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

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

For more information about the assessment, see the NAEP website http://nces.ed.gov/nationsreportcard/ which contains
• *The Nation's Report Card, Mathematics 2009*
• The full set of national and state results in an interactive database
• Released test questions, scoring guides, and question-level performance data

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

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

Grade 4:

- In 2009, the average mathematics score for fourth-grade students in Wyoming was 242. This was higher than that of the nation's public schools (239).
- The average score for students in Wyoming in 2009 (242) was higher than that in 1992 (225) and was lower than that in 2007 (244).
- In 2009, the percentage of students in Wyoming who performed at or above *Proficient* was 40 percent. This was not significantly different from that for the nation's public schools (38 percent).
- The percentage of students in Wyoming who performed at or above *Proficient* in 2009 (40 percent) was greater than that in 1992 (19 percent) and was smaller than that in 2007 (44 percent).
- In 2009, the percentage of students in Wyoming who performed at or above *Basic* was 87 percent. This was greater than that for the nation's public schools (81 percent).
- The percentage of students in Wyoming who performed at or above *Basic* in 2009 (87 percent) was greater than that in 1992 (69 percent) and was not significantly different from that in 2007 (88 percent).

Grade 8:

- In 2009, the average mathematics score for eighth-grade students in Wyoming was 286. This was higher than that of the nation's public schools (282).
- The average score for students in Wyoming in 2009 (286) was higher than that in 1990 (272) and was not significantly different from that in 2007 (287).
- In 2009, the percentage of students in Wyoming who performed at or above *Proficient* was 35 percent. This was not significantly different from that for the nation's public schools (33 percent).
- The percentage of students in Wyoming who performed at or above *Proficient* in 2009 (35 percent) was greater than that in 1990 (19 percent) and was not significantly different from that in 2007 (36 percent).
- In 2009, the percentage of students in Wyoming who performed at or above *Basic* was 78 percent. This was greater than that for the nation's public schools (71 percent).
- The percentage of students in Wyoming who performed at or above *Basic* in 2009 (78 percent) was greater than that in 1990 (64 percent) and was not significantly different from that in 2007 (80 percent).

Introduction

What Was Assessed?

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

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

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

Content Areas and Mathematical Complexity

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

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

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

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

Assessment Design

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

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

Who Was Assessed?

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

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

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

How Is Student Mathematics Performance Reported?

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

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

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

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

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

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

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

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—although 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. These students are expected to draw logical conclusions and justify answers and solution processes by explaining why, as well as how, they were achieved. They should go beyond the obvious in their interpretations and be able to communicate their thoughts clearly and concisely.

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

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

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. (2008). *Mathematics Framework for the 2009 National Assessment of Educational Progress*. Washington, DC: Author.

Assessing Students With Disabilities and/or English Language Learners

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

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

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

Interpreting Results

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

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

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

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

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

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

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

Overall Scale Score Results

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

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

Grade 4 Scale Score Results

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

Grade 8 Scale Score Results

- In 2009, the average scale score for students in Wyoming was 286. This was higher than that of students across the nation (282).
- In Wyoming, the average scale score for students in 2009 was not significantly different from that in 2007 (287). However, the average scale score for students in public schools across the nation in 2009 was higher than that in 2007 (280).
- In Wyoming, the average scale score for students in 2009 was higher than the scores in 1990, 1992, 1996, 2000, 2003, and 2005. However, it was not significantly different from the score in 2007.

Table 1-A

The Nation's Report Card 2009 State Assessment

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

Year and jurisdiction		Average scale score	10th percentile	25th percentile	50th percentile	75th percentile	90th percentile
1992[1]	Nation (public)	219*	176*	197*	220*	241*	259*
	Wyoming	225*	191*	209*	226*	244*	258*
1996[1]	Nation (public)	222*	180*	201*	224*	244*	261*
	Wyoming	223*	186*	205*	225*	243*	259*
2000[1]	Nation (public)	226*	185*	206*	228*	249*	265*
	Wyoming	229*	193*	212*	231*	249*	264*
2000	Nation (public)	224*	183*	203*	225*	247*	264*
	Wyoming	229*	192*	211*	231*	249*	264*
2003	Nation (public)	234*	196*	215*	235*	254*	270*
	West[2]	230*	191	210*	231*	251*	267*
	Wyoming	241	210	226	242	257	271
2005	Nation (public)	237*	199*	219*	239*	257*	272*
	West[2]	233*	193	213	235*	254*	270*
	Wyoming	243	210	227	244	260	274
2007	Nation (public)	239	201	221	241	259	274
	West[2]	233	191	213	236	256	272
	Wyoming	244*	211	228	246*	261	274
2009	Nation (public)	239	201	221	241	259	275
	West[2]	235	193	214	236	256	273
	Wyoming	242	210	226	243	259	272

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

[1]Accommodations were not permitted for this assessment.

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

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

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

Table 1-B

The Nation's Report Card 2009 State Assessment

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

Year and jurisdiction		Average scale score	10th percentile	25th percentile	50th percentile	75th percentile	90th percentile
1990[1]	Nation (public)	262*	214*	237*	263*	288*	307*
	Wyoming	272*	235*	253*	272*	293*	309*
1992[1]	Nation (public)	267*	219*	242*	268*	293*	314*
	Wyoming	275*	238*	255*	276*	295*	312*
1996[1]	Nation (public)	271*	222*	247*	272*	296*	316*
	Wyoming	275*	234*	256*	276*	296*	313*
2000[1]	Nation (public)	274*	225*	250*	276*	300*	321*
	Wyoming	277*	235*	257*	279*	299*	317*
2000	Nation (public)	272*	221*	247*	274*	299*	320*
	Wyoming	276*	232*	255*	278*	297*	316*
2003	Nation (public)	276*	228*	253*	278*	301*	321*
	West[2]	272*	222*	247*	273*	299*	320*
	Wyoming	284*	243	264	285	305	322*
2005	Nation (public)	278*	230*	254*	279*	303*	323*
	West[2]	273*	224	248*	274*	299*	321*
	Wyoming	282*	243	263	283*	303*	319*
2007	Nation (public)	280*	234	257*	281*	305*	325*
	West[2]	275	226	250	276	302	323
	Wyoming	287	246	267	288	309	326
2009	Nation (public)	282	235	258	283	307	328
	West[2]	276	226	251	277	303	325
	Wyoming	286	245	266	287	308	326

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

[1]Accommodations were not permitted for this assessment.

