eligibility**

- In 2009, students in North Carolina eligible for free/reduced-price lunch had an average mathematics scale score of 232. This was lower than that of students in North Carolina not eligible for this program (255).
- In 2009, students in North Carolina who were eligible for free/reduced-price school lunch had an average score that was lower than that of students who were not eligible for free/reduced-price school lunch by 22 points. In 1996, the average score for students in North Carolina who were eligible for free/reduced-price school lunch was lower than the score of those not eligible by 25 points.
- Students in North Carolina eligible for free/reduced-price lunch had an average scale score (232) in 2009 that was higher than that of students in the nation who were eligible (228).
- In North Carolina, students eligible for free/reduced-price lunch had an average mathematics scale score in 2009 that was higher than that of eligible students in 1996, 2000, 2003, and 2005, but not found to be significantly different from that of eligible students in 2007.

**Grade 4 Achievement-Level Results by Free/Reduced-Price School Lunch Eligibility**

- In North Carolina, 25 percent of students who were eligible for free/reduced-price lunch and 60 percent of those who were not eligible for this program performed at or above *Proficient* in 2009. These percentages were found to be significantly different from one another.
- For students in North Carolina in 2009 who were eligible for free/reduced-price lunch, the percentage at or above *Proficient* (25 percent) was greater than the corresponding percentage for their counterparts around the nation (22 percent).
- In North Carolina, the percentage of students eligible for free/reduced-price lunch who performed at or above *Proficient* for 2009 was greater than the corresponding percentages for 1996 and 2000, but not found to be significantly different from the corresponding percentages for 2003, 2005, and 2007.

**Table  
5-A**

Percentage of fourth-grade public school students, average scale score, and percentage at or above achievement levels in NAEP mathematics, by eligibility status, year and jurisdiction, assessment year and jurisdiction: Various years, 1996–2009

Eligibility status, year and jurisdiction		Percentage of students	Average scale score	Below Basic	At or above Basic	At or above Proficient	At Advanced
<b>Eligible</b>							
1996 <sup>1</sup>	Nation (public)	34 *	207 *	59 *	41 *	8 *	# *
	North Carolina	34 *	209 *	55 *	45 *	7 *	1 *
2000 <sup>1</sup>	Nation (public)	35 *	210 *	54 *	46 *	9 *	# *
	North Carolina	40 *	220 *	39 *	61 *	12 *	#
2000	Nation (public)	40 *	208 *	57 *	43 *	7 *	# *
	North Carolina	42 *	218 *	41 *	59 *	11 *	# *
2003	Nation (public)	44 *	222 *	38 *	62 *	15 *	1 *
	North Carolina	42 *	229 *	27	73	21	1
2005	Nation (public)	46 *	225 *	33 *	67 *	19 *	1
	North Carolina	44	229 *	27 *	73 *	22	1
2007	Nation (public)	46 *	227	30	70	22	1
	North Carolina	48	231	24	76	24	2
2009	Nation (public)	48	228	29	71	22	1
	North Carolina	48	232	22	78	25	2
<b>Not eligible</b>							
1996 <sup>1</sup>	Nation (public)	52	231 *	27 *	73 *	25 *	3 *
	North Carolina	58 *	234 *	23 *	77 *	30 *	4 *
2000 <sup>1</sup>	Nation (public)	52	236 *	21 *	79 *	33 *	4 *
	North Carolina	55	241 *	14 *	86 *	39 *	5 *
2000	Nation (public)	49	235 *	23 *	77 *	32 *	4 *
	North Carolina	54	239 *	16 *	84 *	36 *	4 *
2003	Nation (public)	52	244 *	12 *	88 *	45 *	6 *
	North Carolina	52	252 *	6	94	55	10
2005	Nation (public)	52 *	248 *	10 *	90 *	50 *	8 *
	North Carolina	54	251 *	8 *	92 *	54	11
2007	Nation (public)	53 *	249	9	91	53	9 *
	North Carolina	50	252	7	93	57	10 *
2009	Nation (public)	51	250	9	91	54	10
	North Carolina	51	255	6	94	60	14

See notes at end of table.

**Table  
5-A**

Percentage of fourth-grade public school students, average scale score, and percentage at or above achievement levels in NAEP mathematics, by eligibility status, year and jurisdiction, assessment year and jurisdiction: Various years, 1996–2009–Continued

Eligibility status, year and jurisdiction		Percentage of students	Average scale score	Below Basic	At or above Basic	At or above Proficient	At Advanced
<b>Information not available</b>							
1996 <sup>1</sup>	Nation (public)	13 *	230	28	72	28	3
	North Carolina	8 *	217	43	57	17	1
2000 <sup>1</sup>	Nation (public)	13 *	235	23	77	35	3
	North Carolina	5 *	237	19	81	34	3
2000	Nation (public)	11 *	236	22	78	35	4
	North Carolina	4 *	234	21	79	31	4
2003	Nation (public)	4 *	235	23	77	34	4
	North Carolina	7 *	247	11	89	51	7
2005	Nation (public)	2 *	237	21	79	36	5
	North Carolina	1	‡	‡	‡	‡	‡
2007	Nation (public)	1	243	17	83	44	8
	North Carolina	2	238	18	82	40	2
2009	Nation (public)	1	240	22	78	42	7
	North Carolina	1	‡	‡	‡	‡	‡

#Rounds to zero.

‡Reporting standards not met.

\*Value is significantly different ( $p < .05$ ) from the value for the same jurisdiction and student group in 2009.

<sup>1</sup>Accommodations were not permitted for this assessment.

NOTE: The NAEP grade 4 mathematics scale ranges from 0 to 500. Achievement levels correspond to the following points on the NAEP mathematics scales: below *Basic*, 213 or lower; *Basic*, 214–248; *Proficient*, 249–281; and *Advanced*, 282 and above. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 1996–2009 Mathematics Assessments.

***Grade 8 Scale Score Results by Free/Reduced-Price School Lunch Eligibility***

- In 2009, students in North Carolina eligible for free/reduced-price lunch had an average mathematics scale score of 268. This was lower than that of students in North Carolina not eligible for this program (298).
- In 2009, students in North Carolina who were eligible for free/reduced-price school lunch had an average score that was lower than that of students who were not eligible for free/reduced-price school lunch by 30 points. In 1996, the average score for students in North Carolina who were eligible for free/reduced-price school lunch was lower than the score of those not eligible by 27 points.
- Students in North Carolina eligible for free/reduced-price lunch had an average scale score (268) in 2009 that was not significantly different from that of students in the nation who were eligible (266).
- In North Carolina, students eligible for free/reduced-price lunch had an average mathematics scale score in 2009 that was higher than that of eligible students in 1996, 2000, and 2003, but not found to be significantly different from that of eligible students in 2005 and 2007.

***Grade 8 Achievement-Level Results by Free/Reduced-Price School Lunch Eligibility***

- In North Carolina, 18 percent of students who were eligible for free/reduced-price lunch and 50 percent of those who were not eligible for this program performed at or above *Proficient* in 2009. These percentages were found to be significantly different from one another.
- For students in North Carolina in 2009 who were eligible for free/reduced-price lunch, the percentage at or above *Proficient* (18 percent) was not significantly different from the corresponding percentage for their counterparts around the nation (17 percent).
- In North Carolina, the percentage of students eligible for free/reduced-price lunch who performed at or above *Proficient* for 2009 was greater than the corresponding percentages for 1996, 2000, and 2003, but not found to be significantly different from the corresponding percentages for 2005 and 2007.

