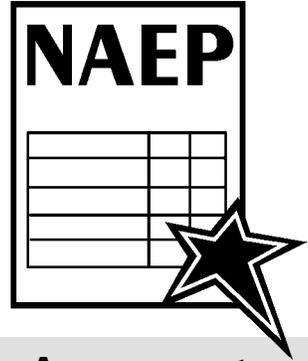


The
Nation's
Report
Card



Mathematics Assessment

2005 NAEP REPORT

for North Carolina

- Fourth Grade Mathematics
- Eighth Grade Mathematics



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Table of Contents

List of Figures.....	ii
List of Graphs.....	iii
List of Tables.....	iv
Key Findings.....	1
Introduction.....	2
Overall Scale Score and Achievement-Level Results.....	10
Comparisons with the Nation and Participating States and Jurisdictions.....	19
Grade 4.....	20
Grade 8.....	22
Performance of Selected Student Groups.....	24
Gender.....	25
Race/Ethnicity.....	33
Student Eligibility for Free/Reduced Price School Lunch.....	44
Toward a More Inclusive NAEP.....	51
Where to Find More Information.....	61

List of Figures

Figure		Page
1-A	Descriptions of NAEP mathematics achievement levels, Grade 4	6
1-B	Descriptions of NAEP mathematics achievement levels, Grade 8	7
2-A	Nation's (public) average mathematics scale scores compared with scores for all participating jurisdictions, Grade 4	20
2-B	Nation's (public) average mathematics scale scores compared with scores for all participating jurisdictions, Grade 8	22

List of Graphs

Graphs		Page
1	Average mathematics scale scores, Grades 4 and 8	13
2-A	Percentage of students at or above mathematics achievement levels, Grade 4	16
2-B	Percentage of students at or above mathematics achievement levels, Grade 8	18
3-A	Average mathematics scale scores, by gender, Grade 4	28
3-B	Average mathematics scale scores, by gender, Grade 8	32
4-A	Average mathematics scale scores, by race/ethnicity, Grade 4	38
4-B	Average mathematics scale scores, by race/ethnicity, Grade 8	43
5-A	Average mathematics scale scores, by eligibility for free/reduced-price school lunch, Grade 4	47
5-B	Average mathematics scale scores, by eligibility for free/reduced-price school lunch, Grade 8	50

List of Tables

Tables	Page
1-A Average mathematics scale scores and selected percentiles, Grade 4	11
1-B Average mathematics scale scores and selected percentiles, Grade 8	12
2-A Percentage of students at or above mathematics achievement levels, Grade 4	15
2-B Percentage of students at or above mathematics achievement levels, Grade 8	17
3-A Nation's (public) average mathematics scale scores compared with scores for all participating jurisdictions, Grade 4	21
3-B Nation's (public) average mathematics scale scores compared with scores for all participating jurisdictions, Grade 8	23
4-A Average mathematics scale scores and percentage of students at or above each achievement level, by gender, Grade 4	27
4-B Average mathematics scale scores and percentage of students at or above each achievement level, by gender, Grade 8	30-31
5-A Average mathematics scale scores and percentage of students at or above each achievement level, by race/ethnicity, Grade 4	35-37
5-B Average mathematics scale scores and percentage of students at or above each achievement level, by race/ethnicity, Grade 8	41-42
6-A Average mathematics scale scores and percentage of students at or above each achievement level, by eligibility for free/reduced-price school lunch, Grade 4	46
6-B Average mathematics scale scores and percentage of students at or above each achievement level, by eligibility for free/reduced-price school lunch, Grade 8	49
7-A Percentage of students in mathematics assessments identified as SD and ELL, excluded, and assessed, Grade 4	53
7-B Percentage of students in mathematics assessments identified as SD and ELL, excluded, and assessed, Grade 8	54

List of Tables Continued

Tables		Page
8-A	Average mathematics scale scores and percentage of students at or above each achievement level, by students disability status, Grade 4	55
8-B	Average mathematics scale scores and percentage of students at or above each achievement level, by students disability status, Grade 8	56
9-A	Average mathematics scale scores and percentage of students at or above each achievement level, by students' classification as English language learners (ELL), Grade 4	57
9-B	Average mathematics scale scores and percentage of students at or above each achievement level, by students' classification as English language learners (ELL), Grade 8	58
10	Total number of students assessed, percentage of students sampled who were excluded, and average mathematics scale scores, Grades 4 and 8	59-60

This report provides selected results from the National Assessment of Educational Progress (NAEP) for North Carolina's public school students at grades 4 and 8. Beginning in 1990, mathematics has been assessed in six different years at the state level (at grade 8 in 1990, and at both grades 4 and 8 in 1992, 1996, 2000, 2003, and 2005).

In the 2005 assessment, 52 jurisdictions participated: the 50 states, the District of Columbia, and the Department of Defense Schools (domestic and overseas). North Carolina participated and met the criteria for reporting public school results.

NAEP is a project of the National Center for Education Statistics (NCES). For more information about the assessment, see *The Nation's Report Card, Mathematics 2005*, which is available on the NAEP website along with the full set of national and state results in an interactive database at <http://nces.ed.gov/nationsreportcard/>. Released test questions, scoring guides, and question-level performance data are also available on the website.

KEY FINDINGS FOR 2005

For grade 4:

- The average mathematics score for students in North Carolina was 241. This was higher than that in 1992 (213) and was not significantly different from that in 2003 (242).
- North Carolina's average score (241) was higher than that of the nation's public schools (237).
- The percentage of students in North Carolina who performed at or above *Proficient* was 40 percent. This was greater than that in 1992 (13 percent) and was not significantly different from that in 2003 (41 percent).
- In North Carolina, the percentage of students who performed at or above *Proficient* was greater than that for the nation's public schools (35 percent).
- The percentage of students in North Carolina who performed at or above *Basic* was 83 percent. This was greater than that in 1992 (50 percent) and was not significantly different from that in 2003 (85 percent).
- In North Carolina, the percentage of students who performed at or above *Basic* was greater than that for the nation's public schools (79 percent).

For grade 8:

- The average mathematics score for students in North Carolina was 282. This was higher than that in 1990 (250) and was not significantly different from that in 2003 (281).
- North Carolina's average score (282) was higher than that of the nation's public schools (278).
- The percentage of students in North Carolina who performed at or above *Proficient* was 32 percent. This was greater than that in 1990 (9 percent) and was not significantly different from that in 2003 (32 percent).
- In North Carolina, the percentage of students who performed at or above *Proficient* was greater than that for the nation's public schools (28 percent).
- The percentage of students in North Carolina who performed at or above *Basic* was 72 percent. This was greater than that in 1990 (38 percent) and was not significantly different from that in 2003 (72 percent).
- In North Carolina, the percentage of students who performed at or above *Basic* was greater than that for the nation's public schools (68 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.

INTRODUCTION

What Was Assessed?

The content for each NAEP assessment is determined by the National Assessment Governing Board (NAGB). The objectives for each NAEP assessment are described in a “framework,” a document that delineates the important content and process areas to be measured, as well as the types of questions to be included on the assessment. In 2000, NAGB awarded a contract to the Council of Chief State School Officers (CCSSO) to update the mathematics assessment framework for 2005. CCSSO established a steering committee, representative of national policy organizations, mathematics associations, research mathematicians, business and industry, and educators to develop policy recommendations for the mathematics assessment and to guide the direction and scope of the project. Care was taken to ensure that the diversity of opinion regarding mathematics issues was represented and reflected.

The mathematics framework for the 2005 National Assessment of Educational Progress is based on the frameworks that guided the 1990, 1992, 1996, 2000, and 2003 mathematics assessments. Those frameworks were developed with the guidance of the College Board and directed by NAGB. The 2005 NAEP mathematics framework calls for questions based on five mathematics content areas: number properties and operations; measurement; geometry; data analysis and probability; and algebra. The mathematics framework is available on the NAGB website at http://www.nagb.org/pubs/m_framework_05/761607-Math%20Framework.pdf.

The 2005 mathematics framework classifies test items in two dimensions—content area and mathematical complexity. Although the names of the content areas, as well as some of the topics in those areas, have changed from one framework to the next, a consistent focus has remained across frameworks on collecting information on student performance in the five content areas mentioned above. The two dimensions of mathematical ability and power in the 1996–2003 frameworks have been replaced in the 2005 framework by the dimension of mathematical complexity.

A combination of multiple-choice and constructed-response questions was used to assess students’ mathematics performance. Short constructed-response questions ask students to provide the answer for a numerical problem or to briefly describe the solution to a problem. Longer constructed-response questions require students to produce both a solution and a justification, explanation, or interpretation for the solution. Released test questions, along with student performance data by state, are available on the NAEP website at <http://nces.ed.gov/nationsreportcard/itmrls/>.

The framework incorporates the use of calculators (four-function at grade 4 and scientific at grade 8), rulers, protractors (grade 8), and manipulatives such as spinners and geometric shapes. The use of these ancillary materials and the use of calculators were incorporated into some parts of the assessment, but not all. Calculator use was permitted on approximately one-third of the test questions.

Who Was Assessed?

Fifty-two jurisdictions participated in NAEP in 2005: the 50 states, the District of Columbia, and the Department of Defense Education Activity Schools (domestic and overseas). The target sample for each state or other jurisdiction was approximately 100 schools at each grade tested and approximately 3,000 students for each subject at each grade, except in small or sparsely populated jurisdictions.

In North Carolina, 175 grade 4 schools and 140 grade 8 schools participated in the 2005 NAEP mathematics assessments. Approximately 4,000 fourth-grade students and approximately 3,900 eighth-grade students participated.

The sample of schools and students was chosen in a two-stage sampling process. First, the sample of schools was selected by probability sampling methods. Then, within the participating schools, random samples of students were chosen. All sampling for NAEP is conducted at the national level.

Beginning in 2002, the national sample was obtained by aggregating the samples from each state. The national results include the results from the states and from a sample of private schools, weighted appropriately to represent the U.S. student population. Only public schools, however, are included in the state reports.

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 (NAGB) in order for assessment results to be reported publicly. Participation rates before substitution needed to be at least 80 percent for schools and at least 85 percent for students in each subject and grade.

Participation rates for the 2005 mathematics assessment are available on the NAEP website at <http://nces.ed.gov/nationsreportcard/mathematics/sampledesign.asp>.

How Is Student Mathematics Performance Reported?

The results of student performance on the NAEP assessments are reported for various groups of students (e.g., fourth-grade female students or students who took the assessment in a particular year). NAEP does not produce scores for individual students, nor does it report scores for schools or for school districts. Some large urban districts, however, have voluntarily participated in the assessment on a trial basis and were sampled as states were sampled. Mathematics performance for groups of students is reported in two ways: as average scale scores and as achievement levels.

Scale Scores: Student performance is reported as an average score based on the NAEP mathematics scale, which ranges from 0 to 500 and is linked to the corresponding scales in 1990, 1992, 1996, 2000, and 2003. Subscales were created to reflect performance on each of the five content areas defined in the NAEP mathematics framework.

An overall composite scale was developed by weighting each of the mathematics subscales for the grade based on its relative importance in the framework. This composite scale is the metric used to present the average scale scores and selected percentiles used in NAEP reports.

Achievement Levels: Student performance is also reported in terms of three achievement levels—*Basic*, *Proficient*, and *Advanced*. Results based on achievement levels are expressed in terms of the percentage of students who attained each level. The three achievement levels are defined as follows:

- *Basic*: This level denotes partial mastery of prerequisite knowledge and skills that are fundamental for proficient work at each grade.
- *Proficient*: This level 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 analytical skills appropriate to the subject matter.
- *Advanced*: This level signifies superior performance.

Note: NAEP reports data at the below *Basic* level, but does not provide a description for below *Basic*.

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 demonstrate the competencies associated with both the *Basic* and the *Proficient* levels.

The achievement levels are performance standards adopted by the National Assessment Governing Board (NAGB) as part of its statutory responsibilities mandated by Congress. The levels represent collective judgments of what students should know and be able to do for each grade tested. They are based on recommendations made by broadly representative panels of classroom teachers, education specialists, and members of the general public from throughout the United States. As provided by law, the National Center for Education Statistics (NCES), upon review of congressionally mandated evaluations of NAEP, has determined that the achievement

levels are to be used on a trial basis until it is determined that they are “reasonable, valid, and informative to the public.” (No Child Left Behind Act of 2001, P.L., 107-110, 115 Stat.1425 [2002]). However, both NCES and NAGB believe these performance standards are useful for understanding trends in student achievement. They have been widely used by national and state officials as a common yardstick for academic performance. The mathematics achievement-level descriptions are summarized in figures 1-A and 1-B.

**Figure
1-A**

The Nation's Report Card 2005 State Assessment

Descriptions of NAEP mathematics achievement levels, grade 4

Basic
Level
(214)

Fourth-grade students performing at the *Basic* level should show some evidence of understanding the mathematical concepts and procedures in the five NAEP content areas.

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—though not always accurately—four-function calculators, rulers, and geometric shapes. Their written responses are often minimal and presented without supporting information.

Proficient
Level
(249)

Fourth-grade students performing at the *Proficient* level should consistently apply integrated procedural knowledge and conceptual understanding to problem solving in the five NAEP content areas.

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.

Advanced
Level
(282)

Fourth-grade students performing at the *Advanced* level should apply integrated procedural knowledge and conceptual understanding to complex and nonroutine real-world problem solving in the five NAEP content areas.

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. The 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.

NOTE: The scores in parentheses indicate the cut point on the scale at which the achievement-level range begins.
SOURCE: National Assessment Governing Board. (2004). *Mathematics Framework for the 2005 National Assessment of Educational Progress*. Washington, DC: Author.

**Figure
1-B**

The Nation's Report Card 2005 State Assessment

Descriptions of NAEP mathematics achievement levels, grade 8

**Basic
Level
(262)**

Eighth-grade students performing at the *Basic* 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.

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.

**Proficient
Level
(299)**

Eighth-grade students performing at the *Proficient* level should apply mathematical concepts and procedures consistently to complex problems in the five NAEP content areas.

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.