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

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

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

Overall Achievement-Level Results

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

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

Grade 4 Achievement-Level Results

- In 2009, the percentage of Wyoming's students who performed at or above *Proficient* was 40 percent. This was not significantly different from the percentage of the nation's public school students who performed at or above *Proficient* (38 percent).
- In Wyoming, the percentage of students who performed at or above *Proficient* in 2009 was greater than the percentages in 1992, 1996, and 2000, but was smaller than the percentage in 2007, and was not significantly different from the percentages in 2003 and 2005.
- In 2009, the percentage of Wyoming's students who performed at or above *Basic* was 87 percent. This was greater than the percentage of the nation's public school students who performed at or above *Basic* (81 percent).
- In Wyoming, the percentage of students who performed at or above *Basic* in 2009 was greater than the percentages in 1992, 1996, and 2000, but was not significantly different from the percentages in 2003, 2005, and 2007.

Grade 8 Achievement-Level Results

- In 2009, the percentage of Wyoming's students who performed at or above *Proficient* was 35 percent. This was not significantly different from the percentage of the nation's public school students who performed at or above *Proficient* (33 percent).
- In Wyoming, the percentage of students who performed at or above *Proficient* in 2009 was greater than the percentages in 1990, 1992, 1996, 2000, and 2005, but was not significantly different from the percentages in 2003 and 2007.
- In 2009, the percentage of Wyoming's students who performed at or above *Basic* was 78 percent. This was greater than the percentage of the nation's public school students who performed at or above *Basic* (71 percent).
- In Wyoming, the percentage of students who performed at or above *Basic* in 2009 was greater than the percentages in 1990, 1992, 1996, and 2000, but was not significantly different from the percentages in 2003, 2005, and 2007.

Table 2-A

The Nation's Report Card 2009 State Assessment

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

Year and jurisdiction		Below *Basic*	At or above *Basic*	At or above *Proficient*	At *Advanced*
1992[1]	Nation (public)	43*	57*	17*	2*
	Wyoming	31*	69*	19*	1*
1996[1]	Nation (public)	38*	62*	20*	2*
	Wyoming	36*	64*	19*	1*
2000[1]	Nation (public)	33*	67*	25*	2*
	Wyoming	27*	73*	25*	2*
2000	Nation (public)	36*	64*	22*	2*
	Wyoming	29*	71*	25*	2*
2003	Nation (public)	24*	76*	31*	4*
	West[2]	29*	71*	27*	3*
	Wyoming	13	87	39	4
2005	Nation (public)	21*	79*	35*	5*
	West[2]	26	74	31*	4*
	Wyoming	13	87	43	5
2007	Nation (public)	19	81	39	5
	West[2]	26	74	33	5
	Wyoming	12	88	44*	5
2009	Nation (public)	19	81	38	6
	West[2]	25	75	34	5
	Wyoming	13	87	40	4

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

[1]Accommodations were not permitted for this assessment.

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

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

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

Table 2-B

The Nation's Report Card 2009 State Assessment

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

Year and jurisdiction		Below *Basic*	At or above *Basic*	At or above *Proficient*	At *Advanced*
1990[1]	Nation (public)	49*	51*	15*	2*
	Wyoming	36*	64*	19*	2*
1992[1]	Nation (public)	44*	56*	20*	3*
	Wyoming	33*	67*	21*	2*
1996[1]	Nation (public)	39*	61*	23*	4*
	Wyoming	32*	68*	22*	2*
2000[1]	Nation (public)	35*	65*	26*	5*
	Wyoming	30*	70*	25*	4*
2000	Nation (public)	38*	62*	25*	5*
	Wyoming	31*	69*	23*	3*
2003	Nation (public)	33*	67*	27*	5*
	West[2]	39*	61*	25*	5*
	Wyoming	23	77	32	4*
2005	Nation (public)	32*	68*	28*	6*
	West[2]	38*	62*	25*	5*
	Wyoming	24	76	29*	3*
2007	Nation (public)	30*	70*	31*	7*
	West[2]	36	64	27	6
	Wyoming	20	80	36	7
2009	Nation (public)	29	71	33	7
	West[2]	35	65	28	6
	Wyoming	22	78	35	7

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

[1]Accommodations were not permitted for this assessment.

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

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

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

Comparisons Between Wyoming, the Nation, and Participating States and Jurisdictions

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

Comparisons by Average Scale Scores

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

Grade 4 Scale Score Comparison Results

- Students' average score in Wyoming was higher than the score in 24 jurisdictions, not significantly different from those in 17 jurisdictions, and lower than those in 10 jurisdictions.