**Table  
5-B**

Percentage of eighth-grade public school students, average scale score, and percentage at or above achievement levels in NAEP mathematics, by eligibility status, year and jurisdiction, assessment year and jurisdiction: Various years, 1996–2009

Eligibility status, year and jurisdiction		Percentage of students	Average scale score	Below Basic	At or above Basic	At or above Proficient	At Advanced
<b>Eligible</b>							
1996 <sup>1</sup>	Nation (public)	30 *	252 *	61 *	39 *	8 *	1 *
	North Carolina	31 *	250 *	64 *	36 *	6 *	# *
2000 <sup>1</sup>	Nation (public)	28 *	255 *	56 *	44 *	10 *	1 *
	North Carolina	28 *	261 *	51 *	49 *	13 *	1
2000	Nation (public)	31 *	253 *	59 *	41 *	10 *	1 *
	North Carolina	29 *	257 *	55 *	45 *	10 *	1
2003	Nation (public)	36 *	258 *	53 *	47 *	11 *	1 *
	North Carolina	37 *	263 *	47	53	14 *	2
2005	Nation (public)	39 *	261 *	49 *	51 *	13 *	1 *
	North Carolina	39 *	266	43	57	15	1
2007	Nation (public)	41 *	265 *	45 *	55 *	15 *	2
	North Carolina	44	268	42	58	17	2
2009	Nation (public)	43	266	43	57	17	2
	North Carolina	44	268	42	58	18	3
<b>Not eligible</b>							
1996 <sup>1</sup>	Nation (public)	56	279 *	29 *	71 *	29 *	5 *
	North Carolina	62 *	277 *	34 *	66 *	28 *	4 *
2000 <sup>1</sup>	Nation (public)	55	285 *	24 *	76 *	35 *	7 *
	North Carolina	66 *	289 *	20 *	80 *	38 *	8 *
2000	Nation (public)	54	283 *	26 *	74 *	34 *	7 *
	North Carolina	64 *	286 *	23 *	77 *	36 *	7 *
2003	Nation (public)	58 *	287 *	22 *	78 *	37 *	7 *
	North Carolina	51	291 *	18	82	42 *	10 *
2005	Nation (public)	59 *	288 *	21 *	79 *	39 *	8 *
	North Carolina	60 *	293 *	17 *	83 *	43 *	11
2007	Nation (public)	58 *	291 *	19 *	81 *	42 *	10 *
	North Carolina	55	296	15	85	48	13
2009	Nation (public)	56	293	17	83	45	12
	North Carolina	54	298	14	86	50	15

See notes at end of table.

**Table  
5-B**

Percentage of eighth-grade public school students, average scale score, and percentage at or above achievement levels in NAEP mathematics, by eligibility status, year and jurisdiction, assessment year and jurisdiction: Various years, 1996–2009–Continued

Eligibility status, year and jurisdiction		Percentage of students	Average scale score	Below Basic	At or above Basic	At or above Proficient	At Advanced
<b>Information not available</b>							
1996 <sup>1</sup>	Nation (public)	14 *	278	31	69	29	5
	North Carolina	7 *	263 *	50 *	50 *	14 *	2
2000 <sup>1</sup>	Nation (public)	16 *	273 *	37 *	63 *	26 *	4 *
	North Carolina	6 *	272	39 *	61 *	21	3
2000	Nation (public)	15 *	271 *	38 *	62 *	24 *	4 *
	North Carolina	6 *	270	37	63	18	3
2003	Nation (public)	6 *	278	32	68	29	6
	North Carolina	12 *	293	17	83	45 *	12
2005	Nation (public)	3 *	277 *	34	66	28	6
	North Carolina	1	‡	‡	‡	‡	‡
2007	Nation (public)	1	274 *	36	64	28	6
	North Carolina	1	‡	‡	‡	‡	‡
2009	Nation (public)	1	284	28	72	35	10
	North Carolina	1	285	22	78	29	7

#Rounds to zero.

‡Reporting standards not met.

\*Value is significantly different ( $p < .05$ ) from the value for the same jurisdiction and student group in 2009.

<sup>1</sup>Accommodations were not permitted for this assessment.

NOTE: The NAEP grade 8 mathematics scale ranges from 0 to 500. Achievement levels correspond to the following points on the NAEP mathematics scales: below *Basic*, 261 or lower; *Basic*, 262–298; *Proficient*, 299–332; and *Advanced*, 333 and above. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 1996–2009 Mathematics Assessments.

## **Type of Location**

Schools that participated in the assessment were classified as being located in four mutually exclusive types of communities: city, suburb, town, and rural. These categories indicate the geographic locations of schools. "City" is a geographical term meaning the principal city of a U.S. Census Bureau-defined Core-Based Statistical Area and is not synonymous with "inner city." The criteria for classifying schools with respect to type of location changed for 2007; therefore, only comparisons between 2007 and 2009 are available. More detail on the changes for the classification of type of location is available at [http://nces.ed.gov/ccd/Rural\\_Locales.asp](http://nces.ed.gov/ccd/Rural_Locales.asp).

Tables 6-A and 6-B show average scale scores and achievement-level data for public school students at grades 4 and 8 in North Carolina and the nation, by type of location (for 2007 and 2009 only).

### **Grade 4 Scale Score Results by Type of Location**

- In 2009 in North Carolina, the average scale score of students attending public schools in city locations was lower than the score of students in suburban schools, but was not found to be significantly different from the scores of students in town and rural schools.
- In 2009, students attending public schools in city and suburban locations in North Carolina had average scale scores that were higher than the average scale scores of students in city and suburban locations in the nation.
- In 2009, students attending public schools in town and rural locations in North Carolina had average scale scores that were not found to be significantly different from the average scale scores of students in town and rural locations in the nation.
- In 2009, students attending public schools in city, suburban, town, and rural locations in North Carolina had average scale scores that were not found to be significantly different from the average scale scores of students in city, suburban, town, and rural locations in 2007 in North Carolina.

### **Grade 4 Achievement-Level Results by Type of Location**

- In 2009, the percentage of students in North Carolina's public schools in city locations who performed at or above *Proficient* was smaller than the percentage of students in suburban schools, but was not found to be significantly different from the corresponding percentages of students in town and rural schools.
- The percentages of students in North Carolina's public schools in city and suburban locations who performed at or above *Proficient* in 2009 were greater than those of students in city and suburban locations in the nation.
- The percentages of students in North Carolina's public schools in town and rural locations who performed at or above *Proficient* in 2009 were not found to be significantly different from those of students in town and rural locations in the nation.
- The percentages of students in North Carolina's public schools in city, suburban, town, and rural locations who performed at or above *Proficient* in 2009 were not found to be significantly different from those of students in city, suburban, town, and rural locations in 2007 in North Carolina.