**Advanced
Level
(333)**

Eighth-grade students performing at the *Advanced* 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.

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.

NOTE: The scores in parentheses indicate the cut point on the scale at which the achievement-level range begins.
SOURCE: National Assessment Governing Board. (2004). *Mathematics Framework for the 2005 National Assessment of Educational Progress*. Washington, DC: Author.

Assessing Students With Disabilities and/or English Language Learners

The results displayed in this report and official publications of NAEP 2005 results are based on representative samples that include students with disabilities (SD) and students who are English language learners (ELL). Some of these students were assessed using accommodations (such as extra time and testing in small groups). In state NAEP mathematics assessments prior to 2000, no testing accommodations or adaptations were permitted for students with disabilities and students who were English language learners. However, research carried out by NAEP showed that the results for students who were accommodated could be combined with the results for unaccommodated students without compromising the validity of the NAEP scales in trend comparisons. Therefore, the SD and ELL students who were identified as SD or ELL and typically received accommodations in their classroom testing, and who required these accommodations to participate, also received them in the NAEP assessment, provided the accommodations did not change the nature of what was tested.

Students who had an Individualized Education Program (IEP) or were protected under Section 504 of the Rehabilitation Act of 1973 were to be included in the NAEP assessment except when:

- The school's IEP team determined that the student could not participate, because the student's cognitive functioning was so severely impaired that she or he could not participate; or
- The student's IEP required that the student had to be tested with an accommodation or adaptation that NAEP does not allow and the student could not demonstrate his or her knowledge without that accommodation.

All ELL who received academic instruction in English for three years or more were to be included in the assessment. Those ELL who received instruction in English for less than three years were to be included unless school staff judged them to be incapable of participating in the assessment in English.

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. The results for both samples 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, and 2005).

Cautions in Interpreting Results

The averages and percentages in this report are estimates based on samples of students rather than on entire populations. Moreover, 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.

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 in previous assessments. In addition, estimates based on smaller groups are likely to have relatively large standard errors. As a consequence, some seemingly large differences may not be statistically significant. That is, it cannot be determined whether these differences are due to the particular makeup of the samples of students who were selected, 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. Statistically significant differences are referred to as “significant differences” or “significantly different.” Significant differences between 2005 and prior assessments are marked with a notation (*) in the tables and graphs. 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.

It is important to note that simple cross-tabulations of a variable with measures of educational achievement, like the ones presented in this report, cannot constitute proof that a difference in the variable causes differences in educational achievement. There might be several reasons why the performance of one group of students might differ from another. Only through controlled experiments with random assignment of students to groups can we test hypotheses about the causes of performance differences.

NAEP 2005 MATHEMATICS OVERALL SCALE SCORE AND ACHIEVEMENT-LEVEL RESULTS FOR PUBLIC SCHOOL STUDENTS

Overall Scale Score Results

In this section student performance is reported as an average score based on the NAEP mathematics scale, which ranges from 0 to 500. Scores on this scale are comparable from 1990 through 2005.

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.

Tables 1-A and 1-B present the overall performance results of grades 4 and 8 public school students in North Carolina and the nation (public). 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 percentage 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.

Graph 1 presents the average scale score data for North Carolina and the nation's public school students in grades 4 and 8.

Grade 4 Scale Score Results

- In 2005, the average scale score for students in North Carolina was 241. This was higher than that for students across the nation (237).
- In North Carolina, the average scale score for students in 2005 was higher than that in 1992 (213).
- In North Carolina, the average scale score for students in 2005 was higher than that in 1996 (224).
- In North Carolina, the average scale score for students in 2005 was higher than that in 2000 (230).
- In North Carolina, the average scale score for students in 2005 was not significantly different from that in 2003 (242). However, the average scale score for students in public schools across the nation in 2005 was higher than that in 2003 (234).

Table	The Nation's Report Card 2005 State Assessment
1-A	Average mathematics scale scores and selected percentiles, grade 4 public schools: various years, 1992–2005

Year and jurisdiction	Average scale score	10th Percentile	25th Percentile	50th Percentile	75th Percentile	90th Percentile	
1992 ¹	Nation (public)	219*	176*	197*	220*	241*	259*
	North Carolina	213*	170*	190*	214*	235*	253*
1996 ¹	Nation (public)	222*	180*	201*	224*	244*	261*
	North Carolina	224*	184*	204*	225*	245*	263*
2000 ¹	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*
	North Carolina	242	207	224	243	261	276
2005	Nation (public)	237	199	219	239	257	272
	North Carolina	241	205	223	242	260	276

* Value is significantly different from the value for the same jurisdiction in 2005.
¹ Accommodations were not permitted for this assessment.
 NOTE: The NAEP mathematics scale ranges from 0 to 500. The standard errors of the statistics in the table appear in parentheses. All differences were tested for statistical significance at the 0.05 level using unrounded numbers. Performance comparisons may be affected by differences in exclusion rates for students with disabilities and English language learners in the NAEP samples and by changes in sample sizes.
 SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 1992–2005 Mathematics Assessments.

Grade 8 Scale Score Results

- In 2005, the average scale score for students in North Carolina was 282. This was higher than that for students across the nation (278).
- In North Carolina, the average scale score for students in 2005 was higher than that in 1990 (250).
- In North Carolina, the average scale score for students in 2005 was higher than that in 1992 (258).
- In North Carolina, the average scale score for students in 2005 was higher than that in 1996 (268).
- In North Carolina, the average scale score for students in 2005 was higher than that in 2000 (276).
- In North Carolina, the average scale score for students in 2005 was not significantly different from that in 2003 (281). However, the average scale score for students in public schools across the nation in 2005 was higher than that in 2003 (276).

**Table
1-B**

The Nation's Report Card 2005 State Assessment

**Average mathematics scale scores and selected percentiles, grade 8 public schools:
various years, 1990–2005**

Year and jurisdiction		Average scale score	10th Percentile	25th Percentile	50th Percentile	75th Percentile	90th Percentile
1990 ¹	Nation (public)	262*	214*	237*	263*	288*	307*
	North Carolina	250*	204*	225*	251*	275*	296*
1992 ¹	Nation (public)	267*	219*	242*	268*	293*	314*
	North Carolina	258*	213*	235*	259*	283*	303*
1996 ¹	Nation (public)	271*	222*	247*	272*	296*	316*
	North Carolina	268*	222*	244*	268*	293*	314*
2000 ¹	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*
	North Carolina	281	232	258	283	306	327
2005	Nation (public)	278	230	254	279	303	323
	North Carolina	282	235	259	283	306	327

* Value is significantly different from the value for the same jurisdiction in 2005.

¹ Accommodations were not permitted for this assessment.

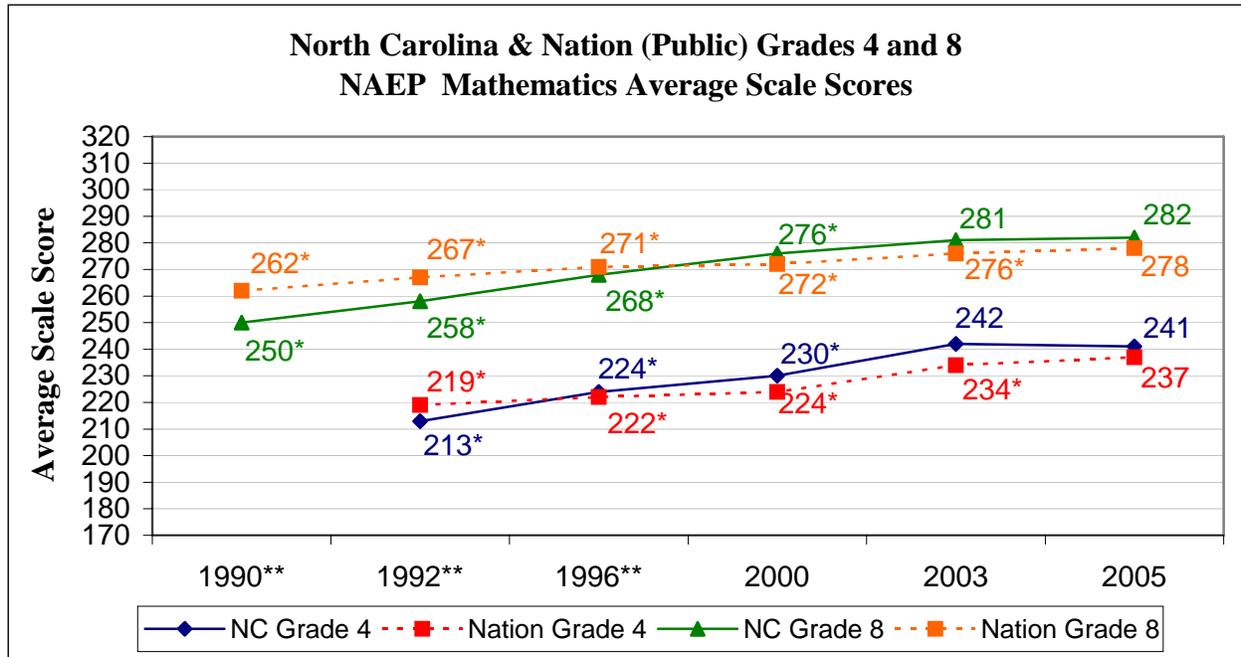
NOTE: The NAEP mathematics scale ranges from 0 to 500. The standard errors of the statistics in the table appear in parentheses. All differences were tested for statistical significance at the 0.05 level using unrounded numbers. Performance comparisons may be affected by differences in exclusion rates for students with disabilities and English language learners in the NAEP samples and by changes in sample sizes.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 1990–2005 Mathematics Assessments.

**Graph
1**

The Nation's Report Card 2005 State Assessment

Average mathematics scale scores, grade 4 and 8 public schools: various years, 1990–2005



* Value is significantly different from the value for the same jurisdiction in 2005.

** Accommodations were not permitted for this assessment.

NOTE: The NAEP mathematics scale ranges from 0 to 500. All differences were tested for statistical significance at the 0.05 level using unrounded numbers. Performance comparisons may be affected by differences in exclusion rates for students with disabilities and English language learners in the NAEP samples and by changes in sample sizes.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 1990–2005 Mathematics Assessments.

Overall Achievement-Level Results

In this section student performance is reported as the percentage of students performing relative to performance standards set by the National Assessment Governing Board (NAGB). 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.

In 2000 only, results were obtained for two student samples: one for which accommodations were permitted and one for which accommodations were not permitted. However, in the text of this report, comparisons to 2000 results refer only to the sample in which accommodations were permitted.

Tables 2-A and 2-B present the percentage of students at grades 4 and 8 who performed below *Basic*, at or above *Basic*, at or above *Proficient*, and at the *Advanced* level. Because the percentages are cumulative from *Basic* to *Proficient* to *Advanced*, they 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 (except for rounding).

Graphs 2-A and 2-B present the percentage of students at grades 4 and 8 who performed at or above the *Basic* level and at or above the *Proficient* level for North Carolina and the nation's public school students.

Grade 4 Achievement-Level Results

- In 2005, the percentage of North Carolina's students who performed at or above *Proficient* was 40 percent. This was greater than the percentage of the nation's public school students who performed at or above *Proficient* (35 percent).
- In North Carolina, the percentage of students who performed at or above *Proficient* in 2005 was greater than that in 1992 (13 percent).
- In North Carolina, the percentage of students who performed at or above *Proficient* in 2005 was greater than that in 1996 (21 percent).
- In North Carolina, the percentage of students who performed at or above *Proficient* in 2005 was greater than that in 2000 (25 percent).
- In North Carolina, the percentage of students who performed at or above *Proficient* in 2005 was not significantly different from that in 2003 (41 percent).

**Table
2-A**

The Nation's Report Card 2005 State Assessment

Percentage of students at or above mathematics achievement levels, grade 4 public schools: various years, 1992–2005

Year and jurisdiction	Below <i>Basic</i>	At or above <i>Basic</i>	At or above <i>Proficient</i>	At <i>Advanced</i>
1992 ¹				
Nation (public)	43*	57*	17*	2*
North Carolina	50*	50*	13*	1*
1996 ¹				
Nation (public)	38*	62*	20*	2*
North Carolina	36*	64*	21*	2*
2000 ¹				
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*
North Carolina	15	85	41	6
2005				
Nation (public)	21	79	35	5
North Carolina	17	83	40	7

* Value is significantly different from the value for the same jurisdiction in 2005.

¹ Accommodations were not permitted for this assessment.

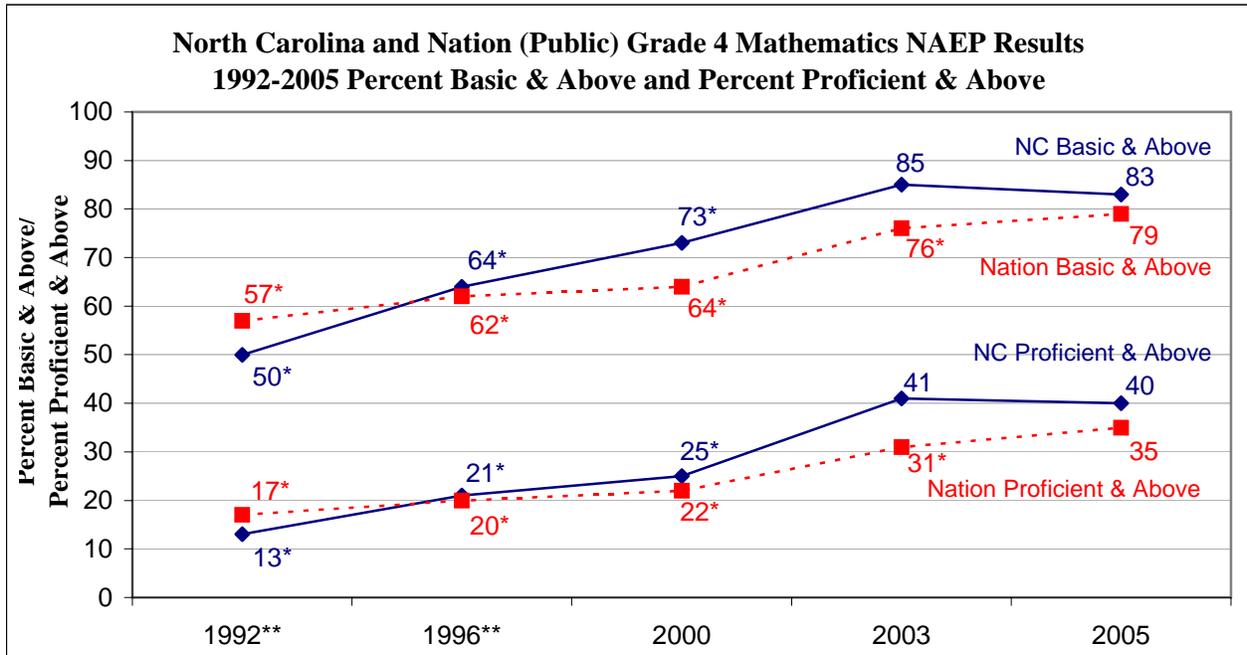
NOTE: The standard errors of the statistics in the table appear in parentheses. Achievement levels correspond to the following points on the NAEP mathematics scale: below Basic, 213 or lower; Basic, 214–248; Proficient, 249–281; and Advanced, 282 and above. All differences were tested for statistical significance at the 0.05 level using unrounded numbers. Detail may not sum to totals because of rounding. Performance comparisons may be affected by differences in exclusion rates for students with disabilities and English language learners in the NAEP samples and by changes in sample sizes.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 1992–2005 Mathematics Assessments.