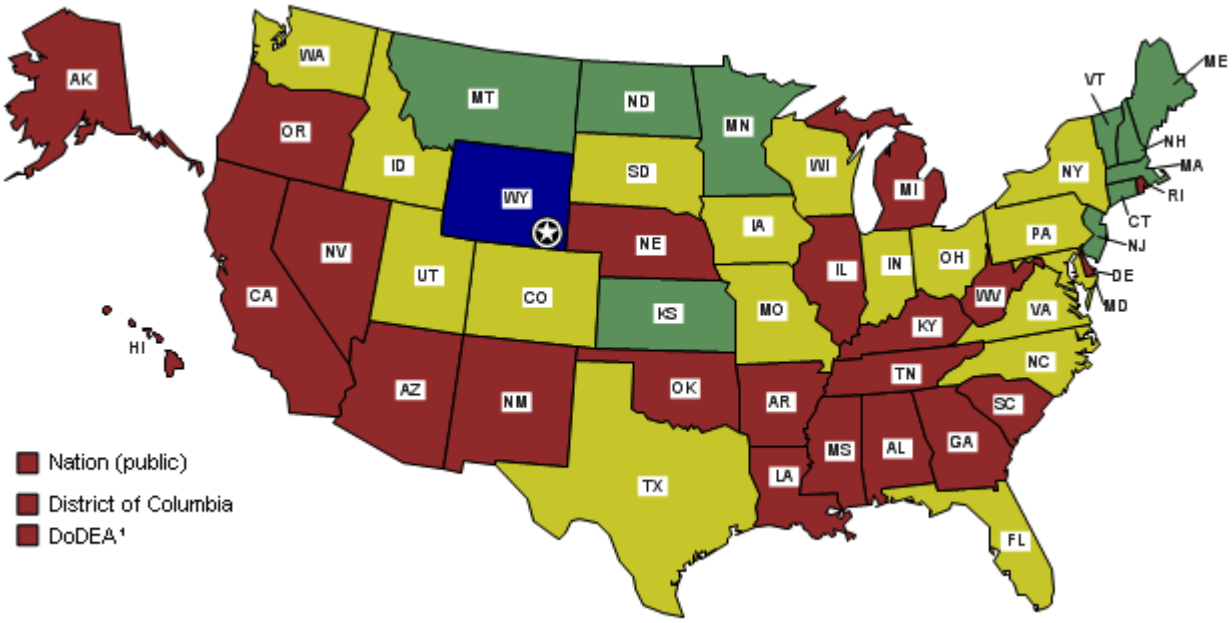
Grade 8 Scale Score Comparison Results

- Students' average score in Wyoming was higher than the score in 23 jurisdictions, not significantly different from those in 17 jurisdictions, and lower than those in 11 jurisdictions.

Figure 2-A

The Nation's Report Card 2009 State Assessment

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



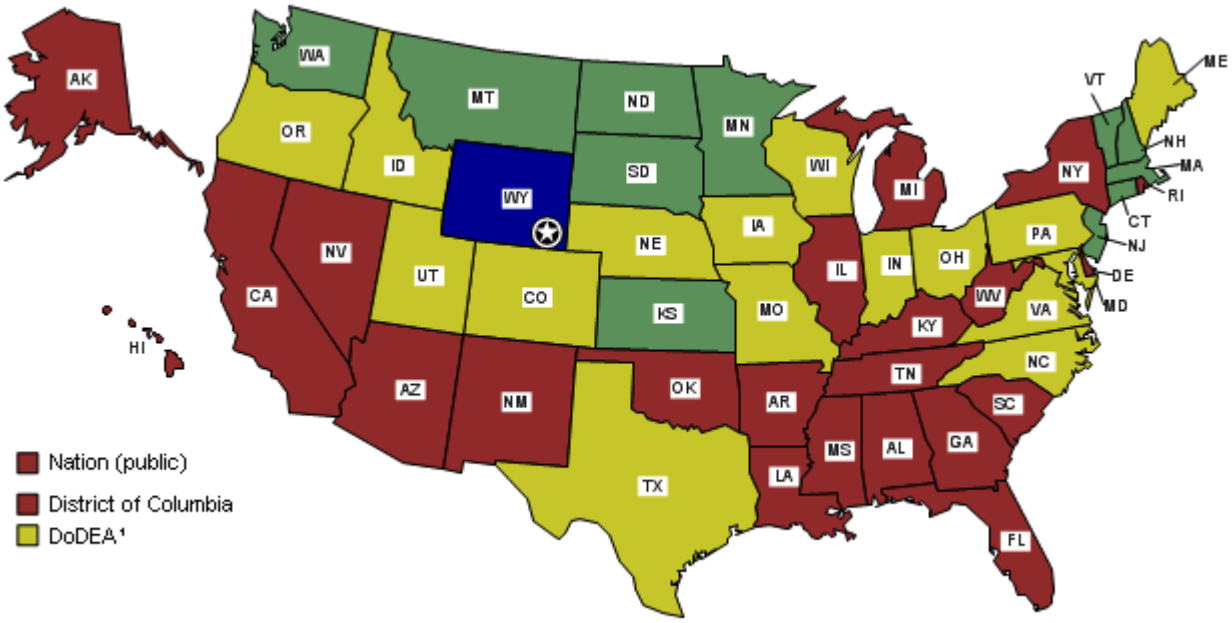
★	Focal state/jurisdiction (Wyoming)
	Higher average scale score than Wyoming (10 jurisdictions)
	Not significantly different from Wyoming (17 jurisdictions)
	Lower average scale score than Wyoming (nation and 24 jurisdictions)

[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), 2009 Mathematics Assessment.

Figure 2-B

The Nation's Report Card 2009 State Assessment

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



★	Focal state/jurisdiction (Wyoming)
	Higher average scale score than Wyoming (11 jurisdictions)
	Not significantly different from Wyoming (17 jurisdictions)
	Lower average scale score than Wyoming (nation and 23 jurisdictions)

[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), 2009 Mathematics Assessment.

Comparisons by Achievement Levels

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

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

Grade 4 Achievement-Level Comparison Results

- The percentage of students performing at or above *Proficient* level in Wyoming was higher than the percentage in 16 jurisdictions, not significantly different from those in 22 jurisdictions, and lower than those in 13 jurisdictions.
- The percentage of students performing at or above *Basic* level in Wyoming was higher than the percentage in 29 jurisdictions, not significantly different from those in 19 jurisdictions, and lower than those in 3 jurisdictions (data not shown).