**Table  
6-A**

Percentage of fourth-grade public school students, average scale score, and percentage at or above achievement levels in NAEP mathematics, by type of location, year and jurisdiction, assessment year and jurisdiction: 2007 and 2009

Type of location, year and jurisdiction		Percentage of students	Average scale score	Below Basic	At or above Basic	At or above Proficient	At Advanced
<b>City</b>							
2007	Nation (public)	29	233	26	74	32	5
	North Carolina	29	240	17	83	40	6
2009	Nation (public)	30	234	25	75	32	5
	North Carolina	28	243	16	84	42	10
<b>Suburb</b>							
2007	Nation (public)	37	243	15	85	44	7
	North Carolina	18	246	12	88	47	9
2009	Nation (public)	36	243	16	84	44	7
	North Carolina	17	249	11	89	51	12
<b>Town</b>							
2007	Nation (public)	12	238	18	82	36	4
	North Carolina	12	234	21	79	29	2
2009	Nation (public)	12	237	19	81	35	4
	North Carolina	13	241	14	86	39	6
<b>Rural</b>							
2007	Nation (public)	22	240	16	84	39	5
	North Carolina	41	243	13	87	43	6
2009	Nation (public)	22	240	16	84	39	5
	North Carolina	42	243	13	87	42	7

NOTE: The NAEP grade 4 mathematics scale ranges from 0 to 500. Achievement levels correspond to the following points on the NAEP mathematics scales: below *Basic*, 213 or lower; *Basic*, 214–248; *Proficient*, 249–281; and *Advanced*, 282 and above. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2007 and 2009 Mathematics Assessments.

***Grade 8 Scale Score Results by Type of Location***

- In 2009 in North Carolina, the average scale score of students attending public schools in city locations was not found to be significantly different from the scores of students in suburban, town, and rural schools.
- In 2009, students attending public schools in city, suburban, town, and rural locations in North Carolina had average scale scores that were not found to be significantly different from the average scale scores of students in city, suburban, town, and rural locations in the nation.
- In 2009, students attending public schools in city, suburban, town, and rural locations in North Carolina had average scale scores that were not found to be significantly different from the average scale scores of students in city, suburban, town, and rural locations in 2007 in North Carolina.

***Grade 8 Achievement-Level Results by Type of Location***

- In 2009, the percentage of students in North Carolina's public schools in city locations who performed at or above *Proficient* was not found to be significantly different from the corresponding percentages of students in suburban, town, and rural schools.
- The percentages of students in North Carolina's public schools in city, suburban, town, and rural locations who performed at or above *Proficient* in 2009 were not found to be significantly different from those of students in city, suburban, town, and rural locations in the nation.
- The percentages of students in North Carolina's public schools in city, suburban, town, and rural locations who performed at or above *Proficient* in 2009 were not found to be significantly different from those of students in city, suburban, town, and rural locations in 2007 in North Carolina.

**Table  
6-B**

Percentage of eighth-grade public school students, average scale score, and percentage at or above achievement levels in NAEP mathematics, by type of location, year and jurisdiction, assessment year and jurisdiction: 2007 and 2009

Type of location, year and jurisdiction		Percentage of students	Average scale score	Below Basic	At or above Basic	At or above Proficient	At Advanced
<b>City</b>							
2007	Nation (public)	28	273*	38*	62*	25*	5*
	North Carolina	25	282	32	68	34	9
2009	Nation (public)	27	276	36	64	28	6
	North Carolina	22	279	35	65	31	11
<b>Suburb</b>							
2007	Nation (public)	36	285	26	74	36	9*
	North Carolina	16	295	16	84	46	13
2009	Nation (public)	36	286	25	75	37	10
	North Carolina	18	291	21	79	44	11
<b>Town</b>							
2007	Nation (public)	13	280	29	71	29	5
	North Carolina	14	276	34	66	25	5
2009	Nation (public)	14	279	30	70	29	5
	North Carolina	14	282	27	73	32	8
<b>Rural</b>							
2007	Nation (public)	22	282*	26	74	32*	6
	North Carolina	45	284	26	74	34	7
2009	Nation (public)	23	284	25	75	33	7
	North Carolina	46	285	25	75	36	8

\*Value is significantly different ( $p < .05$ ) from the value for the same jurisdiction and student group in 2009.

NOTE: The NAEP grade 8 mathematics scale ranges from 0 to 500. Achievement levels correspond to the following points on the NAEP mathematics scales: below *Basic*, 261 or lower; *Basic*, 262–298; *Proficient*, 299–332; and *Advanced*, 333 and above. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2007 and 2009 Mathematics Assessments.

### **Parents' Highest Level of Education**

Eighth- and twelfth-grade students who participated in the NAEP 2009 assessment were asked to indicate the highest level of education they thought their father and their mother had completed. Five response options—did not finish high school, graduated from high school, some education after high school, graduated from college, and "I don't know"—were offered. The highest level of education reported for either parent was used in the analysis. Fourth-graders were not asked about their parents' education level because their responses in previous NAEP assessments were not reliable, and a large percentage of them chose the "I don't know" option.

The results by highest level of parental education are shown in table 7.

#### ***Grade 8 Scale Score Results by Parents' Highest Level of Education***

- In 2009, students in North Carolina who reported that a parent had graduated from college had an average scale score that was higher than the average scores of students with a parent in any of the following education categories: some education after high school, graduated from high school, and did not finish high school.
- In 2009, the average scale scores for students in North Carolina who reported that a parent had graduated from college, had some education after high school, had graduated from high school, or had not finished high school were not found to be significantly different from the corresponding scores of students in the nation.
- In 2009, the average scale scores for students in North Carolina who reported that a parent had graduated from college, had graduated from high school, or had not finished high school were higher than the corresponding scores of students in 1990, 1992, 1996, and 2000, but not found to be significantly different from the corresponding scores of students in 2003, 2005, and 2007.
- In 2009, the average scale score for students in North Carolina who reported that a parent some education after high school was higher than the score of students in 1990, 1992, and 1996, but not found to be significantly different from the score of students in 2000, 2003, 2005, and 2007.

#### ***Grade 8 Achievement-Level Results by Parents' Highest Level of Education***

- In 2009, the percentage of students performing at or above *Proficient* in North Carolina who reported that a parent had graduated from college was greater than the percentage for students whose parents' highest level of education was in any of the following education categories: some education after high school, graduated from high school, and did not finish high school.
- In 2009 in North Carolina, the percentages of students reporting that a parent had graduated from college, had some education after high school, had graduated from high school, or had not finished high school who performed at or above *Proficient* were not found to be significantly different from the corresponding percentages of students in the nation.
- In 2009, the respective percentages of students reporting that a parent had graduated from college or had not finished high school who performed at or above *Proficient* were greater than the corresponding percentages of students in 1990, 1992, 1996, and 2000, but not found to be significantly different from the corresponding percentages of students in 2003, 2005, and 2007.
- In 2009, the respective percentages of students reporting that a parent had some education after high school or had graduated from high school who performed at or above *Proficient* were greater than the corresponding percentages of students in 1990, 1992, and 1996, but not found to be significantly different from the corresponding percentages of students in 2000, 2003, 2005, and 2007.