**Graph
2-A**

The Nation's Report Card 2005 State Assessment

Percentage of students at or above mathematics achievement levels, grade 4 public schools: various years, 1992–2005



* Value is significantly different from the value for the same jurisdiction in 2005.

** Accommodations were not permitted for this assessment.

NOTE: Achievement levels correspond to the following points on the NAEP mathematics scale: below Basic, 213 or lower; Basic, 214–248; Proficient, 249–281; and Advanced, 282 and above. All differences were tested for statistical significance at the 0.05 level using unrounded numbers. Detail may not sum to totals because of rounding. Performance comparisons may be affected by differences in exclusion rates for students with disabilities and English language learners in the NAEP samples and by changes in sample sizes.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 1992–2005 Mathematics Assessments.

Grade 8 Achievement-Level Results

- In 2005, the percentage of North Carolina's students who performed at or above *Proficient* was 32 percent. This was greater than the percentage of the nation's public school students who performed at or above *Proficient* (28 percent).
- In North Carolina, the percentage of students who performed at or above *Proficient* in 2005 was greater than that in 1990 (9 percent).
- In North Carolina, the percentage of students who performed at or above *Proficient* in 2005 was greater than that in 1992 (12 percent).
- In North Carolina, the percentage of students who performed at or above *Proficient* in 2005 was greater than that in 1996 (20 percent).
- In North Carolina, the percentage of students who performed at or above *Proficient* in 2005 was greater than that in 2000 (27 percent).
- In North Carolina, the percentage of students who performed at or above *Proficient* in 2005 was not significantly different from that in 2003 (32 percent).

**Table
2-B**

The Nation's Report Card 2005 State Assessment

Percentage of students at or above mathematics achievement levels, grade 8 public schools: various years, 1990–2005

Year and jurisdiction	Below <i>Basic</i>	At or above <i>Basic</i>	At or above <i>Proficient</i>	At <i>Advanced</i>
1990 ¹				
Nation (public)	49*	51*	15*	2*
North Carolina	62*	38*	9*	1*
1992 ¹				
Nation (public)	44*	56*	20*	3*
North Carolina	53*	47*	12*	1*
1996 ¹				
Nation (public)	39*	61*	23*	4*
North Carolina	44*	56*	20*	3*
2000 ¹				
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*
North Carolina	28	72	32	7
2005				
Nation (public)	32	68	28	6
North Carolina	28	72	32	7

* Value is significantly different from the value for the same jurisdiction in 2005.

¹ Accommodations were not permitted for this assessment.

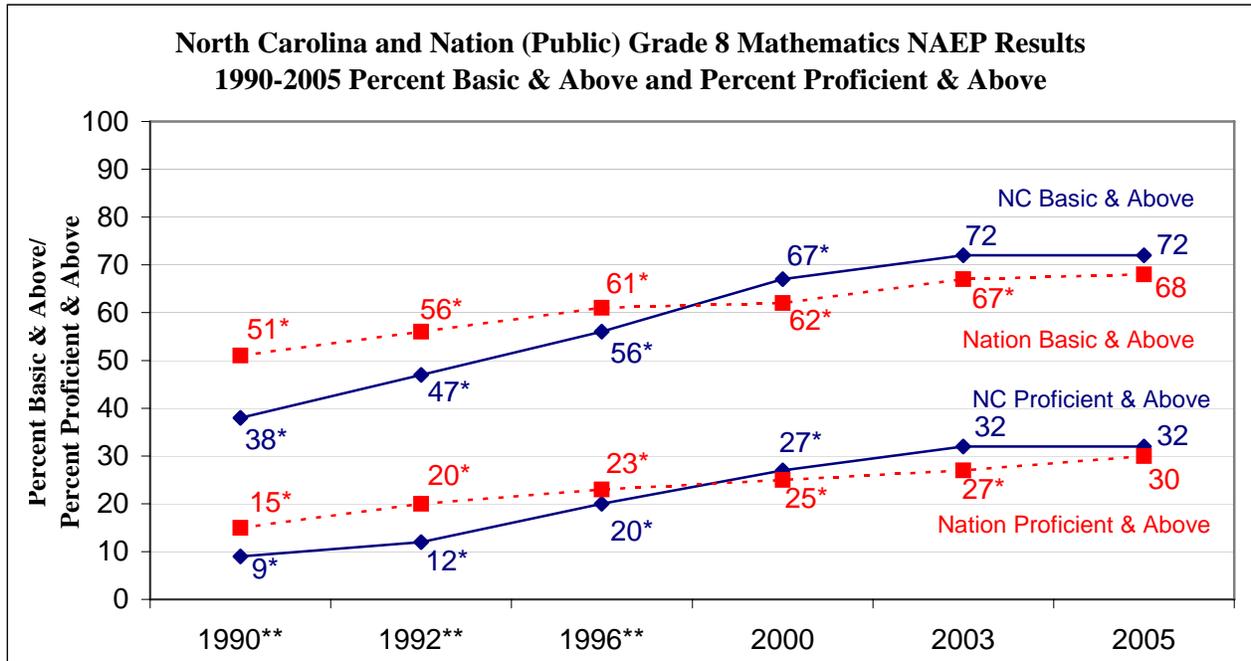
NOTE: The standard errors of the statistics in the table appear in parentheses. Achievement levels correspond to the following points on the NAEP mathematics scale: below Basic, 261 or lower; Basic, 262–298; Proficient, 299–332; and Advanced, 333 and above. All differences were tested for statistical significance at the 0.05 level using unrounded numbers. Detail may not sum to totals because of rounding. Performance comparisons may be affected by differences in exclusion rates for students with disabilities and English language learners in the NAEP samples and by changes in sample sizes.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 1990–2005 Mathematics Assessments.

**Graph
2-B**

The Nation's Report Card 2005 State Assessment

Percentage of students at or above mathematics achievement levels, grade 8 public schools: various years, 1990–2005



* Value is significantly different from the value for the same jurisdiction in 2005.

** Accommodations were not permitted for this assessment.

NOTE: Achievement levels correspond to the following points on the NAEP mathematics scale: below Basic, 261 or lower; Basic, 262–298; Proficient, 299–332; and Advanced, 333 and above. All differences were tested for statistical significance at the 0.05 level using unrounded numbers. Detail may not sum to totals because of rounding. Performance comparisons may be affected by differences in exclusion rates for students with disabilities and English language learners in the NAEP samples and by changes in sample sizes.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 1990–2005 Mathematics Assessments.

COMPARISONS BETWEEN THE NATION AND OTHER PARTICIPATING STATES AND JURISDICTIONS

Fifty-two jurisdictions participated in the mathematics assessment in 2005. These include the 50 states, the District of Columbia, and the Department of Defense Education Activity (DoDEA) schools (domestic and overseas). Previous NAEP reports presented results for the Department of Defense Dependents Schools (DoDDS) overseas and the Department of Defense Domestic Dependent Elementary and Secondary Schools (DDESS) in the United States separately. Data for the two jurisdictions in prior years have been retroactively combined to provide comparable data for the single DoDEA jurisdiction.

In 2003, NAEP changed the regional reporting groups to match the United States Census Bureau regions. North Carolina is part of the South Census Region. The following states and jurisdictions are in the South Census Region: Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia and West Virginia.

Comparisons by Average Scale Scores

Figures 2-A and 2-B compare the nation's (public) 2005 overall mathematics scale scores at grades 4 and 8 with those of all other participating states and jurisdictions. The different shadings indicate whether the average score of a state or a jurisdiction was found to be higher than, lower than, or not significantly different from that of the nation (public) in the NAEP 2005 mathematics assessment.

Tables 3-A and 3-B compare the nation's (public) 2005 overall mathematics scale scores at grades 4 and 8 with those of all other participating states and jurisdictions. The different columns indicate whether the average score of a state or a jurisdiction was found to be higher than, lower than, or not significantly different from that of the nation (public) in the NAEP 2005 mathematics assessment.

Grade 4 Scale Score Comparisons Results

- Student's average scores in the nation's public schools were higher than those in 17 jurisdictions, not significantly different from those in 9 jurisdictions, and lower than those in 26 jurisdictions.

Grade 8 Scale Score Comparisons Results

- Student's average scores in the nation's public schools were higher than those in 17 jurisdictions, not significantly different from those in 5 jurisdictions, and lower than those in 30 jurisdictions.

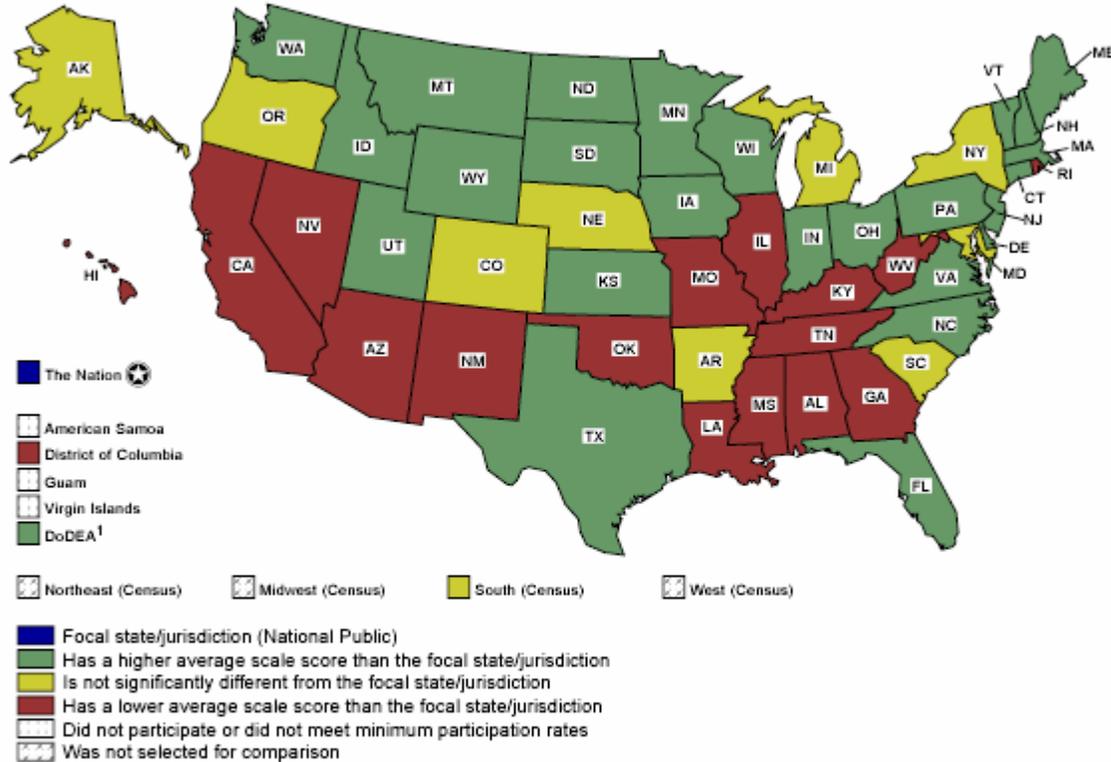
**Figure
2-A**

The Nation's Report Card 2005 State Assessment

Nation's (public) average mathematics scale score compared with scores for all participating jurisdictions, grade 4 public schools: 2005

NAEP Mathematics Grade 4 - Mathematics
Difference in Average Scale Score Between Jurisdictions
For All students [TOTAL] = All students
2005

Color



¹ 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), 2005 Mathematics Assessments.

**Table
3-A**

The Nation's Report Card 2005 State Assessment

Nation's (public) average mathematics scale score compared with scores for all participating jurisdictions, grade 4 public schools: 2005

Nation (public) Average Scale Score: 237

States and Jurisdictions Significantly Below Nation (public) – 17	States and Jurisdictions Not Significantly Different from Nation (public) – 9	States and Jurisdictions Significantly Above Nation (public) – 26
Alabama (225)*	Alaska (236)	Connecticut (242)
Arizona (230)	Arkansas (236)*	Delaware (240)*
California (230)	Colorado (239)	DoDEA (239)
District of Columbia (211)*	Maryland (238)*	Florida (239)*
Georgia (234)*	Michigan (238)	Idaho (242)
Hawaii (230)	Nebraska (238)	Indiana (240)
Illinois (233)	New York (238)	Iowa (240)
Kentucky (231)*	Oregon (238)	Kansas (246)
Louisiana (230)*	South Carolina (238)*	Maine (241)
Mississippi (227)*		Massachusetts (247)
Missouri (235)	South Census (237)	Minnesota (246)
Nevada (230)		Montana (241)
New Mexico (224)		New Hampshire (246)
Oklahoma (234)*		New Jersey (244)
Rhode Island (233)		North Carolina (241)*
Tennessee (232)*		North Dakota (243)
West Virginia (231)*		Ohio (242)
		Pennsylvania (241)
		South Dakota (242)
		Texas (242)*
		Utah (239)
		Vermont (244)
		Virginia (240)*
		Washington (242)
		Wisconsin (241)
		Wyoming (243)

*South Census States

() Average Scale Score for 2005

¹Department of Defense Education Activity schools (domestic and overseas).