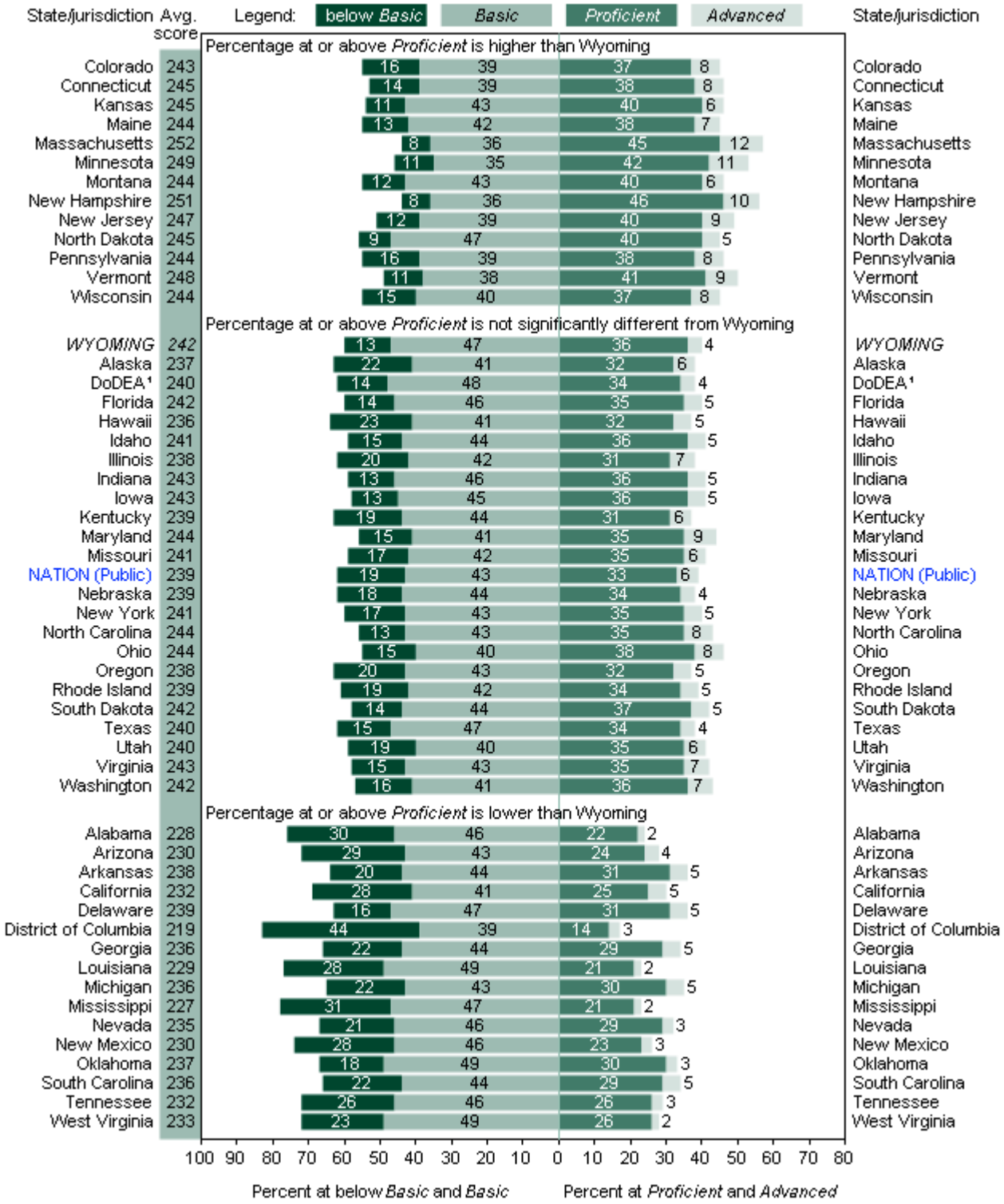
Grade 8 Achievement-Level Comparison Results

- The percentage of students performing at or above *Proficient* level in Wyoming was higher than the percentage in 20 jurisdictions, not significantly different from those in 15 jurisdictions, and lower than those in 16 jurisdictions.
- The percentage of students performing at or above *Basic* level in Wyoming was higher than the percentage in 22 jurisdictions, not significantly different from those in 24 jurisdictions, and lower than those in 5 jurisdictions (data not shown).