**Table  
7**

Percentage of eighth-grade public school students, average scale score, and percentage at or above achievement levels in NAEP mathematics, by parental education level, year and jurisdiction, assessment year and jurisdiction: Various years, 1990–2009

Parental education level, year and jurisdiction		Percentage of students	Average scale score	Below Basic	At or above Basic	At or above Proficient	At Advanced
<b>Did not finish high school</b>							
1990 <sup>1</sup>	Nation (public)	10	241 *	76 *	24 *	3 *	#
	North Carolina	11 *	235 *	80 *	20 *	2 *	#
1992 <sup>1</sup>	Nation (public)	8	249 *	66 *	34 *	6 *	1
	North Carolina	10 *	241 *	74 *	26 *	3 *	#
1996 <sup>1</sup>	Nation (public)	8	254 *	56 *	44 *	8 *	1
	North Carolina	7	250 *	67 *	33 *	5 *	#
2000 <sup>1</sup>	Nation (public)	7 *	255 *	55 *	45 *	8 *	1
	North Carolina	7	261	54	46	10	1
2000	Nation (public)	8	253 *	57 *	43 *	7 *	# *
	North Carolina	7	258 *	58 *	42 *	8 *	1
2003	Nation (public)	7 *	256 *	56 *	44 *	9 *	1 *
	North Carolina	7	264	45	55	14	1
2005	Nation (public)	8 *	259 *	52 *	48 *	11 *	1 *
	North Carolina	7	265	45	55	17	1
2007	Nation (public)	8	263 *	48	52	12 *	1
	North Carolina	7	268	45	55	16	3
2009	Nation (public)	8	265	45	55	14	1
	North Carolina	8	267	43	57	18	3
<b>Graduated from high school</b>							
1990 <sup>1</sup>	Nation (public)	25 *	255 *	59 *	41 *	8 *	#
	North Carolina	32 *	242 *	73 *	27 *	4 *	# *
1992 <sup>1</sup>	Nation (public)	25 *	257 *	55 *	45 *	10 *	1 *
	North Carolina	27 *	247 *	67 *	33 *	5 *	#
1996 <sup>1</sup>	Nation (public)	23 *	260 *	50 *	50 *	12 *	1
	North Carolina	24 *	257 *	55 *	45 *	10 *	1
2000 <sup>1</sup>	Nation (public)	21 *	263 *	47 *	53 *	16 *	1
	North Carolina	21 *	268	42	58	18	2
2000	Nation (public)	21 *	260 *	49 *	51 *	15 *	1
	North Carolina	22 *	264 *	45 *	55 *	15	1
2003	Nation (public)	18 *	267 *	42 *	58 *	16 *	2 *
	North Carolina	19	270	40	60	21	2
2005	Nation (public)	18 *	267 *	42 *	58 *	17 *	2
	North Carolina	21 *	270	38	62	19	1
2007	Nation (public)	18	270	40	60	19	2
	North Carolina	19	271	38	62	20	2
2009	Nation (public)	17	270	38	62	19	2
	North Carolina	17	272	36	64	21	2

See notes at end of table.

**Table  
7**

Percentage of eighth-grade public school students, average scale score, and percentage at or above achievement levels in NAEP mathematics, by parental education level, year and jurisdiction, assessment year and jurisdiction: Various years, 1990–2009–Continued

Parental education level, year and jurisdiction		Percentage of students	Average scale score	Below Basic	At or above Basic	At or above Proficient	At Advanced
<b>Some education after high school</b>							
1990 <sup>1</sup>	Nation (public)	17	267*	43*	57*	15*	3*
	North Carolina	17	258*	52*	48*	8*	#
1992 <sup>1</sup>	Nation (public)	18*	270*	40*	60*	20*	3*
	North Carolina	20*	266*	44*	56*	14*	1
1996 <sup>1</sup>	Nation (public)	19*	279*	29*	71*	26*	4
	North Carolina	20*	272*	38*	62*	20*	3
2000 <sup>1</sup>	Nation (public)	18	279*	28*	72*	27*	3
	North Carolina	20*	282	25	75	29	4
2000	Nation (public)	18	277*	30*	70*	26*	3*
	North Carolina	20*	279	29	71	26	4
2003	Nation (public)	18*	280*	27*	73*	28*	4*
	North Carolina	21*	283	24	76	31	5
2005	Nation (public)	18*	280*	27*	73*	28*	4*
	North Carolina	21*	282	26	74	29	6
2007	Nation (public)	17	283	24	76	32	5
	North Carolina	18	287	22	78	37	6
2009	Nation (public)	17	283	24	76	32	5
	North Carolina	17	284	25	75	32	7
<b>Graduated from college</b>							
1990 <sup>1</sup>	Nation (public)	39*	274*	34*	66*	25*	4*
	North Carolina	33*	263*	46*	54*	17*	2*
1992 <sup>1</sup>	Nation (public)	40*	279*	30*	70*	31*	5*
	North Carolina	36*	271*	38*	62*	21*	3*
1996 <sup>1</sup>	Nation (public)	40*	281*	28*	72*	34*	7*
	North Carolina	40*	279*	32*	68*	32*	5*
2000 <sup>1</sup>	Nation (public)	43*	286*	24*	76*	39*	9*
	North Carolina	45	291	19	81	43	10*
2000	Nation (public)	41*	285*	25*	75*	38*	9*
	North Carolina	43*	290*	21	79	41*	9*
2003	Nation (public)	45	287*	23*	77*	39*	8*
	North Carolina	44	291	20	80	44	12
2005	Nation (public)	45*	289*	22*	78*	41*	10*
	North Carolina	43*	294	18	82	46	12
2007	Nation (public)	46	291*	20*	80*	43*	11*
	North Carolina	45	295	18	82	47	13
2009	Nation (public)	46	294	18	82	46	13
	North Carolina	48	296	17	83	49	15

See notes at end of table.

**Table  
7**

Percentage of eighth-grade public school students, average scale score, and percentage at or above achievement levels in NAEP mathematics, by parental education level, year and jurisdiction, assessment year and jurisdiction: Various years, 1990–2009–Continued

Parental education level, year and jurisdiction		Percentage of students	Average scale score	Below Basic	At or above Basic	At or above Proficient	At Advanced
<b>Unknown</b>							
1990 <sup>1</sup>	Nation (public)	9*	240*	71*	29*	5*	#
	North Carolina	7*	230*	85*	15*	2	#
1992 <sup>1</sup>	Nation (public)	9*	251*	62*	38*	9*	#
	North Carolina	6*	241*	73*	27*	4*	#
1996 <sup>1</sup>	Nation (public)	11	253*	59*	41*	10*	1*
	North Carolina	9	254*	59*	41*	8*	#
2000 <sup>1</sup>	Nation (public)	11	255*	55*	45*	11*	1*
	North Carolina	7*	261	51	49	9	1
2000	Nation (public)	12	253*	59*	41*	9*	1*
	North Carolina	8*	251*	59*	41*	6*	1
2003	Nation (public)	11	258*	53*	47*	12*	1*
	North Carolina	9	267	40	60	19	2
2005	Nation (public)	11*	260*	51*	49*	13*	1*
	North Carolina	9	266	42	58	16	2
2007	Nation (public)	12	263	48	52	15	2
	North Carolina	11	269	41	59	16	2
2009	Nation (public)	12	264	47	53	16	2
	North Carolina	10	268	42	58	18	2

#Rounds to zero.

\*Value is significantly different ( $p < .05$ ) from the value for the same jurisdiction and student group in 2009.

<sup>1</sup>Accommodations were not permitted for this assessment.