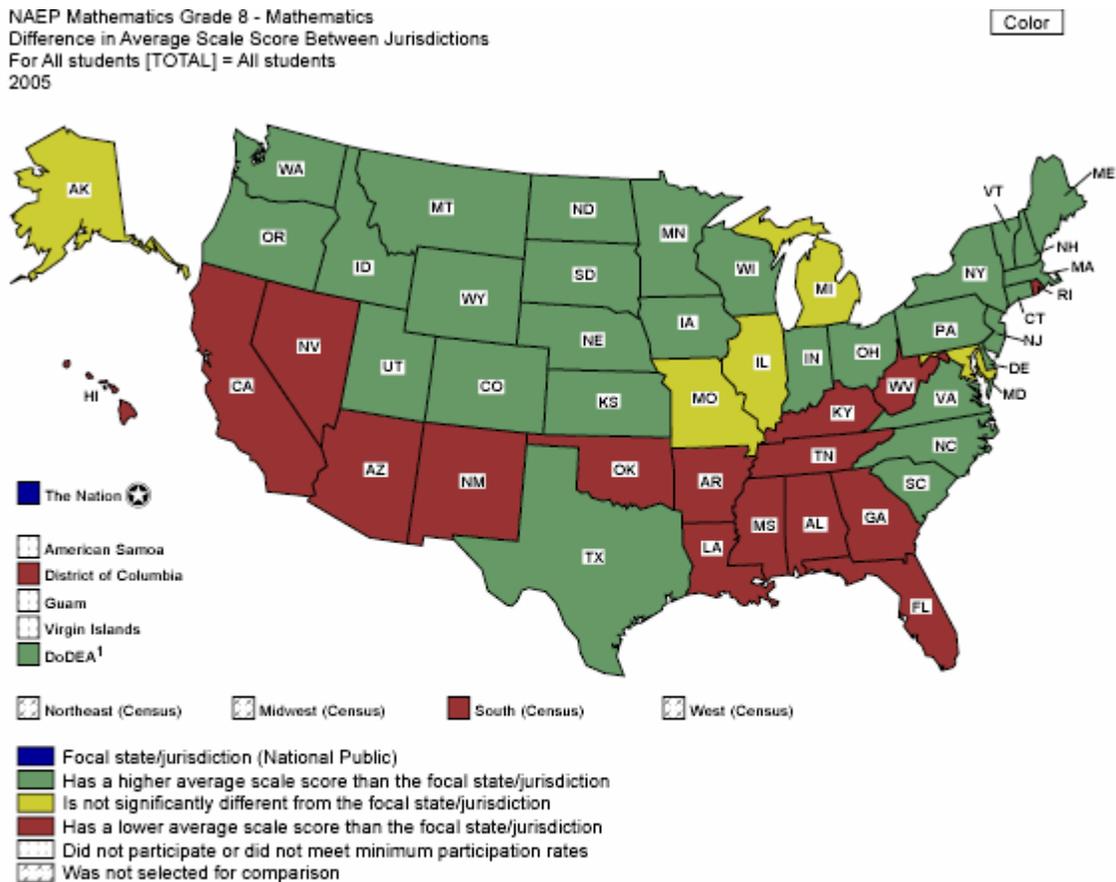
Note: The NAEP mathematics scale ranges from 0 to 500. All differences were tested for statistical significance at the 0.05 level using unrounded numbers. Detail may not sum to totals because of rounding. Performance comparisons may be affected by differences in exclusion rates for students with disabilities and English language learners in the NAEP samples and by changes in sample sizes.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2005 Mathematics Assessments.

Figure 2-B

The Nation's Report Card 2005 State Assessment

Nation's (public) average mathematics scale score compared with scores for all participating jurisdictions, grade 8 public schools: 2005



¹ 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), 2005 Mathematics Assessments.

**Table
3-B**

The Nation's Report Card 2005 State Assessment

Nation's (public) average mathematics scale score compared with scores for all participating jurisdictions, grade 8 public schools: 2005

Nation (public) Average Scale Score: 278

States and Jurisdictions Significantly Below Nation (public) – 17	States and Jurisdictions Not Significantly Different from Nation (public) – 5	States and Jurisdictions Significantly Above Nation (public) – 30
Alabama (262)*	Alaska (279)	Colorado (281)
Arizona (274)	Illinois (278)	Connecticut (281)
Arkansas (272)*	Maryland (278)*	Delaware (281)*
California (269)	Michigan (277)	DoDEA (284)
District of Columbia (245)*	Missouri (276)	Idaho (281)
Florida (274)*		Indiana (282)
Georgia (272)*		Iowa (284)
Hawaii (266)		Kansas (284)
Kentucky (274)*		Maine (281)
Louisiana (268)*		Massachusetts (292)
Mississippi (262)*		Minnesota (290)
Nevada (270)		Montana (286)
New Mexico (263)		Nebraska (284)
Oklahoma (271)*		New Hampshire (285)
Rhode Island (272)		New Jersey (284)
Tennessee (271)*		New York (280)
West Virginia (269)*		North Carolina (282)*
		North Dakota (287)
South Census (276)		Ohio (283)
		Oregon (282)
		Pennsylvania (281)
		South Carolina (281)*
		South Dakota (287)
		Texas (281)*
		Utah (279)
		Vermont (287)
		Virginia (284)*
		Washington (285)
		Wisconsin (285)
		Wyoming (282)

*South Census States

() Average Scale Score for 2005

¹Department of Defense Education Activity schools (domestic and overseas).

Note: The NAEP mathematics scale ranges from 0 to 500. All differences were tested for statistical significance at the 0.05 level using unrounded numbers. Detail may not sum to totals because of rounding. Performance comparisons may be affected by differences in exclusion rates for students with disabilities and English language learners in the NAEP samples and by changes in sample sizes.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2005 Mathematics Assessments.

MATHEMATICS PERFORMANCE OF SELECTED STUDENT GROUPS

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

- gender
- race/ethnicity
- student eligibility for free/reduced-price school lunch

Definitions of NAEP reporting groups are available on the NAEP website at <http://nces.ed.gov/nationsreportcard/mathematics/results2005/interpret-results.asp#RepGroups>.

Each of the variables is reported in tables that present the percentage of students belonging to 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.

Differences between scores or percentages mentioned in the text are calculated using unrounded values. The result of subtracting the rounded values displayed in the tables may differ (usually by one point) from the results that would be obtained by subtracting the unrounded values.

The reader is cautioned against making causal inferences about the performance of groups of students relative to demographic variables. Many factors other than those discussed here, including home and school factors, may affect student performance.

NAEP collects information on many additional variables, including school and home factors related to achievement. All of this information is in an interactive database available on the NAEP website at <http://nces.ed.gov/nationsreportcard/>.

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 grade 4 and 8 in North Carolina and the nation by gender. In 2000 only, results were obtained for student samples for which accommodations were permitted and those for which accommodations were not permitted. However, in the text of this report, comparisons to 2000 results refer only to the sample for which accommodations were permitted.

Graphs 3-A and 3-B show average scale score data for North Carolina public school students in grades 4 and 8 by gender.

Grade 4 Scale Score Results by Gender

- In 2005, male students in North Carolina had an average score that was not found to be significantly different from that of female students. In 1992, there was no significant difference between the average score of male and female students.
- In 2005, male students in North Carolina had an average scale score in mathematics (242) that was higher than that of male students in public schools across the nation (238). Similarly, female students in North Carolina had an average scale score (241) that was higher than that of female students across the nation (236).
- In North Carolina, the average scale scores of both males and females were higher in 2005 than in 1992.
- In North Carolina, the average scale scores of both males and females were higher in 2005 than in 1996.
- In North Carolina, the average scale scores of both males and females were higher in 2005 than in 2000.
- In North Carolina, the average scale scores of both males and females were not found to differ significantly in 2005 from the scores in 2003.

Grade 4 Achievement-Level Results by Gender

- In the 2005 assessment, 41 percent of males and 38 percent of females performed at or above *Proficient* in North Carolina. The difference between these percentages was not significant.
- The percentage of males in North Carolina's public schools who were at or above *Proficient* in 2005 (41 percent) was greater than that of males in the nation (37 percent).
- The percentage of females in North Carolina's public schools who were at or above *Proficient* in 2005 (38 percent) was greater than that of females in the nation (33 percent).
- In North Carolina, the percentages of both males and females performing at or above *Proficient* were greater in 2005 than in 1992.
- In North Carolina, the percentages of both males and females performing at or above *Proficient* were greater in 2005 than in 1996.
- In North Carolina, the percentages of both males and females performing at or above *Proficient* were greater in 2005 than in 2000.
- In North Carolina, the percentages of both males and females performing at or above *Proficient* were not found to differ significantly in 2005 from the percentages in 2003.

**Table
4-A**

The Nation's Report Card 2005 State Assessment

Average mathematics scale scores and percentage of students at or above each achievement level, by gender, grade 4 public schools: various years, 1992–2005

Gender		Percent of students	Average scale score	Below Basic	At or above Basic	At or above Proficient	At Advanced
Male 1992 ¹	Nation (public)	50	220*	41*	59*	19*	2*
	North Carolina	51	213*	50*	50*	13*	2*
1996 ¹	Nation (public)	51	224*	37*	63*	22*	3*
	North Carolina	50	224*	36*	64*	22*	3*
2000 ¹	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
Female 1992 ¹	Nation (public)	50	218*	44*	56*	16*	1*
	North Carolina	49	213*	49*	51*	12*	1*
1996 ¹	Nation (public)	49	221*	39*	61*	17*	1*
	North Carolina	50	224*	35*	65*	20*	2*
2000 ¹	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

* Value is significantly different from the value for the same jurisdiction in 2005.

¹ Accommodations were not permitted for this assessment.

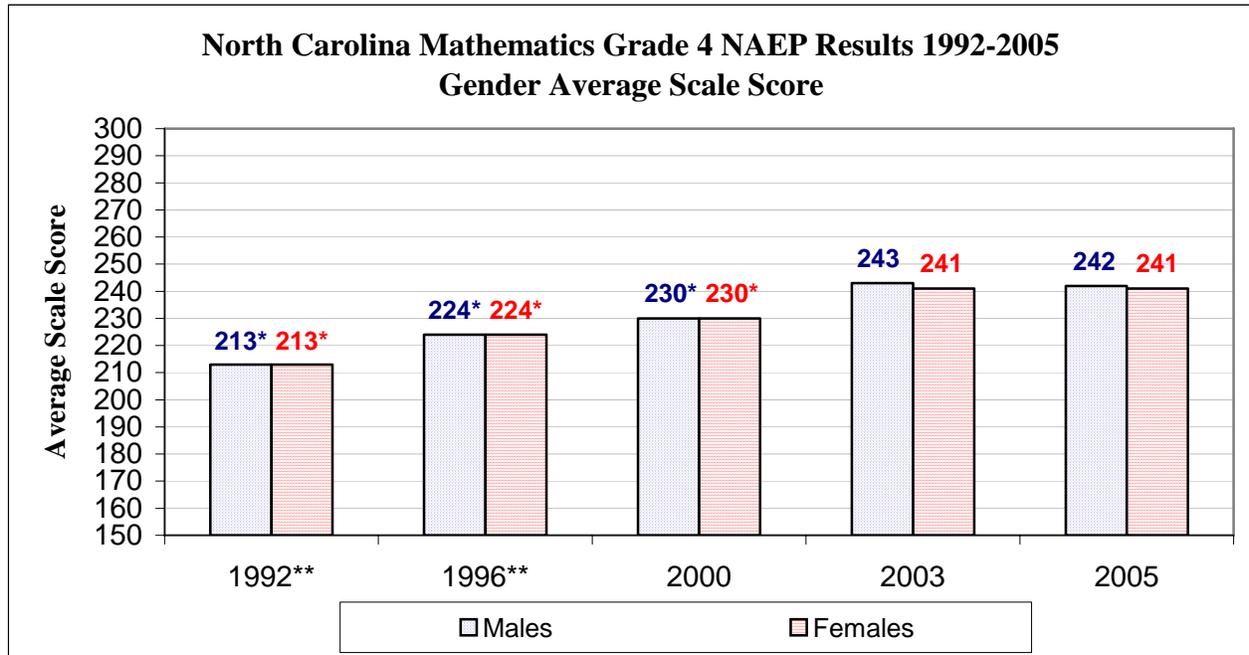
NOTE: The NAEP mathematics scale ranges from 0 to 500. The standard errors of the statistics in the table appear in parentheses. Achievement levels correspond to the following points on the NAEP mathematics scale: below Basic, 213 or lower; Basic, 214–248; Proficient, 249–281; and Advanced, 282 and above. All differences were tested for statistical significance at the 0.05 level using unrounded numbers. Detail may not sum to totals because of rounding. Performance comparisons may be affected by differences in exclusion rates for students with disabilities and English language learners in the NAEP samples and by changes in sample sizes.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 1992–2005 Mathematics Assessments.

**Graph
3-A**

The Nation's Report Card 2005 State Assessment

Average mathematics scale scores, by gender, grade 4 public schools: various years, 1992–2005



* Value is significantly different from the value for the same jurisdiction in 2005.

** Accommodations were not permitted for this assessment.

NOTE: The NAEP mathematics scale ranges from 0 to 500. Achievement levels correspond to the following points on the NAEP mathematics scale: below Basic, 213 or lower; Basic, 214–248; Proficient, 249–281; and Advanced, 282 and above. All differences were tested for statistical significance at the 0.05 level using unrounded numbers. Detail may not sum to totals because of rounding. Performance comparisons may be affected by differences in exclusion rates for students with disabilities and English language learners in the NAEP samples and by changes in sample sizes.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 1992–2005 Mathematics Assessments.