Figure 3-A

The Nation's Report Card 2009 State Assessment

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



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

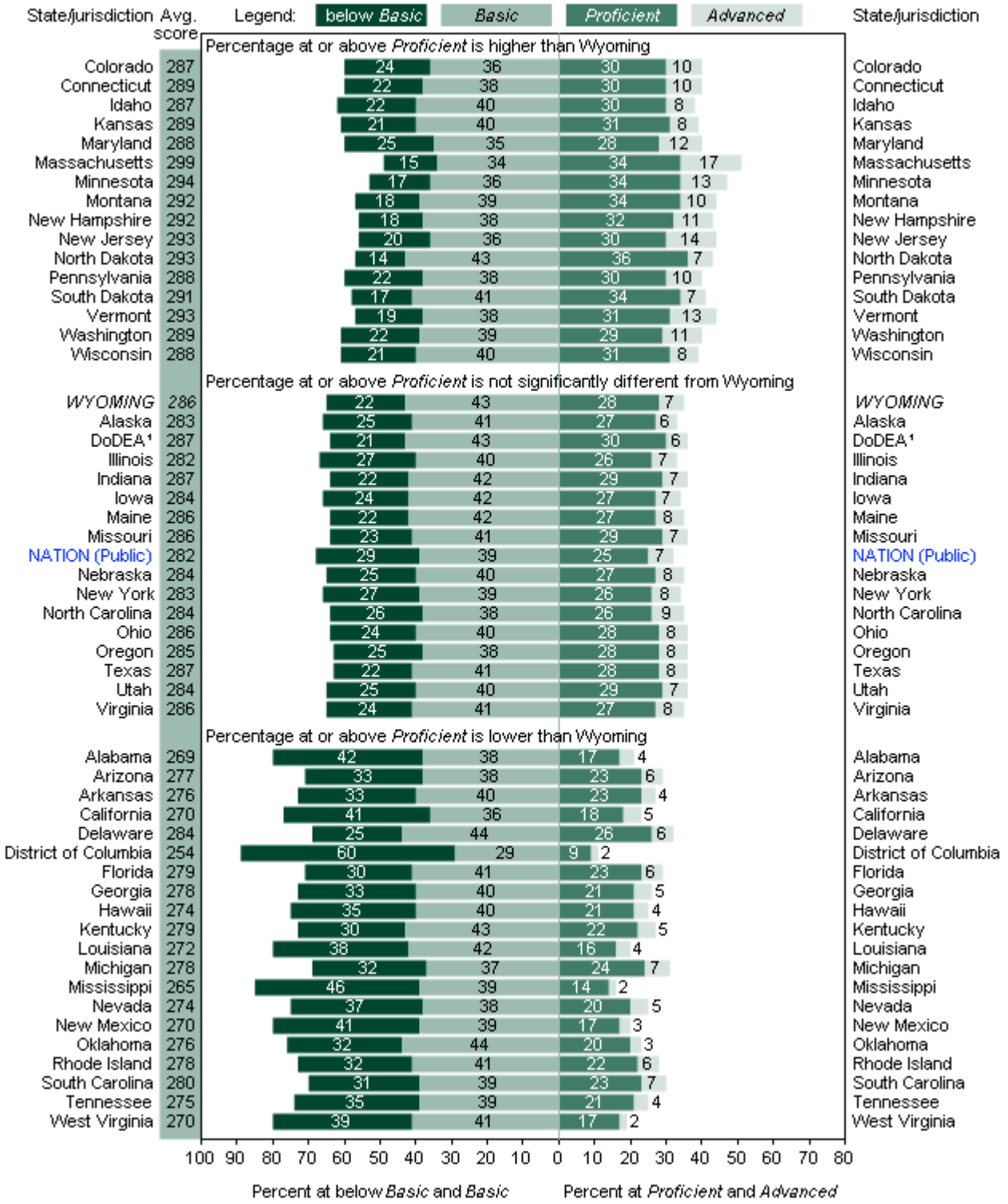
NOTE: The bars above contain percentages of students in each NAEP mathematics achievement level. Achievement levels corresponding to each population of students are aligned at the point where the *Proficient* category begins, so that they may be compared at *Proficient* and above. Detail may not sum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

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

Figure 3-B

The Nation's Report Card 2009 State Assessment

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



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

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

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

Mathematics Performance of Selected Student Groups

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

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

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

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

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

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

Race/Ethnicity

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

Grade 4 Scale Score Results by Race/Ethnicity

- In 2009, White students in Wyoming had an average scale score that was higher than the score of Hispanic students.
- In 2009, the average scale score of White students in Wyoming was higher than the scores of their corresponding peers in 1992, 1996, and 2000, but lower than the score in 2007, and not found to be significantly different from the scores of their corresponding peers in 2003 and 2005.
- In 2009, the average scale score of Hispanic students in Wyoming was higher than the scores of their corresponding peers in 1992, 1996, and 2000, but not found to be significantly different from the scores of their corresponding peers in 2003, 2005, and 2007.
- Data are not reported for Black students in 2009, because reporting standards were not met.
- In 2009, Hispanic students in Wyoming had an average score that was lower than that of White students by 13 points. In 1992, the average score for Hispanic students was lower than that of White students by 11 points.

Grade 4 Achievement-Level Results by Race/Ethnicity

- In Wyoming in 2009, the percentage of White students performing at or above *Proficient* was greater than the percentage of Hispanic students.
- In 2009, the percentages of White and Hispanic students in Wyoming performing at or above *Proficient* were greater than the percentages of their respective peers in 1992, 1996, and 2000, but not found to be significantly different from the percentages of their respective peers in 2003, 2005, and 2007.

Table 3-A

The Nation's Report Card 2009 State Assessment

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

Race/ethnicity, year and jurisdiction		Percentage of students	Average scale score	Below *Basic*	At or above *Basic*	At or above *Proficient*	At *Advanced*
White							
1992[1]	Nation (public)	72*	227*	32*	68*	22*	2*
	Wyoming	90*	227*	29*	71*	20*	1*
1996[1]	Nation (public)	71*	230*	27*	73*	25*	3*
	Wyoming	89*	225*	34*	66*	20*	1*
2000[1]	Nation (public)	67*	234*	22*	78*	32*	3*
	Wyoming	89*	231*	24*	76*	27*	2*
2000	Nation (public)	62*	233*	24*	76*	30*	3*
	Wyoming	89*	231*	25*	75*	27*	2*
2003	Nation (public)	58*	243*	13*	87*	42*	5*
	Wyoming	86*	243	11	89	42	4
2005	Nation (public)	57*	246*	11*	89*	47*	7*
	Wyoming	85	245	11	89	45	5
2007	Nation (public)	55*	248	9	91	51	8
	Wyoming	84	246*	9	91	48	5
2009	Nation (public)	54	248	10	90	50	8
	Wyoming	84	244	10	90	44	5
Black							
1992[1]	Nation (public)	18*	192*	78*	22*	2*	#
	Wyoming	1	‡	‡	‡	‡	‡
1996[1]	Nation (public)	17	199*	70*	30*	4*	#
	Wyoming	2	‡	‡	‡	‡	‡
2000[1]	Nation (public)	17	204*	64*	36*	5*	#
	Wyoming	1	‡	‡	‡	‡	‡
2000	Nation (public)	17	203*	65*	35*	4*	#
	Wyoming	1	‡	‡	‡	‡	‡
2003	Nation (public)	17*	216*	46*	54*	10*	#*
	Wyoming	1	‡	‡	‡	‡	‡
2005	Nation (public)	17*	220*	40*	60*	13*	1
	Wyoming	1	‡	‡	‡	‡	‡
2007	Nation (public)	17	222	37	63	15	1
	Wyoming	2	‡	‡	‡	‡	‡
2009	Nation (public)	16	222	37	63	15	1
	Wyoming	2	‡	‡	‡	‡	‡

See notes at end of table.