NOTE: The NAEP grade 8 mathematics scale ranges from 0 to 500. Achievement levels correspond to the following points on the NAEP mathematics scales: below *Basic*, 261 or lower; *Basic*, 262–298; *Proficient*, 299–332; and *Advanced*, 333 and above. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 1990–2009 Mathematics Assessments.

## A More Inclusive NAEP: Students With Disabilities and English Language Learners

To ensure that the samples are representative, NAEP has established policies and procedures to maximize the inclusion of all students in the assessment. Every effort is made to ensure that all selected students who are capable of participating meaningfully in the assessment are assessed. While some students with disabilities (SD) and/or English language learners (ELL) can be assessed without any special procedures, others require accommodations to participate in NAEP. Still other SD and/or ELL students selected by NAEP may not be able to participate. Local school staff who are familiar with these students are asked a series of questions to help them decide whether each student should participate in the assessment and whether the student needs accommodations.

Within any assessment year, exclusion and accommodation rates may vary across jurisdictions. In addition, exclusion and accommodation rates may increase or decrease between assessment administrations, making it difficult to interpret comparisons over time within jurisdictions. Since SD and/or ELL students tend to score below average on assessments, the exclusion of students from these groups may result in a higher average score than if those students had taken the assessment. On the other hand, providing appropriate testing accommodations (e.g., providing extended time for some SD and/or ELL students to take the assessment) removes barriers that would otherwise prevent them from demonstrating their knowledge and skills.

Prior to 2000, testing accommodations were not provided for students with special needs in NAEP state mathematics assessments. For 2000, results are displayed for both the sample in which accommodations were permitted and the sample in which they were not permitted. Subsequent assessment results were based on the more inclusive samples.

Tables 8-A and 8-B display data for 4<sup>th</sup> and 8<sup>th</sup> grade students in North Carolina who were identified as SD and/or ELL, by whether they were excluded, assessed with accommodations, or assessed under standard conditions, as a percent of all 4<sup>th</sup> or 8<sup>th</sup> grade students in the state.

Tables 9-A and 9-B show the percentages of students assessed in North Carolina by disability status and their performance on the NAEP assessment in terms of average scale scores and percentages performing below *Basic*, at or above *Basic*, at or above *Proficient*, and at *Advanced* for grades 4 and 8 .

Tables 10-A and 10-B present the percentages of students assessed in North Carolina by ELL status, their average scale scores, and their performance in terms of the percentages below *Basic*, the percentages at or above *Basic*, at or above *Proficient*, and at *Advanced* for grades 4 and 8 .

Tables 11-A and 11-B present the total number of grades 4 and 8 students assessed in each of the participating states and the percentage of students sampled who were excluded.

# NAEP 2009 Mathematics Report for North Carolina (Embargoed)

## The Nation's Report Card 2009 State Assessment

**Table  
8-A**

Fourth-grade public school students identified as students with disabilities (SD) and/or English language learners (ELL) in NAEP mathematics, by assessment year and testing status, as a percentage of all students: Various years, 1992–2009

Year and testing status		SD and/or ELL		SD		ELL	
		North Carolina	Nation	North Carolina	Nation	North Carolina	Nation
1992 <sup>1</sup>	<b>Identified</b>	<b>12</b>	<b>10</b>	<b>11</b>	<b>7</b>	<b>1</b>	<b>3</b>
	Excluded	4	7	3	5	#	2
	Assessed under standard conditions	8	4	8	3	#	1
1996 <sup>1</sup>	<b>Identified</b>	<b>14</b>	<b>16</b>	<b>13</b>	<b>12</b>	<b>2</b>	<b>4</b>
	Excluded	7	6	6	5	1	2
	Assessed under standard conditions	7	9	6	7	1	2
2000	<b>Identified</b>	<b>16</b>	<b>19</b>	<b>14</b>	<b>13</b>	<b>3</b>	<b>7</b>
	Excluded	5	4	4	3	1	1
	Assessed under standard conditions	3	10	3	5	1	5
	Assessed with accommodations	8	5	7	4	1	1
2003	<b>Identified</b>	<b>21</b>	<b>22</b>	<b>17</b>	<b>14</b>	<b>5</b>	<b>11</b>
	Excluded	4	4	4	3	1	1
	Assessed under standard conditions	5	10	3	4	2	7
	Assessed with accommodations	12	8	10	7	2	2
2005	<b>Identified</b>	<b>21</b>	<b>23</b>	<b>15</b>	<b>14</b>	<b>6</b>	<b>10</b>
	Excluded	2	3	2	3	1	1
	Assessed under standard conditions	4	10	3	4	2	7
	Assessed with accommodations	14	10	10	8	4	3
2007	<b>Identified</b>	<b>21</b>	<b>23</b>	<b>15</b>	<b>14</b>	<b>7</b>	<b>11</b>
	Excluded	2	3	2	3	1	1
	Assessed under standard conditions	5	10	3	3	2	7
	Assessed with accommodations	14	10	10	8	4	3
2009	<b>Identified</b>	<b>19</b>	<b>23</b>	<b>15</b>	<b>13</b>	<b>6</b>	<b>10</b>
	Excluded	2	2	2	2	#	1
	Assessed under standard conditions	4	9	3	3	2	6
	Assessed with accommodations	13	11	10	8	4	4

# Rounds to zero.

<sup>1</sup> Accommodations were not permitted for this assessment year.

NOTE: Students identified as both SD and ELL were counted only once under the combined SD and/or ELL category, but were counted separately under the SD and ELL categories. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 1992–2009 Mathematics Assessments.

# NAEP 2009 Mathematics Report for North Carolina (Embargoed)

## The Nation's Report Card 2009 State Assessment

**Table  
8-B**

Eighth-grade public school students identified as students with disabilities (SD) and/or English language learners (ELL) in NAEP mathematics, by assessment year and testing status, as a percentage of all students: Various years, 1990–2009

Year and testing status		SD and/or ELL		SD		ELL	
		North Carolina	Nation	North Carolina	Nation	North Carolina	Nation
1990 <sup>1</sup>	<b>Identified</b>	<b>9</b>	—	<b>9</b>	—	<b>#</b>	—
	Excluded	3	—	3	—	#	—
	Assessed under standard conditions	6	—	6	—	#	—
1992 <sup>1</sup>	<b>Identified</b>	<b>12</b>	<b>10</b>	<b>12</b>	<b>8</b>	<b>#</b>	<b>2</b>
	Excluded	3	6	3	5	#	2
	Assessed under standard conditions	9	4	9	3	#	1
1996 <sup>1</sup>	<b>Identified</b>	<b>9</b>	<b>11</b>	<b>8</b>	<b>9</b>	<b>1</b>	<b>3</b>
	Excluded	4	5	4	4	1	1
	Assessed under standard conditions	5	7	5	5	#	2
2000	<b>Identified</b>	<b>16</b>	<b>14</b>	<b>14</b>	<b>11</b>	<b>2</b>	<b>4</b>
	Excluded	5	4	4	3	1	1
	Assessed under standard conditions	4	7	3	5	1	3
	Assessed with accommodations	7	3	7	2	#	1
2003	<b>Identified</b>	<b>18</b>	<b>19</b>	<b>16</b>	<b>14</b>	<b>4</b>	<b>6</b>
	Excluded	4	4	3	3	1	1
	Assessed under standard conditions	3	8	2	5	1	4
	Assessed with accommodations	12	7	10	6	2	1
2005	<b>Identified</b>	<b>17</b>	<b>19</b>	<b>14</b>	<b>13</b>	<b>4</b>	<b>6</b>
	Excluded	3	4	2	3	1	1
	Assessed under standard conditions	3	7	2	3	1	4
	Assessed with accommodations	12	8	11	7	2	1
2007	<b>Identified</b>	<b>17</b>	<b>18</b>	<b>13</b>	<b>13</b>	<b>4</b>	<b>7</b>
	Excluded	2	4	2	4	#	1
	Assessed under standard conditions	3	6	1	2	2	4
	Assessed with accommodations	12	8	10	6	2	2
2009	<b>Identified</b>	<b>17</b>	<b>18</b>	<b>12</b>	<b>13</b>	<b>5</b>	<b>6</b>
	Excluded	2	3	1	3	#	#
	Assessed under standard conditions	3	5	1	2	2	3
	Assessed with accommodations	13	10	10	8	3	2

# Rounds to zero.

— Not available.