Grade 8 Scale Score Results by Gender

- In 2005, male students in North Carolina had an average score that was not found to be significantly different from that of female students. In 1990, there was no significant difference between the average score of male and female students.
- In 2005, male students in North Carolina had an average scale score in mathematics (281) that was higher than that of male students in public schools across the nation (278). Similarly, female students in North Carolina had an average scale score (282) that was higher than that of female students across the nation (277).
- In North Carolina, the average scale scores of both males and females were higher in 2005 than in 1990.
- In North Carolina, the average scale scores of both males and females were higher in 2005 than in 1992.
- In North Carolina, the average scale scores of both males and females were higher in 2005 than in 1996.
- In North Carolina, the average scale score of males was not found to differ significantly in 2005 from the scores in 2000; however, that of females was higher in 2005 than in 2000.
- In North Carolina, the average scale scores of both males and females were not found to differ significantly in 2005 from the scores in 2003.

Grade 8 Achievement-Level Results by Gender

- In the 2005 assessment, 32 percent of males and 32 percent of females performed at or above *Proficient* in North Carolina. The difference between these percentages was not significant.
- The percentage of males in North Carolina's public schools who were at or above *Proficient* in 2005 (32 percent) was not significantly different from that of males in the nation (30 percent).
- The percentage of females in North Carolina's public schools who were at or above *Proficient* in 2005 (32 percent) was greater than that of females in the nation (27 percent).
- In North Carolina, the percentages of both males and females performing at or above *Proficient* were greater in 2005 than in 1990.
- In North Carolina, the percentages of both males and females performing at or above *Proficient* were greater in 2005 than in 1992.
- In North Carolina, the percentages of both males and females performing at or above *Proficient* were greater in 2005 than in 1996.
- In North Carolina, the percentage of males performing at or above *Proficient* was not found to differ significantly in 2005 from the percentages in 2000; however, that of females was greater in 2005 than in 2000.
- In North Carolina, the percentages of both males and females performing at or above *Proficient* were not found to differ significantly in 2005 from the percentages in 2003.

**Table
4-B**

The Nation's Report Card 2005 State Assessment

Average mathematics scale scores and percentage of students at or above each achievement level, by gender, grade 8 public schools: various years, 1990–2005

Gender		Percent of students	Average scale score	Below Basic	At or above Basic	At or above Proficient	At Advanced
Male 1990 ¹	Nation (public)	51	262*	49*	51*	17*	2*
	North Carolina	51	250*	62*	38*	9*	1*
1992 ¹	Nation (public)	52	266*	45*	55*	20*	3*
	North Carolina	50	259*	52*	48*	14*	1*
1996 ¹	Nation (public)	52	270*	40*	60*	24*	4*
	North Carolina	48*	270*	41*	59*	23*	4*
2000 ¹	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

See notes at end of table.

The Nation's Report Card 2005 State Assessment

**Table
4-B**

**Average mathematics scale scores and percentage of students at or above each achievement level, by gender, grade 8 public schools: various years, 1990–2005—
Continued**

Gender	Percent of students	Average scale score	Below Basic	At or above Basic	At or above Proficient	At Advanced	
Female 1990 ¹	Nation (public)	49	261*	49*	51*	14*	2*
	North Carolina	49	251*	62*	38*	8*	1*
1992 ¹	Nation (public)	48	267*	44*	56*	20*	3*
	North Carolina	50	257*	54*	46*	10*	1*
1996 ¹	Nation (public)	48	271*	39*	61*	21*	3*
	North Carolina	52*	266*	46*	54*	18*	3*
2000 ¹	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

* Value is significantly different from the value for the same jurisdiction in 2005.

¹ Accommodations were not permitted for this assessment.

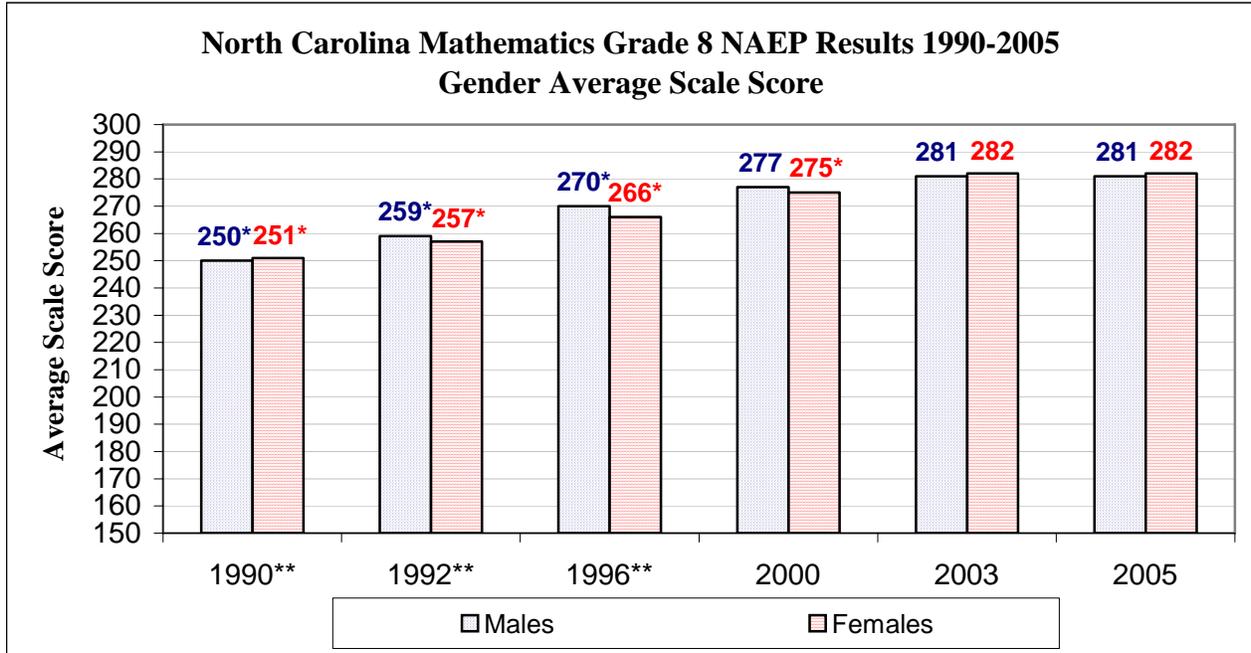
NOTE: The NAEP mathematics scale ranges from 0 to 500. The standard errors of the statistics in the table appear in parentheses. Achievement levels correspond to the following points on the NAEP mathematics scale: below Basic, 261 or lower; Basic, 262–298; Proficient, 299–332; and Advanced, 333 and above. All differences were tested for statistical significance at the 0.05 level using unrounded numbers. Detail may not sum to totals because of rounding. Performance comparisons may be affected by differences in exclusion rates for students with disabilities and English language learners in the NAEP samples and by changes in sample sizes.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 1990–2005 Mathematics Assessments.

**Graph
3-B**

The Nation's Report Card 2005 State Assessment

Average mathematics scale scores, by gender, grade 8 public schools: various years, 1990–2005



* Value is significantly different from the value for the same jurisdiction in 2005.

** Accommodations were not permitted for this assessment.

NOTE: The NAEP mathematics scale ranges from 0 to 500. Achievement levels correspond to the following points on the NAEP mathematics scale: below Basic, 261 or lower; Basic, 262–298; Proficient, 299–332; and Advanced, 333 and above. All differences were tested for statistical significance at the 0.05 level using unrounded numbers. Detail may not sum to totals because of rounding. Performance comparisons may be affected by differences in exclusion rates for students with disabilities and English language learners in the NAEP samples and by changes in sample sizes.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 1990–2005 Mathematics Assessments.

Race/Ethnicity

Schools reported the racial/ethnic subgroup that best described the students eligible to be assessed. 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 unless specified.

Tables 5-A and 5-B show average scale scores and achievement-level data for public school students at grade 4 and 8 in North Carolina and the nation by race/ethnicity. In 2000 only, results were obtained for student samples for which accommodations were permitted and those for which accommodations were not permitted. However, in the text of this report, comparisons to 2000 results refer only to the sample for which accommodations were permitted.

Graphs 4-A and 4-B show average scale score data for North Carolina public school students in grades 4 and 8 by race/ethnicity.

Grade 4 Scale Score Results by Race/Ethnicity

- In 2005, White students in North Carolina had an average scale score that was higher than those of Black and Hispanic students, but was not found to be significantly different from that of Asian/Pacific Islander students.
- The average scale scores of White and Black students in North Carolina were higher in 2005 than in 1992.
- The average scale scores of White and Black students in North Carolina were higher in 2005 than in 1996.
- The average scale scores of White, Black, and Hispanic students in North Carolina were higher in 2005 than in 2000.
- The average scale scores of White, Black, Hispanic, and Asian/Pacific Islander students in North Carolina were not significantly different between 2003 and 2005.
- In 2005, Black students had an average score that was lower than that of White students by 25 points. This performance gap was narrower than that of 1992 (30 points).
- In 2005, Hispanic students had an average score that was lower than that of White students by 16 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 2005, the percentage of White students performing at or above *Proficient* was greater than those of Black and Hispanic students, but was not found to be significantly different from that of Asian/Pacific Islander students.
- The respective percentages of White and Black students in North Carolina performing at or above *Proficient* were greater in 2005 than in 1992.
- The respective percentages of White and Black students in North Carolina performing at or above *Proficient* were greater in 2005 than in 1996.
- The respective percentages of White, Black, and Hispanic students in North Carolina performing at or above *Proficient* were greater in 2005 than in 2000.
- The differences between the percentages of White, Black, Hispanic, and Asian/Pacific Islander students in North Carolina performing at or above *Proficient* in 2003 and the respective percentages in 2005 were not found to be significant.

**Table
5-A**

The Nation's Report Card 2005 State Assessment

Average mathematics scale scores and percentage of students at or above each achievement level, by race/ethnicity, grade 4 public schools: various years, 1992–2005

Race/ethnicity	Percent of students	Average scale score	Below Basic	At or above Basic	At or above Proficient	At Advanced
White						
1992 ¹						
Nation (public)	72*	227*	32*	68*	22*	2*
North Carolina	65*	223*	36*	64*	18*	2*
1996 ¹						
Nation (public)	71*	230*	27*	73*	25*	3*
North Carolina	68*	233*	23*	77*	29*	3*
2000 ¹						
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
Black						
1992 ¹						
Nation (public)	18	192*	78*	22*	2*	#
North Carolina	31*	193*	77*	23*	2*	#
1996 ¹						
Nation (public)	17	199*	70*	30*	4*	#
North Carolina	28	204*	64*	36*	4*	#
2000 ¹						
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

See notes at end of table.

The Nation's Report Card 2005 State Assessment

**Table
5-A**

**Average mathematics scale scores and percentage of students at or above each achievement level, by race/ethnicity, grade 4 public schools: various years, 1992–2005—
Continued**

Race/ethnicity		Percent of students	Average scale score	Below Basic	At or above Basic	At or above Proficient	At Advanced
Hispanic							
1992 ¹							
	Nation (public)	7*	201*	68*	32*	5*	#
	North Carolina	1*	‡	‡	‡	‡	‡
1996 ¹							
	Nation (public)	9*	204*	63*	37*	7*	#
	North Carolina	1*	‡	‡	‡	‡	‡
2000 ¹							
	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
Asian/Pacific Islander							
1992 ¹							
	Nation (public)	3*	231*	26*	74*	27*	4*
	North Carolina	1*	‡	‡	‡	‡	‡
1996 ¹							
	Nation (public)	3*	225*	35*	65*	20*	5*
	North Carolina	2	‡	‡	‡	‡	‡
2000 ¹							
	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

See notes at end of table.

The Nation's Report Card 2005 State Assessment

**Table
5-A**

Average mathematics scale scores and percentage of students at or above each achievement level, by race/ethnicity, grade 4 public schools: various years, 1992–2005—Continued

Race/ethnicity	Percent of students	Average scale score	Below Basic	At or above Basic	At or above Proficient	At Advanced
American Indian/Alaska Native						
1992 ¹						
Nation (public)	1	‡	‡	‡	‡	‡
North Carolina	2	‡	‡	‡	‡	‡
1996 ¹						
Nation (public)	1*	‡	‡	‡	‡	‡
North Carolina	1	‡	‡	‡	‡	‡
2000 ¹						
Nation (public)	1	‡	‡	‡	‡	‡
North Carolina	2	‡	‡	‡	‡	‡
2000						
Nation (public)	1	‡	‡	‡	‡	‡
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	‡	‡	‡	‡	‡

Estimate rounds to zero.

‡ Reporting standards are not met.

* Value is significantly different from the value for the same jurisdiction in 2005.