Table 3-A

The Nation's Report Card 2009 State Assessment

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

Race/ethnicity, year and jurisdiction		Percentage of students	Average scale score	Below *Basic*	At or above *Basic*	At or above *Proficient*	At *Advanced*
Hispanic							
1992[1]	Nation (public)	7*	201*	68*	32*	5*	#
	Wyoming	6*	216*	45*	55*	10*	#
1996[1]	Nation (public)	9*	204*	63*	37*	7*	#
	Wyoming	6*	207*	59*	41*	5*	#
2000[1]	Nation (public)	11*	209*	55*	45*	8*	#
	Wyoming	8*	212*	49*	51*	9*	#
2000	Nation (public)	16*	207*	59*	41*	7*	#*
	Wyoming	7*	214*	50*	50*	9*	1
2003	Nation (public)	19*	221*	38*	62*	15*	1*
	Wyoming	8*	229	24	76	20	1
2005	Nation (public)	20*	225*	33*	67*	19*	1
	Wyoming	9	234	22	78	31	3
2007	Nation (public)	21	227	31	69	22	1
	Wyoming	10	229	27	73	23	1
2009	Nation (public)	22	227	30	70	21	1
	Wyoming	11	231	23	77	22	#
Asian/Pacific Islander							
1992[1]	Nation (public)	3*	231*	26*	74*	27*	4*
	Wyoming	1*	‡	‡	‡	‡	‡
1996[1]	Nation (public)	3*	225*	35*	65*	20*	5*
	Wyoming	1	‡	‡	‡	‡	‡
2000[1]	Nation (public)	‡	‡	‡	‡	‡	‡
	Wyoming	1	‡	‡	‡	‡	‡
2000	Nation (public)	‡	‡	‡	‡	‡	‡
	Wyoming	1*	‡	‡	‡	‡	‡
2003	Nation (public)	4*	246*	13*	87*	48*	10*
	Wyoming	1	‡	‡	‡	‡	‡
2005	Nation (public)	4*	251*	11*	89*	54*	14
	Wyoming	1	‡	‡	‡	‡	‡
2007	Nation (public)	5	254	9	91	59	16
	Wyoming	1	‡	‡	‡	‡	‡
2009	Nation (public)	5	255	9	91	61	18
	Wyoming	1	‡	‡	‡	‡	‡

See notes at end of table.

Table 3-A

The Nation's Report Card 2009 State Assessment

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

Race/ethnicity, year and jurisdiction		Percentage of students	Average scale score	Below *Basic*	At or above *Basic*	At or above *Proficient*	At *Advanced*
American Indian/Alaska Native							
1992[1]	Nation (public)	1	‡	‡	‡	‡	‡
	Wyoming	2	205	63	37	3	#
1996[1]	Nation (public)	1*	‡	‡	‡	‡	‡
	Wyoming	2	‡	‡	‡	‡	‡
2000[1]	Nation (public)	1	‡	‡	‡	‡	‡
	Wyoming	1*	‡	‡	‡	‡	‡
2000	Nation (public)	1	207*	61*	39*	8*	#
	Wyoming	3	‡	‡	‡	‡	‡
2003	Nation (public)	1	224	35	65	18*	1
	Wyoming	3	221	37	63	16	2
2005	Nation (public)	1	227	31	69	22	2
	Wyoming	3	‡	‡	‡	‡	‡
2007	Nation (public)	1	229	28	72	26	3
	Wyoming	3	227	26	74	21	#
2009	Nation (public)	1	227	32	68	23	2
	Wyoming	3	‡	‡	‡	‡	‡
Unclassified[2]							
1992[1]	Nation (public)	#*	‡	‡	‡	‡	‡
	Wyoming	#	‡	‡	‡	‡	‡
1996[1]	Nation (public)	1*	‡	‡	‡	‡	‡
	Wyoming	#	‡	‡	‡	‡	‡
2000[1]	Nation (public)	1*	‡	‡	‡	‡	‡
	Wyoming	#	‡	‡	‡	‡	‡
2000	Nation (public)	1*	‡	‡	‡	‡	‡
	Wyoming	#	‡	‡	‡	‡	‡
2003	Nation (public)	1*	236*	20*	80*	32*	3*
	Wyoming	#	‡	‡	‡	‡	‡
2005	Nation (public)	1*	240	18	82	38	5
	Wyoming	#	‡	‡	‡	‡	‡
2007	Nation (public)	1*	240	16	84	39	6
	Wyoming	#	‡	‡	‡	‡	‡
2009	Nation (public)	2	242	14	86	41	6
	Wyoming	#	‡	‡	‡	‡	‡

#Rounds to zero.

‡Reporting standards not met.

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

[1]Accommodations were not permitted for this assessment.

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

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

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

Grade 8 Scale Score Results by Race/Ethnicity

- In 2009, White students in Wyoming had an average scale score that was higher than the score of Hispanic students.
- In 2009, the average scale score of White students in Wyoming was higher than the scores of their corresponding peers in 1990, 1992, 1996, 2000, 2003, and 2005, but not found to be significantly different from the score in 2007.
- In 2009, the average scale score of Hispanic students in Wyoming was higher than the scores of their corresponding peers in 1990, 1996, and 2000, but not found to be significantly different from the scores of their corresponding peers in 1992, 2003, 2005, and 2007.
- Data are not reported for Black students in 2009, because reporting standards were not met.
- In 2009, Hispanic students in Wyoming had an average score that was lower than that of White students by 20 points. In 1990, the average score for Hispanic students was lower than that of White students by 16 points.

Grade 8 Achievement-Level Results by Race/Ethnicity

- In Wyoming in 2009, the percentage of White students performing at or above *Proficient* was greater than the percentage of Hispanic students.
- In 2009, the percentage of White students in Wyoming performing at or above *Proficient* was greater than the percentages of their respective peers in 1990, 1992, 1996, 2000, and 2005, but not found to be significantly different from the percentages of their respective peers in 2003 and 2007.
- In 2009, the percentage of Hispanic students in Wyoming performing at or above *Proficient* was greater than the percentage in 1996, but not found to be significantly different from the percentages of their respective peers in 1990, 1992, 2000, 2003, 2005, and 2007.