<sup>1</sup> Accommodations were not permitted for this assessment year.

NOTE: Students identified as both SD and ELL were counted only once under the combined SD and/or ELL category, but were counted separately under the SD and ELL categories. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 1990–2009 Mathematics Assessments.

**Table 9-A**

Percentage of fourth-grade public school students, average scale score, and percentage at or above achievement levels in NAEP mathematics, by students with disabilities (SD) status, assessment year and jurisdiction: Various years, 1992–2009

SD status, year and jurisdiction		Percentage of students	Average scale score	Below Basic	At or above Basic	At or above Proficient	At Advanced
<b>SD</b>							
1992 <sup>1</sup>	Nation (public)	‡	‡	‡	‡	‡	‡
	North Carolina	‡	‡	‡	‡	‡	‡
1996 <sup>1</sup>	Nation (public)	‡	‡	‡	‡	‡	‡
	North Carolina	‡	‡	‡	‡	‡	‡
2000 <sup>1</sup>	Nation (public)	‡	‡	‡	‡	‡	‡
	North Carolina	‡	‡	‡	‡	‡	‡
2000	Nation (public)	10*	198*	71*	29*	6*	1*
	North Carolina	10*	207*	53*	47*	5*	#
2003	Nation (public)	11	214*	50*	50*	12*	1*
	North Carolina	14	230*	30	70	26	3
2005	Nation (public)	12	218*	44*	56*	16*	2*
	North Carolina	13	226	34	66	20	2
2007	Nation (public)	11	220	40	60	19	2
	North Carolina	13	224	37	63	22	2
2009	Nation (public)	12	220	41	59	19	2
	North Carolina	13	224	36	64	23	2
<b>Not SD</b>							
1992 <sup>1</sup>	Nation (public)	‡	‡	‡	‡	‡	‡
	North Carolina	‡	‡	‡	‡	‡	‡
1996 <sup>1</sup>	Nation (public)	‡	‡	‡	‡	‡	‡
	North Carolina	‡	‡	‡	‡	‡	‡
2000 <sup>1</sup>	Nation (public)	‡	‡	‡	‡	‡	‡
	North Carolina	‡	‡	‡	‡	‡	‡
2000	Nation (public)	90*	227*	33*	67*	24*	3*
	North Carolina	90*	232*	24*	76*	27*	3*
2003	Nation (public)	89	236*	21*	79*	34*	4*
	North Carolina	86	244*	13	87	43	7
2005	Nation (public)	88	240*	17*	83*	38*	5*
	North Carolina	87	244*	14*	86*	43	7
2007	Nation (public)	89	241	16	84	41	6
	North Carolina	87	244	12	88	44	7*
2009	Nation (public)	88	242	16	84	41	6
	North Carolina	87	247	10	90	46	9

#Rounds to zero.

‡Reporting standards not met.

\*Value is significantly different (p < .05) from the value for the same jurisdiction and student group in 2009.

<sup>1</sup>Accommodations were not permitted for this assessment.

NOTE: The NAEP grade 4 mathematics scale ranges from 0 to 500. Achievement levels correspond to the following points on the NAEP mathematics scales: below *Basic*, 213 or lower; *Basic*, 214–248; *Proficient*, 249–281; and *Advanced*, 282 and above. Performance comparisons may be affected by differences in exclusion rates for students with disabilities in the NAEP samples and by differences in sample sizes. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 1992–2009 Mathematics Assessments.

# NAEP 2009 Mathematics Report for North Carolina (Embargoed)

## The Nation's Report Card 2009 State Assessment

**Table  
9-B**

Percentage of eighth-grade public school students, average scale score, and percentage at or above achievement levels in NAEP mathematics, by students with disabilities (SD) status, assessment year and jurisdiction: Various years, 1990–2009

SD status, year and jurisdiction		Percentage of students	Average scale score	Below Basic	At or above Basic	At or above Proficient	At Advanced
<b>SD</b>							
1990 <sup>1</sup>	Nation (public)	‡	‡	‡	‡	‡	‡
	North Carolina	‡	‡	‡	‡	‡	‡
1992 <sup>1</sup>	Nation (public)	‡	‡	‡	‡	‡	‡
	North Carolina	‡	‡	‡	‡	‡	‡
1996 <sup>1</sup>	Nation (public)	‡	‡	‡	‡	‡	‡
	North Carolina	‡	‡	‡	‡	‡	‡
2000 <sup>1</sup>	Nation (public)	‡	‡	‡	‡	‡	‡
	North Carolina	‡	‡	‡	‡	‡	‡
2000	Nation (public)	8*	229*	80*	20*	4*	#
	North Carolina	10	244	65	35	8	1
2003	Nation (public)	11*	242*	71*	29*	6*	1*
	North Carolina	13	255	56	44	13	2
2005	Nation (public)	11	244*	69*	31*	7*	1*
	North Carolina	13	253	60	40	10	1
2007	Nation (public)	9*	246*	67*	33*	8	1
	North Carolina	12	257	57	43	14	2
2009	Nation (public)	10	249	64	36	9	1
	North Carolina	11	251	61	39	11	2
<b>Not SD</b>							
1990 <sup>1</sup>	Nation (public)	‡	‡	‡	‡	‡	‡
	North Carolina	‡	‡	‡	‡	‡	‡
1992 <sup>1</sup>	Nation (public)	‡	‡	‡	‡	‡	‡
	North Carolina	‡	‡	‡	‡	‡	‡
1996 <sup>1</sup>	Nation (public)	‡	‡	‡	‡	‡	‡
	North Carolina	‡	‡	‡	‡	‡	‡
2000 <sup>1</sup>	Nation (public)	‡	‡	‡	‡	‡	‡
	North Carolina	‡	‡	‡	‡	‡	‡
2000	Nation (public)	92*	275*	35*	65*	26*	5*
	North Carolina	90	280*	30*	70*	30*	6*
2003	Nation (public)	89*	280*	29*	71*	30*	5*
	North Carolina	87	285	24	76	35	8
2005	Nation (public)	89	281*	28*	72*	31*	6*
	North Carolina	87	286	23	77	35	8
2007	Nation (public)	91*	284*	26*	74*	33*	7*
	North Carolina	88	287	23	77	37	9
2009	Nation (public)	90	285	24	76	35	8
	North Carolina	89	288	22	78	39	10

#Rounds to zero.