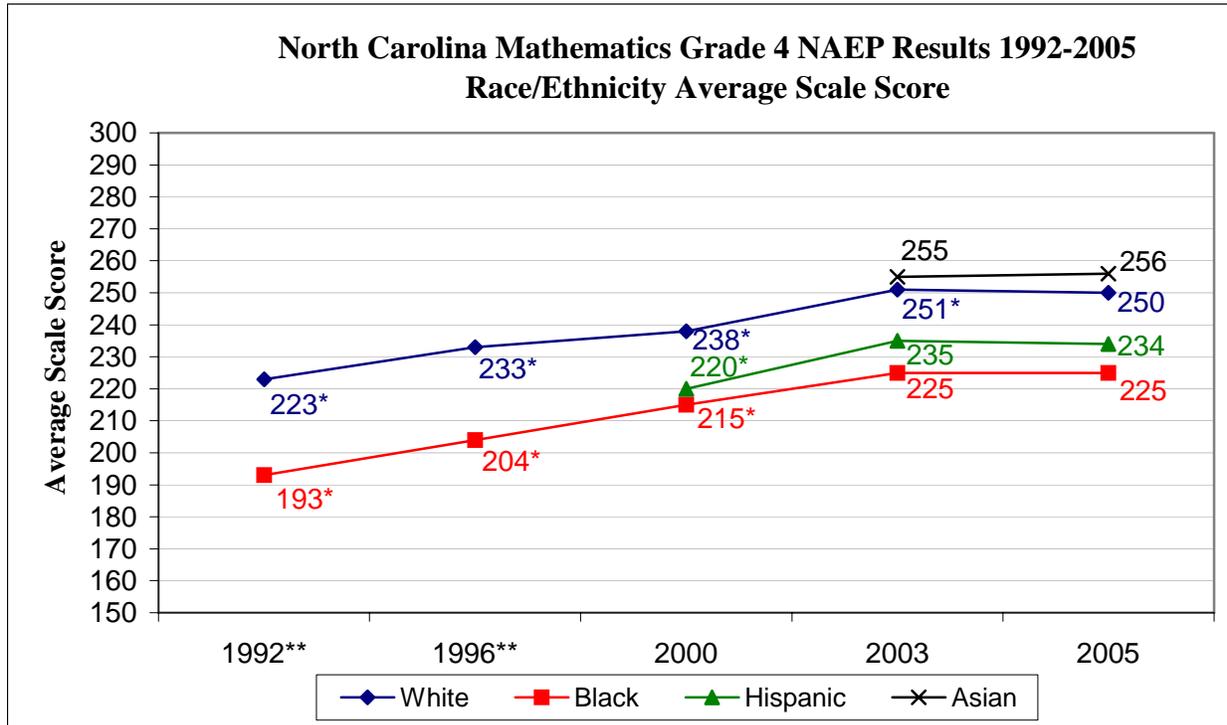
¹ Accommodations were not permitted for this assessment.

NOTE: The NAEP mathematics scale ranges from 0 to 500. The standard errors of the statistics in the table appear in parentheses. Achievement levels correspond to the following points on the NAEP mathematics scale: below Basic, 213 or lower; Basic, 214–248; Proficient, 249–281; and Advanced, 282 and above. All differences were tested for statistical significance at the 0.05 level using unrounded numbers. Detail may not sum to totals because of rounding. Performance comparisons may be affected by differences in exclusion rates for students with disabilities and English language learners in the NAEP samples and by changes in sample sizes.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 1992–2005 Mathematics Assessments.

**Graph
4-A**

Average mathematics scale scores and percentage of students at or above each achievement level, by race/ethnicity, grade 4 public schools: various years, 1992–2005



* Value is significantly different from the value for the same jurisdiction in 2005.

** Accommodations were not permitted for this assessment.

NOTE: The NAEP mathematics scale ranges from 0 to 500. Achievement levels correspond to the following points on the NAEP mathematics scale: below Basic, 213 or lower; Basic, 214–248; Proficient, 249–281; and Advanced, 282 and above. All differences were tested for statistical significance at the 0.05 level using unrounded numbers. Detail may not sum to totals because of rounding. Performance comparisons may be affected by differences in exclusion rates for students with disabilities and English language learners in the NAEP samples and by changes in sample sizes.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 1992–2005 Mathematics Assessments.

Grade 8 Scale Score Results by Race/Ethnicity

- In 2005, White students in North Carolina had an average scale score that was higher than those of Black and Hispanic students, but was not found to be significantly different from that of Asian/Pacific Islander students.
- The average scale scores of White and Black students in North Carolina were higher in 2005 than in 1990.
- The average scale scores of White and Black students in North Carolina were higher in 2005 than in 1992.
- The average scale scores of White and Black students in North Carolina were higher in 2005 than in 1996.
- The average scale scores of White and Black students in North Carolina were higher in 2005 than in 2000.
- The average scale scores of White, Black, Hispanic, and Asian/Pacific Islander students in North Carolina were not significantly different between 2003 and 2005.
- In 2005, Black students had an average score that was lower than that of White students by 28 points. In 1990, the average score for Black students was lower than that of White students by 30 points.
- In 2005, Hispanic students had an average score that was lower than that of White students by 26 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 2005, the percentage of White students performing at or above *Proficient* was greater than those of Black and Hispanic students, but was not found to be significantly different from that of Asian/Pacific Islander students.
- The respective percentages of White and Black students in North Carolina performing at or above *Proficient* were greater in 2005 than in 1990.
- The respective percentages of White and Black students in North Carolina performing at or above *Proficient* were greater in 2005 than in 1992.
- The respective percentages of White and Black students in North Carolina performing at or above *Proficient* were greater in 2005 than in 1996.
- The respective percentages of White and Black students in North Carolina performing at or above *Proficient* were greater in 2005 than in 2000.
- The differences between the percentages of White, Black, Hispanic, and Asian/Pacific Islander students in North Carolina performing at or above *Proficient* in 2003 and the respective percentages in 2005 were not found to be significant.

**Table
5-B**

The Nation's Report Card 2005 State Assessment

Average mathematics scale scores and percentage of students at or above each achievement level, by race/ethnicity, grade 8 public schools: various years, 1990–2005

Race/ethnicity	Percent of students	Average scale score	Below Basic	At or above Basic	At or above Proficient	At Advanced
White						
1990 ¹						
Nation (public)	73*	269*	41*	59*	18*	3*
North Carolina	63	261*	51*	49*	12*	1*
1992 ¹						
Nation (public)	72*	276*	34*	66*	25*	3*
North Carolina	70*	266*	44*	56*	16*	2*
1996 ¹						
Nation (public)	70*	280*	28*	72*	29*	5*
North Carolina	66*	277*	32*	68*	27*	4*
2000 ¹						
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
Black						
1990 ¹						
Nation (public)	16	236*	79*	21*	5*	#
North Carolina	32	231*	83*	17*	2*	#
1992 ¹						
Nation (public)	17	236*	81*	19*	2*	#
North Carolina	28	238*	77*	23*	3*	#
1996 ¹						
Nation (public)	16	241*	74*	26*	4*	#
North Carolina	29	247*	69*	31*	5*	#
2000 ¹						
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

See notes at end of table.

The Nation's Report Card 2005 State Assessment

**Table
5-B**

**Average mathematics scale scores and percentage of students at or above each achievement level, by race/ethnicity, grade 8 public schools: various years, 1990–2005—
Continued**

Race/ethnicity	Percent of students	Average scale score	Below Basic	At or above Basic	At or above Proficient	At Advanced
Hispanic						
1990 ¹						
Nation (public)	7*	245*	67*	33*	7*	1
North Carolina	1*	‡	‡	‡	‡	‡
1992 ¹						
Nation (public)	8*	247*	67*	33*	6*	#*
North Carolina	1*	‡	‡	‡	‡	‡
1996 ¹						
Nation (public)	9*	250*	62*	38*	8*	1
North Carolina	2*	‡	‡	‡	‡	‡
2000 ¹						
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
Asian/Pacific Islander						
1990 ¹						
Nation (public)	2*	‡	‡	‡	‡	‡
North Carolina	1*	‡	‡	‡	‡	‡
1992 ¹						
Nation (public)	2*	290	25	75	43	14
North Carolina	1*	‡	‡	‡	‡	‡
1996 ¹						
Nation (public)	‡	‡	‡	‡	‡	‡
North Carolina	2	‡	‡	‡	‡	‡
2000 ¹						
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

See notes at end of table.

The Nation's Report Card 2005 State Assessment

**Table
5-B**

**Average mathematics scale scores and percentage of students at or above each achievement level, by race/ethnicity, grade 8 public schools: various years, 1990–2005—
Continued**

Race/ethnicity	Percent of students	Average scale score	Below Basic	At or above Basic	At or above Proficient	At Advanced
American Indian/Alaska Native						
1990 ¹						
Nation (public)	1	‡	‡	‡	‡	‡
North Carolina	2	‡	‡	‡	‡	‡
1992 ¹						
Nation (public)	1	‡	‡	‡	‡	‡
North Carolina	1	‡	‡	‡	‡	‡
1996 ¹						
Nation (public)	1	‡	‡	‡	‡	‡
North Carolina	2	‡	‡	‡	‡	‡
2000 ¹						
Nation (public)	1	‡	‡	‡	‡	‡
North Carolina	2	‡	‡	‡	‡	‡
2000						
Nation (public)	1	‡	‡	‡	‡	‡
North Carolina	2	‡	‡	‡	‡	‡
2003						
Nation (public)	1	265	46	54	16	2
North Carolina	2	‡	‡	‡	‡	‡
2005						
Nation (public)	1	266	45	55	14	2
North Carolina	1	‡	‡	‡	‡	‡

Estimate rounds to zero.

‡ Reporting standards are not met.

* Value is significantly different from the value for the same jurisdiction in 2005.

¹ Accommodations were not permitted for this assessment.

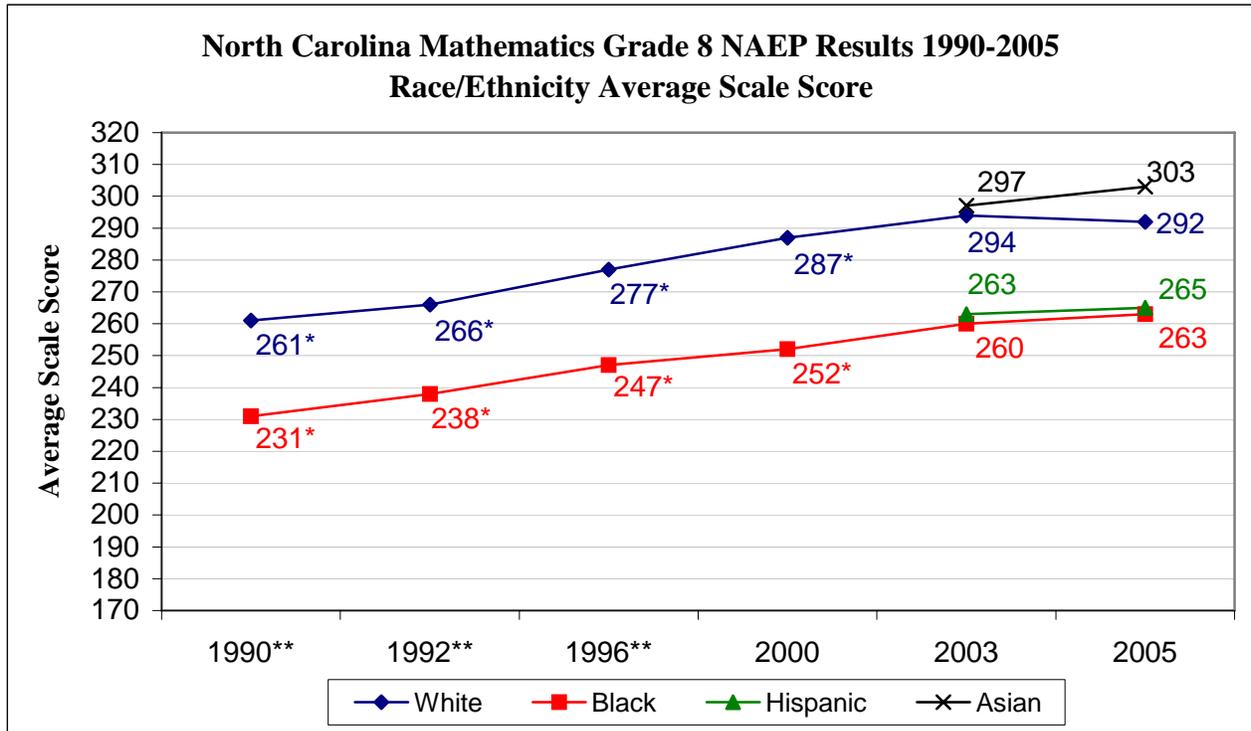
NOTE: The NAEP mathematics scale ranges from 0 to 500. The standard errors of the statistics in the table appear in parentheses. Achievement levels correspond to the following points on the NAEP mathematics scale: below Basic, 261 or lower; Basic, 262–298; Proficient, 299–332; and Advanced, 333 and above. All differences were tested for statistical significance at the 0.05 level using unrounded numbers. Detail may not sum to totals because of rounding. Performance comparisons may be affected by differences in exclusion rates for students with disabilities and English language learners in the NAEP samples and by changes in sample sizes.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 1990–2005 Mathematics Assessments.

**Graph
4-B**

The Nation's Report Card 2005 State Assessment

Average mathematics scale scores, by race/ethnicity, grade 8 public schools: various years, 1990–2005



* Value is significantly different from the value for the same jurisdiction in 2005.

** Accommodations were not permitted for this assessment.

NOTE: The NAEP mathematics scale ranges from 0 to 500. Achievement levels correspond to the following points on the NAEP mathematics scale: below Basic, 261 or lower; Basic, 262–298; Proficient, 299–332; and Advanced, 333 and above. All differences were tested for statistical significance at the 0.05 level using unrounded numbers. Detail may not sum to totals because of rounding. Performance comparisons may be affected by differences in exclusion rates for students with disabilities and English language learners in the NAEP samples and by changes in sample sizes.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 1990–2005 Mathematics Assessments.

Student Eligibility for Free/Reduced-Price School Lunch

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 6-A and 6-B show average scale scores and achievement-level data for public school students at grade 4 and 8 in North Carolina and the nation by eligibility for free/reduced-price lunch. In 2000 only, results were obtained for student samples for which accommodations were permitted and those for which accommodations were not permitted. However, in the text of this report, comparisons to 2000 results refer only to the sample for which accommodations were permitted.

Graphs 5-A and 5-B show average scale score data for North Carolina public school students at grades 4 and 8 by eligibility for free/reduced price lunch.

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

- In 2005, students in North Carolina eligible for free/reduced-price lunch had an average mathematics scale score of 229. This was lower than that of students in North Carolina not eligible for this program (251).
- In 2005, students 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 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 (229) in 2005 that was higher than that of students in the nation who were eligible (225).
- In North Carolina, students eligible for free/reduced-priced lunch had an average mathematics scale score in 2005 (229) that was higher than that of eligible students in 1996 (209).
- In North Carolina, students eligible for free/reduced-priced lunch had an average mathematics scale score in 2005 (229) that was higher than that of eligible students in 2000 (218).
- In North Carolina, students eligible for free/reduced-priced lunch had an average mathematics scale score in 2005 (229) that was not significantly different from that of eligible students in 2003 (229).