Table 3-B

The Nation's Report Card 2009 State Assessment

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

Race/ethnicity, year and jurisdiction		Percentage of students	Average scale score	Below *Basic*	At or above *Basic*	At or above *Proficient*	At *Advanced*
White							
1990[1]	Nation (public)	73*	269*	41*	59*	18*	3*
	Wyoming	86	274*	34*	66*	20*	2*
1992[1]	Nation (public)	72*	276*	34*	66*	25*	3*
	Wyoming	91*	277*	30*	70*	22*	2*
1996[1]	Nation (public)	70*	280*	28*	72*	29*	5*
	Wyoming	90*	277*	29*	71*	23*	3*
2000[1]	Nation (public)	69*	284*	24*	76*	33*	6*
	Wyoming	91*	279*	28*	72*	26*	4*
2000	Nation (public)	63*	283*	25*	75*	33*	6*
	Wyoming	90*	278*	28*	72*	25*	4*
2003	Nation (public)	62*	287*	21*	79*	36*	7*
	Wyoming	89*	286*	20	80	35	5*
2005	Nation (public)	60*	288*	21*	79*	37*	7*
	Wyoming	87*	284*	21	79	32*	4*
2007	Nation (public)	58*	290*	19*	81*	41*	9*
	Wyoming	86	290	17	83	39	7
2009	Nation (public)	56	292	18	82	43	10
	Wyoming	84	289	18	82	38	8
Black							
1990[1]	Nation (public)	16	236*	79*	21*	5*	#
	Wyoming	1	‡	‡	‡	‡	‡
1992[1]	Nation (public)	17*	236*	81*	19*	2*	#
	Wyoming	1*	‡	‡	‡	‡	‡
1996[1]	Nation (public)	16	241*	74*	26*	4*	#
	Wyoming	1*	‡	‡	‡	‡	‡
2000[1]	Nation (public)	14*	245*	70*	30*	5*	#*
	Wyoming	1	‡	‡	‡	‡	‡
2000	Nation (public)	17	243*	70*	30*	5*	#*
	Wyoming	1	‡	‡	‡	‡	‡
2003	Nation (public)	17*	252*	61*	39*	7*	#*
	Wyoming	1	‡	‡	‡	‡	‡
2005	Nation (public)	17*	254*	59*	41*	8*	1*
	Wyoming	1	‡	‡	‡	‡	‡
2007	Nation (public)	17*	259	53*	47*	11	1
	Wyoming	1	‡	‡	‡	‡	‡
2009	Nation (public)	16	260	51	49	12	1
	Wyoming	1	‡	‡	‡	‡	‡

See notes at end of table.

Table 3-B

The Nation's Report Card 2009 State Assessment

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

Race/ethnicity, year and jurisdiction		Percentage of students	Average scale score	Below *Basic*	At or above *Basic*	At or above *Proficient*	At *Advanced*
Hispanic							
1990[1]	Nation (public)	7*	245*	67*	33*	7*	1*
	Wyoming	6*	257*	58*	42*	8	#
1992[1]	Nation (public)	8*	247*	67*	33*	6*	#*
	Wyoming	5*	262	51	49	11	1
1996[1]	Nation (public)	9*	250*	62*	38*	8*	1
	Wyoming	5*	256*	54	46	7*	#
2000[1]	Nation (public)	11*	252*	60*	40*	8*	#*
	Wyoming	6*	254*	58*	42*	8	#
2000	Nation (public)	14*	252*	60*	40*	8*	#*
	Wyoming	5*	257*	54	46	8	1
2003	Nation (public)	15*	258*	53*	47*	11*	1
	Wyoming	7*	265	46	54	13	1
2005	Nation (public)	17*	261*	50*	50*	13*	1*
	Wyoming	7*	265	43	57	11	#
2007	Nation (public)	19*	264	46	54	15	2
	Wyoming	8	274	36	64	22	3
2009	Nation (public)	21	266	44	56	17	2
	Wyoming	10	269	40	60	15	3
Asian/Pacific Islander							
1990[1]	Nation (public)	2*	275*	36*	64*	30*	6*
	Wyoming	1	‡	‡	‡	‡	‡
1992[1]	Nation (public)	2*	290	25	75	43	14
	Wyoming	#	‡	‡	‡	‡	‡
1996[1]	Nation (public)	‡	‡	‡	‡	‡	‡
	Wyoming	1	‡	‡	‡	‡	‡
2000[1]	Nation (public)	4*	286*	27*	73*	40*	12*
	Wyoming	1	‡	‡	‡	‡	‡
2000	Nation (public)	4*	287*	27*	73*	40*	12
	Wyoming	1	‡	‡	‡	‡	‡
2003	Nation (public)	4*	289*	23*	77*	42*	12*
	Wyoming	1	‡	‡	‡	‡	‡
2005	Nation (public)	5*	294*	19*	81*	46*	16*
	Wyoming	1	‡	‡	‡	‡	‡
2007	Nation (public)	5	296	18	82	49	17
	Wyoming	1	‡	‡	‡	‡	‡
2009	Nation (public)	5	300	16	84	53	20
	Wyoming	1	‡	‡	‡	‡	‡

See notes at end of table.