‡Reporting standards not met.

\*Value is significantly different ( $p < .05$ ) from the value for the same jurisdiction and student group in 2009.

<sup>1</sup>Accommodations were not permitted for this assessment.

NOTE: The NAEP grade 8 mathematics scale ranges from 0 to 500. Achievement levels correspond to the following points on the NAEP mathematics scales: below *Basic*, 261 or lower; *Basic*, 262–298; *Proficient*, 299–332; and *Advanced*, 333 and above. Performance comparisons may be affected by differences in exclusion rates for students with disabilities in the NAEP samples and by differences in sample sizes. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 1990–2009 Mathematics Assessments.

**Table  
10-A**

Percentage of fourth-grade public school students, average scale score, and percentage at or above achievement levels in NAEP mathematics, by English language learner (ELL), assessment year and jurisdiction: Various years, 1992–2009

ELL status, year and jurisdiction		Percentage of students	Average scale score	Below Basic	At or above Basic	At or above Proficient	At Advanced
<b>ELL</b>							
1992 <sup>1</sup>	Nation (public)	‡	‡	‡	‡	‡	‡
	North Carolina	‡	‡	‡	‡	‡	‡
1996 <sup>1</sup>	Nation (public)	‡	‡	‡	‡	‡	‡
	North Carolina	‡	‡	‡	‡	‡	‡
2000 <sup>1</sup>	Nation (public)	‡	‡	‡	‡	‡	‡
	North Carolina	‡	‡	‡	‡	‡	‡
2000	Nation (public)	6*	199*	70*	30*	4*	#
	North Carolina	2*	‡	‡	‡	‡	‡
2003	Nation (public)	9	214*	51*	49*	9*	#
	North Carolina	5	231	26	74	25	3
2005	Nation (public)	10	216	46*	54*	11	1
	North Carolina	6	228	26	74	18	#
2007	Nation (public)	10	217	44	56	13	1
	North Carolina	7	229	22	78	18	1
2009	Nation (public)	10	218	43	57	12	1
	North Carolina	6	229	25	75	18	1
<b>Not ELL</b>							
1992 <sup>1</sup>	Nation (public)	‡	‡	‡	‡	‡	‡
	North Carolina	‡	‡	‡	‡	‡	‡
1996 <sup>1</sup>	Nation (public)	‡	‡	‡	‡	‡	‡
	North Carolina	‡	‡	‡	‡	‡	‡
2000 <sup>1</sup>	Nation (public)	‡	‡	‡	‡	‡	‡
	North Carolina	‡	‡	‡	‡	‡	‡
2000	Nation (public)	94*	226*	34*	66*	24*	3*
	North Carolina	98*	230*	27*	73*	25*	3*
2003	Nation (public)	91	236*	21*	79*	34*	4*
	North Carolina	95	243	15	85	42	6*
2005	Nation (public)	90	239*	18*	82*	38*	5*
	North Carolina	94	242	16*	84*	41	7
2007	Nation (public)	90	242	16	84	42	6
	North Carolina	93	243	15	85	43	6*
2009	Nation (public)	90	242	16	84	41	6
	North Carolina	94	245	13	87	45	9

#Rounds to zero.

‡Reporting standards not met.

\*Value is significantly different (p < .05) from the value for the same jurisdiction and student group in 2009.

<sup>1</sup>Accommodations were not permitted for this assessment.

NOTE: The NAEP grade 4 mathematics scale ranges from 0 to 500. Achievement levels correspond to the following points on the NAEP mathematics scales: below *Basic*, 213 or lower; *Basic*, 214–248; *Proficient*, 249–281; and *Advanced*, 282 and above. Performance comparisons may be affected by differences in exclusion rates for English language learners in the NAEP samples and by differences in sample sizes. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 1992–2009 Mathematics Assessments.

# NAEP 2009 Mathematics Report for North Carolina (Embargoed)

## The Nation's Report Card 2009 State Assessment

**Table  
10-B**

Percentage of eighth-grade public school students, average scale score, and percentage at or above achievement levels in NAEP mathematics, by English language learner (ELL), assessment year and jurisdiction: Various years, 1990–2009

ELL status, year and jurisdiction		Percentage of students	Average scale score	Below Basic	At or above Basic	At or above Proficient	At Advanced
<b>ELL</b>							
1990 <sup>1</sup>	Nation (public)	‡	‡	‡	‡	‡	‡
	North Carolina	‡	‡	‡	‡	‡	‡
1992 <sup>1</sup>	Nation (public)	‡	‡	‡	‡	‡	‡
	North Carolina	‡	‡	‡	‡	‡	‡
1996 <sup>1</sup>	Nation (public)	‡	‡	‡	‡	‡	‡
	North Carolina	‡	‡	‡	‡	‡	‡
2000 <sup>1</sup>	Nation (public)	‡	‡	‡	‡	‡	‡
	North Carolina	‡	‡	‡	‡	‡	‡
2000	Nation (public)	3*	234*	80*	20*	2*	#
	North Carolina	1*	‡	‡	‡	‡	‡
2003	Nation (public)	5	241	74	26	5	1
	North Carolina	3*	250	62	38	7	1
2005	Nation (public)	6	244	71	29	6	1
	North Carolina	3*	252	58	42	8	1
2007	Nation (public)	6	245*	70	30	6	1
	North Carolina	4	259	58	42	12	1
2009	Nation (public)	6	243	72	28	5	1
	North Carolina	5	259	49	51	11	1
<b>Not ELL</b>							
1990 <sup>1</sup>	Nation (public)	‡	‡	‡	‡	‡	‡
	North Carolina	‡	‡	‡	‡	‡	‡
1992 <sup>1</sup>	Nation (public)	‡	‡	‡	‡	‡	‡
	North Carolina	‡	‡	‡	‡	‡	‡
1996 <sup>1</sup>	Nation (public)	‡	‡	‡	‡	‡	‡
	North Carolina	‡	‡	‡	‡	‡	‡
2000 <sup>1</sup>	Nation (public)	‡	‡	‡	‡	‡	‡
	North Carolina	‡	‡	‡	‡	‡	‡
2000	Nation (public)	97*	273*	37*	63*	26*	5*
	North Carolina	99*	276*	33*	67*	28*	5*
2003	Nation (public)	95	278*	31*	69*	29*	5*
	North Carolina	97*	282	27	73	33	7*
2005	Nation (public)	94	280*	30*	70*	30*	6*
	North Carolina	97*	283	27	73	33	7
2007	Nation (public)	94	282*	27*	73*	33*	7*
	North Carolina	96	285	26	74	35	8
2009	Nation (public)	94	284	26	74	34	8
	North Carolina	95	286	25	75	37	10

#Rounds to zero.

‡Reporting standards not met.

\*Value is significantly different ( $p < .05$ ) from the value for the same jurisdiction and student group in 2009.

<sup>1</sup>Accommodations were not permitted for this assessment.

NOTE: The NAEP grade 8 mathematics scale ranges from 0 to 500. Achievement levels correspond to the following points on the NAEP mathematics scales: below *Basic*, 261 or lower; *Basic*, 262–298; *Proficient*, 299–332; and *Advanced*, 333 and above. Performance comparisons may be affected by differences in exclusion rates for English language learners in the NAEP samples and by differences in sample sizes. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 1990–2009 Mathematics Assessments.