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

- In North Carolina in 2005, 22 percent of students who were eligible for free/reduced-price lunch and 54 percent of those who were not eligible for this program performed at or above *Proficient*. These percentages were found to be significantly different from one another.
- For students in North Carolina in 2005 who were eligible for free/reduced-price lunch, the percentage at or above *Proficient* (22 percent) was greater than the corresponding percentage for their counterparts around the nation (19 percent).
- In North Carolina, the percentage of students eligible for free/reduced-price lunch who performed at or above *Proficient* for 2005 (22 percent) was greater than the corresponding percentage (7 percent) for 1996.
- In North Carolina, the percentage of students eligible for free/reduced-price lunch who performed at or above *Proficient* for 2005 (22 percent) was greater than the corresponding percentage (11 percent) for 2000.
- In North Carolina, the percentage of students eligible for free/reduced-price lunch who performed at or above *Proficient* for 2005 (22 percent) was not significantly different from the corresponding percentage (21 percent) for 2003.

The Nation's Report Card 2005 State Assessment

**Table
6-A**

Average mathematics scale scores and percentage of students at or above each achievement level, by eligibility for free/reduced-price school lunch, grade 4 public schools: various years, 1996–2005

Eligibility status	Percent of students	Average scale score	Below Basic	At or above Basic	At or above Proficient	At Advanced
Eligible 1996 ¹						
Nation (public)	34*	207*	59*	41*	8*	#
North Carolina	34*	209*	55*	45*	7*	1
2000 ¹						
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
Not eligible 1996 ¹						
Nation (public)	52	231*	27*	73*	25*	3*
North Carolina	58	234*	23*	77*	30*	4*
2000 ¹						
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

Estimate rounds to zero.

‡ Reporting standards are not met.

* Value is significantly different from the value for the same jurisdiction in 2005.

¹ Accommodations were not permitted for this assessment.

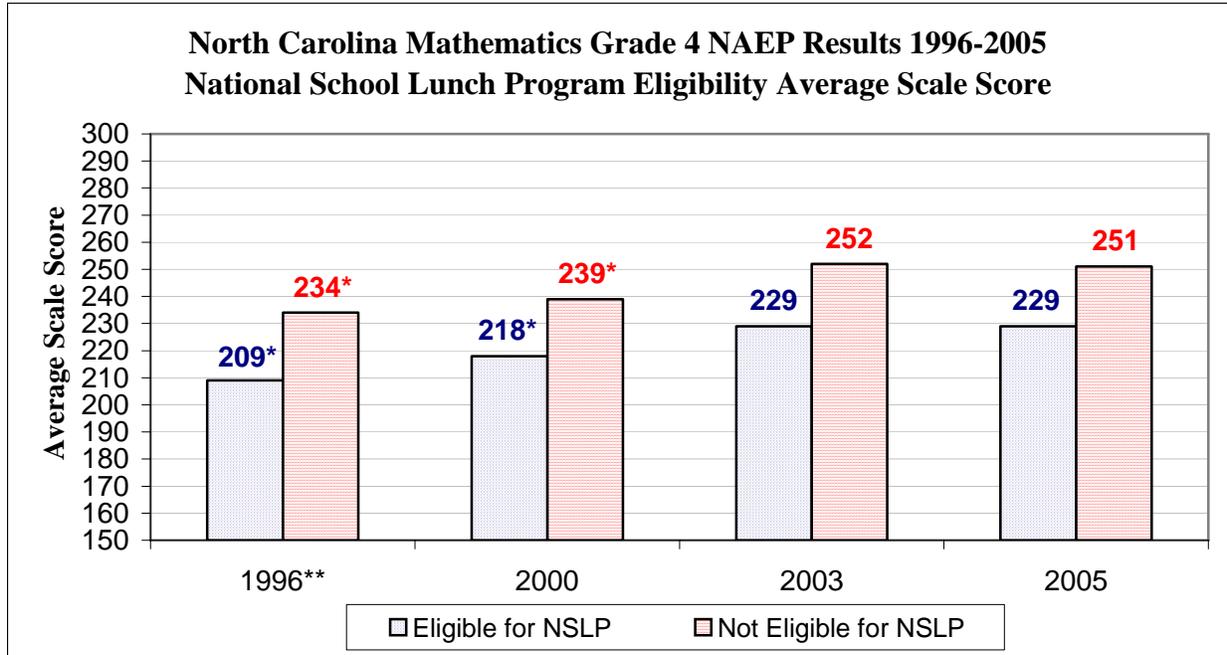
NOTE: The NAEP mathematics scale ranges from 0 to 500. The standard errors of the statistics in the table appear in parentheses. Achievement levels correspond to the following points on the NAEP mathematics scale: below Basic, 213 or lower; Basic, 214–248; Proficient, 249–281; and Advanced, 282 and above. All differences were tested for statistical significance at the 0.05 level using unrounded numbers. Detail may not sum to totals because of rounding. Performance comparisons may be affected by differences in exclusion rates for students with disabilities and English language learners in the NAEP samples and by changes in sample sizes.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 1996–2005 Mathematics Assessments.

**Graph
5-A**

The Nation's Report Card 2005 State Assessment

Average mathematics scale scores, by eligibility for free/reduced-price school lunch, grade 4 public schools: various years, 1996–2005



* Value is significantly different from the value for the same jurisdiction in 2005.

** Accommodations were not permitted for this assessment.

NOTE: The NAEP mathematics scale ranges from 0 to 500. Achievement levels correspond to the following points on the NAEP mathematics scale: below Basic, 213 or lower; Basic, 214–248; Proficient, 249–281; and Advanced, 282 and above. All differences were tested for statistical significance at the 0.05 level using unrounded numbers. Detail may not sum to totals because of rounding. Performance comparisons may be affected by differences in exclusion rates for students with disabilities and English language learners in the NAEP samples and by changes in sample sizes.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 1996–2005 Mathematics Assessments.

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

- In 2005, students in North Carolina eligible for free/reduced-price lunch had an average mathematics scale score of 266. This was lower than that of students in North Carolina not eligible for this program (293).
- In 2005, students 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 27 points. In 1996, the average score for students 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 (266) in 2005 that was higher than that of students in the nation who were eligible (261).
- In North Carolina, students eligible for free/reduced-priced lunch had an average mathematics scale score in 2005 (266) that was higher than that of eligible students in 1996 (250).
- In North Carolina, students eligible for free/reduced-priced lunch had an average mathematics scale score in 2005 (266) that was higher than that of eligible students in 2000 (257).
- In North Carolina, students eligible for free/reduced-priced lunch had an average mathematics scale score in 2005 (266) that was not significantly different from that of eligible students in 2003 (263).

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

- In North Carolina in 2005, 15 percent of students who were eligible for free/reduced-price lunch and 43 percent of those who were not eligible for this program performed at or above *Proficient*. These percentages were found to be significantly different from one another.
- For students in North Carolina in 2005 who were eligible for free/reduced-price lunch, the percentage at or above *Proficient* (15 percent) was not significantly different from the corresponding percentage for their counterparts around the nation (13 percent).
- In North Carolina, the percentage of students eligible for free/reduced-price lunch who performed at or above *Proficient* for 2005 (15 percent) was greater than the corresponding percentage (6 percent) for 1996.
- In North Carolina, the percentage of students eligible for free/reduced-price lunch who performed at or above *Proficient* for 2005 (15 percent) was greater than the corresponding percentage (10 percent) for 2000.
- In North Carolina, the percentage of students eligible for free/reduced-price lunch who performed at or above *Proficient* for 2005 (15 percent) was not significantly different from the corresponding percentage (14 percent) for 2003.

The Nation's Report Card 2005 State Assessment

**Table
6B**

Average mathematics scale scores and percentage of students at or above each achievement level, by eligibility for free/reduced-price school lunch, grade 8 public schools: various years, 1996–2005

Eligibility status	Percent of students	Average scale score	Below Basic	At or above Basic	At or above Proficient	At Advanced
Eligible 1996 ¹						
Nation (public)	30*	252*	61*	39*	8*	1
North Carolina	31*	250*	64*	36*	6*	#
2000 ¹						
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
Not eligible 1996 ¹						
Nation (public)	56	279*	29*	71*	29*	5*
North Carolina	62	277*	34*	66*	28*	4*
2000 ¹						
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

Estimate rounds to zero.

‡ Reporting standards are not met.

* Value is significantly different from the value for the same jurisdiction in 2005.

¹ Accommodations were not permitted for this assessment.

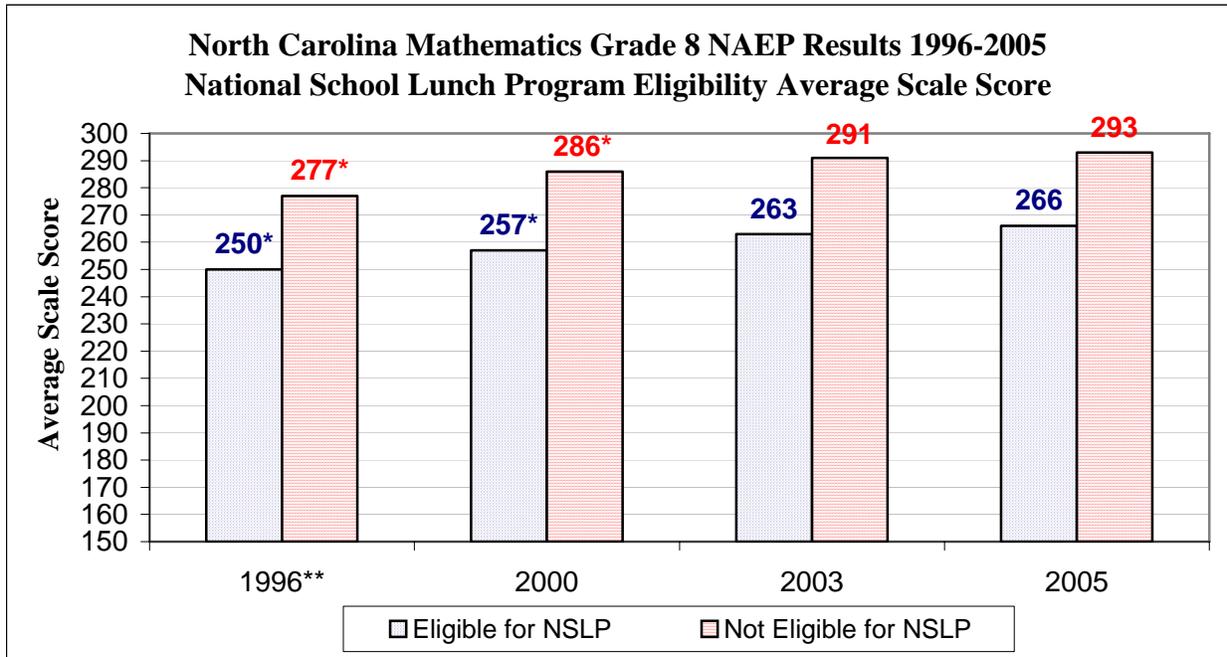
NOTE: The NAEP mathematics scale ranges from 0 to 500. The standard errors of the statistics in the table appear in parentheses. Achievement levels correspond to the following points on the NAEP mathematics scale: below Basic, 261 or lower; Basic, 262–298; Proficient, 299–332; and Advanced, 333 and above. All differences were tested for statistical significance at the 0.05 level using unrounded numbers. Detail may not sum to totals because of rounding. Performance comparisons may be affected by differences in exclusion rates for students with disabilities and English language learners in the NAEP samples and by changes in sample sizes.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 1996–2005 Mathematics Assessments.

**Graph
5-B**

The Nation's Report Card 2005 State Assessment

Average mathematics scale scores, by eligibility for free/reduced-price school lunch, grade 8 public schools: various years, 1996–2005



* Value is significantly different from the value for the same jurisdiction in 2005.

** Accommodations were not permitted for this assessment.

NOTE: The NAEP mathematics scale ranges from 0 to 500. Achievement levels correspond to the following points on the NAEP mathematics scale: below Basic, 261 or lower; Basic, 262–298; Proficient, 299–332; and Advanced, 333 and above. All differences were tested for statistical significance at the 0.05 level using unrounded numbers. Detail may not sum to totals because of rounding. Performance comparisons may be affected by differences in exclusion rates for students with disabilities and English language learners in the NAEP samples and by changes in sample sizes.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 1996–2005 Mathematics Assessments.

TOWARD A MORE INCLUSIVE NAEP: STUDENTS WITH DISABILITIES AND ENGLISH LANGUAGE LEARNERS

It is important to assess all students selected in the randomized sampling process, including students with disabilities (SD) and students who are classified by their schools as English language learners (ELL). Some students sampled for participation in NAEP can be excluded from the sample according to carefully defined criteria. School personnel, guided by the student's Individualized Education Program (IEP), as well as eligibility for Section 504 services, make decisions regarding inclusion of students with disabilities in the assessment. They also make decisions regarding inclusion of English language learners, based on NAEP's guidelines, by evaluating the student's capability of participating in the assessment given the available accommodations, and taking into consideration the number of years the student has been receiving instruction in English. The results displayed in this report and in other publications of the NAEP 2005 mathematics results are based on representative samples that include SD and ELL students who were assessed either with or without accommodations, based on NAEP's guidelines.

Percentages of students excluded from NAEP may vary considerably across states, and, within a state, across years. Comparisons of results across states and within a state across years should be interpreted with caution if the exclusion rates vary widely. The percentages of assessed students classified as SD or ELL, as well as their NAEP performance in each participating state and jurisdiction, are available in an interactive database on the NAEP website at <http://nces.ed.gov/nationsreportcard/>.