# NAEP 2009 Mathematics Report for North Carolina (Embargoed)

## The Nation's Report Card 2009 State Assessment

**Table  
11-A**

Number of fourth-grade public school students assessed in NAEP mathematics and percentage excluded, by state/jurisdiction: 2009

State/jurisdiction	Number assessed	Weighted percentages excluded
<b>Nation (public)</b>	<b>163,000</b>	<b>2</b>
Alabama	2,700	1
Alaska	2,600	1
Arizona	3,100	1
Arkansas	2,800	1
California	7,400	2
Colorado	2,700	2
Connecticut	2,700	2
Delaware	2,800	3
Florida	4,700	2
Georgia	4,000	1
Hawaii	2,800	1
Idaho	3,100	1
Illinois	4,100	3
Indiana	2,800	2
Iowa	2,800	2
Kansas	3,000	3
Kentucky	3,800	3
Louisiana	2,900	2
Maine	2,700	2
Maryland	3,400	5
Massachusetts	3,700	5
Michigan	3,400	3
Minnesota	3,300	2
Mississippi	2,900	1
Missouri	2,600	3
Montana	2,700	2
Nebraska	3,000	3
Nevada	3,000	3
New Hampshire	2,700	2
New Jersey	2,900	3
New Mexico	2,800	2
New York	4,100	1
North Carolina	4,400	2
North Dakota	2,000	4
Ohio	3,400	3
Oklahoma	2,900	4
Oregon	2,800	3
Pennsylvania	3,600	3
Rhode Island	2,500	2
South Carolina	2,900	2
South Dakota	2,700	2
Tennessee	2,900	3
Texas	6,300	3
Utah	3,300	2
Vermont	2,700	2
Virginia	2,900	2
Washington	3,200	2
West Virginia	2,800	2
Wisconsin	3,800	2
Wyoming	2,000	1
Other jurisdictions		
District of Columbia	1,800	4
DoDEA <sup>1</sup>	2,000	2

<sup>1</sup> Department of Defense Education Activity Schools (domestic and overseas).

NOTE: The numbers of students assessed are rounded to the nearest hundred.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2009 Mathematics Assessment.

# NAEP 2009 Mathematics Report for North Carolina (Embargoed)

## The Nation's Report Card 2009 State Assessment

**Table  
11-B**

Number of eighth-grade public school students assessed in NAEP mathematics and percentage excluded, by state/jurisdiction: 2009

State/jurisdiction	Number assessed	Weighted percentages excluded
<b>Nation (public)</b>	<b>156,200</b>	<b>3</b>
Alabama	2,700	2
Alaska	2,400	3
Arizona	2,900	2
Arkansas	2,600	1
California	7,100	2
Colorado	2,700	2
Connecticut	2,800	2
Delaware	2,700	3
Florida	4,300	2
Georgia	3,500	3
Hawaii	2,800	2
Idaho	3,000	1
Illinois	4,100	3
Indiana	2,600	4
Iowa	2,600	3
Kansas	2,700	3
Kentucky	3,700	5
Louisiana	2,600	2
Maine	2,700	2
Maryland	3,200	7
Massachusetts	3,600	6
Michigan	3,400	3
Minnesota	2,900	3
Mississippi	2,800	2
Missouri	2,700	3
Montana	2,600	3
Nebraska	2,700	3
Nevada	2,800	2
New Hampshire	2,500	3
New Jersey	2,800	2
New Mexico	2,500	3
New York	3,800	3
North Carolina	4,400	2
North Dakota	2,200	5
Ohio	3,500	5
Oklahoma	2,600	6
Oregon	2,900	3
Pennsylvania	3,600	3
Rhode Island	2,700	2
South Carolina	2,800	4
South Dakota	2,800	2
Tennessee	2,900	4
Texas	5,800	5
Utah	2,900	3
Vermont	2,800	2
Virginia	2,800	4
Washington	2,800	2
West Virginia	2,900	2
Wisconsin	3,500	3
Wyoming	1,900	2
Other jurisdictions		
District of Columbia	1,700	6
DoDEA <sup>1</sup>	1,600	2

<sup>1</sup> Department of Defense Education Activity Schools (domestic and overseas).

NOTE: The numbers of students assessed are rounded to the nearest hundred.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2009 Mathematics Assessment.

## Where to Find More Information

### **The NAEP Mathematics Assessment**

The latest news about the NAEP 2009 mathematics assessment and the national results can be found on the NAEP website at <http://nces.ed.gov/nationsreportcard/mathematics/results/>. The individual snapshot reports for each participating state and other jurisdictions are also available in the state results section of the website at <http://nces.ed.gov/nationsreportcard/states/>.

*The Nation's Report Card: Mathematics 2009* may be ordered or downloaded at the NAEP website.

The *Mathematics Framework for the 2009 National Assessment of Educational Progress*, on which this assessment is based, is available at the National Assessment Governing Board website at <http://www.nagb.org/publications/frameworks/math-framework09.pdf>

### **The NAEP Data Explorer (NDE)**

The interactive database at <http://nces.ed.gov/nationsreportcard/naepdata/> includes student, teacher, and school variables for all participating states and other jurisdictions, the nation, and the four regions. Data tables are also available for each jurisdiction, with all background questions cross-tabulated with the major demographic variables. Users can design and create tables and can perform tests of statistical significance at this website.

### **Technical Documentation on the Web (TDW)**

Technical documentation section of the NAEP website <http://nces.ed.gov/nationsreportcard/tdw/> contains information about the technical procedures and methods of NAEP. The TDW site is organized by topic (from Item Development through Analysis and Scaling) with subtopics, including information specific to a particular assessment. The content is written for researchers and assumes knowledge of educational measurement and testing.

### **Publications on the inclusion of students with disabilities and English language learners**

References for a variety of research publications related to the assessment of students with special needs may be found at <http://nces.ed.gov/nationsreportcard/about/inclusion.asp#research>.

### **To order publications**

Recent NAEP publications related to mathematics are listed on the mathematics page of the NAEP website and are available electronically. Publications can also be ordered from

Education Publications Center (ED Pubs)  
U.S. Department of Education  
P.O. Box 1398  
Jessup, MD 20794-1398

Call toll free: 1-877-4ED-Pubs (1-877-433-7827)  
TTY/TDD: 1-877-576-7734  
FAX: 1-301-470-1244  
Order online at: <http://www.edpubs.org>.

## What is the Nation's Report Card™?

*The Nation's Report Card* informs the public about the academic achievement of elementary and secondary students in the United States. Report cards communicate the findings of the National Assessment of Educational Progress (NAEP), a continuing and nationally representative measure of achievement in various subjects over time.

Since 1969, NAEP assessments have been conducted periodically in reading, mathematics, science, writing, U.S. history, civics, geography, the arts, and other subjects. NAEP collects and reports information on student performance at the national, state, and local levels, making the assessment an integral part of our nation's evaluation of the condition and progress of education. Only academic achievement data and related background information are collected. The privacy of individual students and their families is protected.

NAEP is a congressionally authorized project of the National Center for Education Statistics (NCES) within the Institute of Education Sciences of the U.S. Department of Education. The Commissioner of Education Statistics is responsible for carrying out the NAEP project. The National Assessment Governing Board oversees and sets policy for NAEP.

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