Prior to 2000, no testing accommodations were made available to the samples of students with disabilities and the English language learners in state NAEP mathematics assessments that served as the basis for reported results. In the 1996 national and 2000 national and state mathematics assessments, NAEP researchers drew a second representative sample of schools. Accommodations were made available for students in this sample who required them, provided the accommodation did not change the nature of what was tested. For example, students could be assessed one-on-one or in small groups, receive extended time, or use a large-print test book. In mathematics, students had the option of having the test questions read aloud in English, or using a bilingual English-Spanish test book. However, in the mathematics assessment, students were not allowed to use calculators for any questions on which calculators were not permitted. NAEP has used these comparable samples to study the effects of allowing accommodations for students categorized as SD or ELL in the assessments. A series of technical research papers covering various NAEP subject areas has been published with the results of these comparisons at <http://nces.ed.gov/nationsreportcard/about/inclusion.asp#research>.

Tables 7-A and 7-B display the percentages of students with disabilities and English language learners in North Carolina identified, excluded, and assessed under standard and accommodated conditions at grades 4 and 8.

Tables 8-A and 8-B show the percentage 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 9-A and 9-B present the percentage of students assessed in North Carolina by ELL status, their average scale scores, and their performance in terms of the percentage below *Basic*, the percentages at or above *Basic*, at or above *Proficient*, and at *Advanced*.

Table 10 presents the total number of students assessed, the percentage of students sampled who were excluded, and average scale scores for all participating states and other jurisdictions.

**Table
7-A**

The Nation's Report Card 2005 State Assessment

Percentage of students in mathematics assessments identified as SD and ELL, excluded, and assessed, grade 4 public schools: various years, 2000–2005

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

¹ Accommodations were not permitted for this assessment.

Estimate rounds to zero.

NOTE: SD = students with disabilities. ELL = English language learners. Detail may not sum to totals because of rounding. Some students were identified as both SD and ELL. Such students would be included in both the SD and ELL portions of the table.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 1992–2005 Mathematics Assessments.

**Table
7-B**

The Nation's Report Card 2005 State Assessment

Percentage of students in mathematics assessments identified as SD and ELL, excluded, and assessed, grade 8 public schools: various years, 2000–2005

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

¹ Accommodations were not permitted for this assessment.
— Not available.

Estimate rounds to zero.

NOTE: SD = students with disabilities. ELL = English language learners. Detail may not sum to totals because of rounding. Some students were identified as both SD and ELL. Such students would be included in both the SD and ELL portions of the table.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 1990–2005 Mathematics Assessments.

The Nation's Report Card 2005 State Assessment

**Table
8-A**

Average mathematics scale scores and percentage of students at or above each achievement level, by students' disability status, grade 4 public schools: various years, 2000–2005

Student disability status	Percent of students	Average scale score	Below Basic	At or above Basic	At or above Proficient	At Advanced
Yes						
2000 ¹						
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
No						
2000 ¹						
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

Estimate rounds to zero.

‡ Reporting standards are not met.

* Value is significantly different from the value for the same jurisdiction in 2005.

¹ Accommodations were not permitted for this assessment.

NOTE: The NAEP mathematics scale ranges from 0 to 500. The standard errors of the statistics in the table appear in parentheses. Achievement levels correspond to the following points on the NAEP mathematics scale: below Basic, 213 or lower; Basic, 214–248; Proficient, 249–281; and Advanced, 282 and above. All differences were tested for statistical significance at the 0.05 level using unrounded numbers. Detail may not sum to totals because of rounding. Performance comparisons may be affected by differences in exclusion rates for students with disabilities and English language learners in the NAEP samples and by changes in sample sizes.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 2000–2005 Mathematics Assessments.

The Nation's Report Card 2005 State Assessment

**Table
8-B**

Average mathematics scale scores and percentage of students at or above each achievement level, by students' disability status, grade 8 public schools: various years, 2000–2005

Student disability status	Percent of students	Average scale score	Below Basic	At or above Basic	At or above Proficient	At Advanced
Yes						
2000 ¹						
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
No						
2000 ¹						
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

Estimate rounds to zero.

‡ Reporting standards are not met.

* Value is significantly different from the value for the same jurisdiction in 2005.

¹ Accommodations were not permitted for this assessment.

NOTE: The NAEP mathematics scale ranges from 0 to 500. The standard errors of the statistics in the table appear in parentheses. Achievement levels correspond to the following points on the NAEP mathematics scale: below Basic, 261 or lower; Basic, 262–298; Proficient, 299–332; and Advanced, 333 and above. All differences were tested for statistical significance at the 0.05 level using unrounded numbers. Detail may not sum to totals because of rounding. Performance comparisons may be affected by differences in exclusion rates for students with disabilities and English language learners in the NAEP samples and by changes in sample sizes.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 2000–2005 Mathematics Assessments.

The Nation's Report Card 2005 State Assessment

**Table
9-A**

Average mathematics scale scores and percentage of students at or above each achievement level, by students' classification as English language learners (ELL), grade 4 public schools: various years, 2000–2005

ELL status	Percent of students	Average scale score	Below Basic	At or above Basic	At or above Proficient	At Advanced
Yes 2000 ¹						
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	#
No 2000 ¹						
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

Estimate rounds to zero.

‡ Reporting standards are not met.

* Value is significantly different from the value for the same jurisdiction in 2005.

¹ Accommodations were not permitted for this assessment.

NOTE: The NAEP mathematics scale ranges from 0 to 500. The standard errors of the statistics in the table appear in parentheses. Achievement levels correspond to the following points on the NAEP mathematics scale: below Basic, 213 or lower; Basic, 214–248; Proficient, 249–281; and Advanced, 282 and above. All differences were tested for statistical significance at the 0.05 level using unrounded numbers. Detail may not sum to totals because of rounding. Performance comparisons may be affected by differences in exclusion rates for students with disabilities and English language learners in the NAEP samples and by changes in sample sizes.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 2000–2005 Mathematics Assessments.

The Nation's Report Card 2005 State Assessment

**Table
9-B**

Average mathematics scale scores and percentage of students at or above each achievement level, by students' classification as English language learners (ELL), grade 8 public schools: various years, 2000–2005

ELL status	Percent of students	Average scale score	Below Basic	At or above Basic	At or above Proficient	At Advanced
Yes						
2000 ¹						
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
No						
2000 ¹						
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

Estimate rounds to zero.

‡ Reporting standards are not met.

* Value is significantly different from the value for the same jurisdiction in 2005.

¹ Accommodations were not permitted for this assessment.

NOTE: The NAEP mathematics scale ranges from 0 to 500. The standard errors of the statistics in the table appear in parentheses. Achievement levels correspond to the following points on the NAEP mathematics scale: below Basic, 261 or lower; Basic, 262–298; Proficient, 299–332; and Advanced, 333 and above. All differences were tested for statistical significance at the 0.05 level using unrounded numbers. Detail may not sum to totals because of rounding. Performance comparisons may be affected by differences in exclusion rates for students with disabilities and English language learners in the NAEP samples and by changes in sample sizes.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 2000–2005 Mathematics Assessments.

**Table
10****The Nation's Report Card 2005 State Assessment****Total number of students assessed, percentage of students sampled who were excluded, and average mathematics scale scores, grades 4 and 8 public schools: By state, 2005**

State/jurisdiction	Grade 4			Grade 8		
	Number assessed	Percentage excluded	Average scale score	Number assessed	Percentage excluded	Average scale score
Alabama	2,600	1	225	2,300	1	262
Alaska	2,800	2	236	2,600	2	279
Arizona	2,900	4	230	2,800	5	274
Arkansas	2,800	3	236	2,700	3	272
California	10,700	4	230	9,800	2	269
Colorado	2,800	3	239	2,400	3	281
Connecticut	2,800	2	242	2,700	3	281
Delaware	2,500	8	240	2,500	11	281
Florida	4,300	3	239	3,900	3	274
Georgia	4,300	2	234	3,900	2	272
Hawaii	2,700	3	230	2,700	3	266
Idaho	2,900	1	242	2,900	2	281
Illinois	4,100	3	233	4,000	3	278
Indiana	2,700	2	240	2,700	4	282
Iowa	3,200	2	240	2,700	3	284
Kansas	3,300	3	246	2,700	4	284
Kentucky	2,800	3	231	2,800	3	274
Louisiana	2,700	4	230	2,300	4	268
Maine	2,600	4	241	2,500	5	281
Maryland	2,700	4	238	2,600	4	278
Massachusetts	3,900	4	247	3,500	6	292
Michigan	2,500	4	238	2,400	4	277
Minnesota	2,600	2	246	2,600	2	290
Mississippi	2,800	2	227	2,700	3	262
Missouri	2,800	2	235	2,700	4	276
Montana	2,700	2	241	2,700	2	286
Nebraska	3,100	2	238	2,800	1	284
Nevada	2,900	3	230	2,700	2	270
New Hampshire	2,600	2	246	2,400	2	285
New Jersey	2,800	3	244	2,600	4	284
New Mexico	2,800	3	224	2,700	3	263
New York	5,000	4	238	4,300	4	280
North Carolina	4,100	2	241	3,900	3	282
North Dakota	2,200	3	243	2,400	4	287
Ohio	3,500	3	242	3,300	6	283
Oklahoma	2,700	4	234	2,500	4	271
Oregon	2,700	4	238	2,500	3	282
Pennsylvania	3,500	3	241	2,800	3	281
Rhode Island	2,700	3	233	2,800	3	272
South Carolina	2,800	4	238	2,600	6	281
South Dakota	2,800	2	242	2,800	2	287

See notes at end of table.

**Table
10****The Nation's Report Card 2005 State Assessment****Total number of students assessed, percentage of students sampled who were excluded, and average mathematics scale scores, grades 4 and 8 public schools: By state, 2005—
Continued**

State/jurisdiction	Grade 4			Grade 8		
	Number assessed	Percentage excluded	Average scale score	Number assessed	Percentage excluded	Average scale score
Tennessee	2,900	3	232	2,400	5	271
Texas	8,400	6	242	7,900	6	281
Utah	2,900	2	239	2,800	2	279
Vermont	2,100	3	244	2,300	4	287
Virginia	2,700	5	240	2,600	5	284
Washington	2,800	3	242	2,700	2	285
West Virginia	2,700	2	231	2,600	3	269
Wisconsin	2,600	2	241	2,500	4	285
Wyoming	1,800	2	243	2,000	2	282
Other jurisdictions						
District of Columbia	2,200	6	211	1,900	6	245
DoDEA¹	2,400	2	239	1,700	2	284

¹ Department of Defense Education Activity Schools (domestic and overseas).

NOTE: The NAEP mathematics scale ranges from 0 to 500. Sample sizes are rounded to the nearest hundred, or indicated as <50 when the value is between 1 and 49.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2005 Mathematics Assessment.

WHERE TO FIND MORE INFORMATION

The NAEP Mathematics Assessment

The latest news about the NAEP 2005 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 2005 may be ordered or downloaded at the NAEP website.

The Mathematics Framework for the 2005 National Assessment of Educational Progress, on which this assessment is based, is available on the National Assessment Governing Board website at http://www.nagb.org/pubs/m_framework_05/761607-Math%20Framework.pdf.

The North Carolina NAEP Mathematics Report and the *North Carolina NAEP Snap Shot Report* are available on the NCDPI website at <http://www.ncpublicschools.org/accountability/policies/naep/naep>.

Additional Results from the Mathematics Assessment

For more findings from the 2005 mathematics assessments, refer to the NAEP 2005 results at <http://nces.ed.gov/nationsreportcard/naepdata/>. The interactive database at this site 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

For explanations of NAEP survey procedures, see: Allen, N.L., Donoghue, J.R., and Schoeps, T.L. (2001). *The NAEP 1998 Technical Report*. (NCES 2001–509). Washington, DC: U.S. Department of Education, Office of Educational Research and Improvement, National Center for Education Statistics. Technical information may also be found on the NAEP website at <http://nces.ed.gov/nationsreportcard/mathematics/results2003/interpret-results.asp>.

Publications on the Inclusion of Students with Disabilities and Limited-English-Proficient Students

Olson, J.F., and Goldstein, A.A. (1997). *The Inclusion of Students With Disabilities and Limited-English-Proficient Students in Large-Scale Assessments: A Summary of Recent Progress* (NCES 97–482). Washington, DC: U.S. Department of Education, Office of Educational Research and Improvement, National Center for Education Statistics.

Mazzeo, J., Carlson, J.E., Voelkl, K.E., and Lutkus, A.D. (2000). *Increasing the Participation of Special-Needs Students in NAEP: A Report on 1996 Research Activities* (NCES 2000–473). Washington, DC: U.S. Department of Education, Office of Educational Research and Improvement, National Center for Education Statistics.

Lutkus, A.D., and Mazzeo, J. (2003). *Including Special-Needs Students in the NAEP 1998 Reading Assessment, Part I: Comparison of Overall Results With and Without Accommodations* (NCES 2003–467). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics.

Lutkus, A.D. (2004). *Including Special-Needs Students in the NAEP 1998 Reading Assessment, Part II: Results for Students With Disabilities and Limited-English-Proficient Students* (ETS-NAEP 04-R01). Princeton, NJ: Educational Testing Service.

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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:

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<p>The NAEP State Report Generator was developed for the NAEP 2005 reports by Phillip Leung, Anthony Lutkus, Paul Gazzillo, Mike Narcowich, Nancy Mead, Arlene Weiner, Linda Myers, Mary Daane, and Bobby Rampey.</p>
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What is the Nation's Report Card?

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

NAEP is a congressionally mandated project of the National Center for Education Statistics within the Institute of Education Sciences of the U.S. Department of Education. The Commissioner of Education Statistics is responsible, by law, for carrying out the NAEP project through competitive awards to qualified organizations.

In 1988, Congress established the National Assessment Governing Board (NAGB) to oversee and set policy for NAEP. The Board is responsible for selecting the subject areas to be assessed; setting appropriate student achievement levels; developing assessment objectives and test specifications; developing a process for the review of the assessment; designing the assessment methodology; developing guidelines for reporting and disseminating NAEP results; developing standards and procedures for interstate, regional, and national comparisons; determining the appropriateness of all assessment items and ensuring the assessment items are free from bias and are secular, neutral, and non-ideological; taking actions to improve the form, content, use, and reporting of results of the National Assessment; and planning and executing the initial public release of NAEP reports.

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