Table 3-B

The Nation's Report Card 2009 State Assessment

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

Race/ethnicity, year and jurisdiction		Percentage of students	Average scale score	Below *Basic*	At or above *Basic*	At or above *Proficient*	At *Advanced*
American Indian/Alaska Native							
1990[1]	Nation (public)	1	‡	‡	‡	‡	‡
	Wyoming	2*	256	57	43	7	#
1992[1]	Nation (public)	1	‡	‡	‡	‡	‡
	Wyoming	3	‡	‡	‡	‡	‡
1996[1]	Nation (public)	1	‡	‡	‡	‡	‡
	Wyoming	3	246	70	30	5	#
2000[1]	Nation (public)	1	264	47	53	14	2
	Wyoming	2	‡	‡	‡	‡	‡
2000	Nation (public)	1	263	47	53	13	3
	Wyoming	3	245	73	27	3	1
2003	Nation (public)	1	265	46	54	16*	2
	Wyoming	3	261	52	48	14	1
2005	Nation (public)	1	266	45	55	14*	2*
	Wyoming	3	262	46	54	8	#
2007	Nation (public)	1*	265	44	56	17	2
	Wyoming	3	‡	‡	‡	‡	‡
2009	Nation (public)	1	267	43	57	20	3
	Wyoming	3	‡	‡	‡	‡	‡
Unclassified[2]							
1990[1]	Nation (public)	#*	‡	‡	‡	‡	‡
	Wyoming	3	275	28	72	19	#
1992[1]	Nation (public)	1	258*	55*	45*	8*	#
	Wyoming	#	‡	‡	‡	‡	‡
1996[1]	Nation (public)	#*	‡	‡	‡	‡	‡
	Wyoming	#	‡	‡	‡	‡	‡
2000[1]	Nation (public)	#*	‡	‡	‡	‡	‡
	Wyoming	#	‡	‡	‡	‡	‡
2000	Nation (public)	1*	‡	‡	‡	‡	‡
	Wyoming	#	‡	‡	‡	‡	‡
2003	Nation (public)	1*	276*	30	70	24*	3
	Wyoming	#	‡	‡	‡	‡	‡
2005	Nation (public)	1*	278*	31	69	29	7
	Wyoming	#	‡	‡	‡	‡	‡
2007	Nation (public)	1*	282	28	72	32	8
	Wyoming	#	‡	‡	‡	‡	‡
2009	Nation (public)	1	283	28	72	33	7
	Wyoming	#	‡	‡	‡	‡	‡

#Rounds to zero.

‡Reporting standards not met.

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

[1]Accommodations were not permitted for this assessment.

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

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

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

Gender

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

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

Grade 4 Scale Score Results by Gender

- In 2009, male students in Wyoming had an average score that was not found to be significantly different from that of female students. In 1992, male students in Wyoming had an average score that was higher than that of female students.
- In 2009, male students in Wyoming had an average scale score in mathematics (243) that was higher than that of male students in public schools across the nation (240). Similarly, female students in Wyoming had an average scale score (241) that was higher than that of female students across the nation (238).
- In Wyoming, the average scale score of male students in 2009 was higher than the scores of male students in 1992, 1996, and 2000, but not found to be significantly different from the scores of male students in 2003, 2005, and 2007.
- In Wyoming, the average scale score of female students in 2009 was higher than the scores of female students in 1992, 1996, and 2000, but not found to be significantly different from the scores of female students in 2003, 2005, and 2007.

Grade 4 Achievement-Level Results by Gender

- The percentage of male students in Wyoming's public schools who were at or above *Proficient* in 2009 (43 percent) was not significantly different from that of male students in the nation (40 percent).
- The percentage of female students in Wyoming's public schools who were at or above *Proficient* in 2009 (38 percent) was not significantly different from that of female students in the nation (37 percent).
- In Wyoming, the percentage of male students performing at or above *Proficient* in 2009 was greater than the corresponding percentages of students in 1992, 1996, and 2000, but not significantly different from the corresponding percentages of students in 2003, 2005, and 2007.
- In Wyoming, the percentage of female students performing at or above *Proficient* in 2009 was greater than the corresponding percentages of students in 1992, 1996, and 2000, but not significantly different from the corresponding percentages of students in 2003, 2005, and 2007.

Table 4-A

The Nation's Report Card 2009 State Assessment

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

Gender, year and jurisdiction		Percentage of students	Average scale score	Below *Basic*	At or above *Basic*	At or above *Proficient*	At *Advanced*
Male							
1992[1]	Nation (public)	50	220*	41*	59*	19*	2*
	Wyoming	50	227*	30*	70*	21*	1*
1996[1]	Nation (public)	51	224*	37*	63*	22*	3*
	Wyoming	50	224*	36*	64*	20*	2*
2000[1]	Nation (public)	51	227*	32*	68*	27*	3*
	Wyoming	53	230*	25*	75*	27*	2
2000	Nation (public)	51	225*	35*	65*	25*	3*
	Wyoming	53	230*	27*	73*	27*	3
2003	Nation (public)	51	235*	23*	77*	34*	5*
	Wyoming	52	242	12	88	41	4
2005	Nation (public)	51	238*	20*	80*	37*	6*
	Wyoming	51	244	12	88	45	6
2007	Nation (public)	51*	240	18	82	41	7
	Wyoming	51	244	12	88	46	5
2009	Nation (public)	51	240	19	81	40	7
	Wyoming	52	243	12	88	43	4
Female							
1992[1]	Nation (public)	50	218*	44*	56*	16*	1*
	Wyoming	50	224*	33*	67*	17*	1*
1996[1]	Nation (public)	49	221*	39*	61*	17*	1*
	Wyoming	50	223*	36*	64*	18*	1*
2000[1]	Nation (public)	49	225*	34*	66*	22*	2*
	Wyoming	47	228*	29*	71*	23*	2*
2000	Nation (public)	49	223*	38*	62*	20*	1*
	Wyoming	47	227*	30*	70*	22*	1*
2003	Nation (public)	49	233*	25*	75*	29*	3*
	Wyoming	48	240	14	86	36	2
2005	Nation (public)	49	236*	21*	79*	33*	4*
	Wyoming	49	242	13	87	40	4
2007	Nation (public)	49*	238	19	81	36	4
	Wyoming	49	243	11	89	43	4
2009	Nation (public)	49	238	19	81	37	5
	Wyoming	48	241	14	86	38	4

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

[1]Accommodations were not permitted for this assessment.

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

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

Grade 8 Scale Score Results by Gender

- In 2009, male students in Wyoming had an average score that was higher than that of female students. In 1990, male students in Wyoming had an average score that was higher than that of female students.
- In 2009, male students in Wyoming had an average scale score in mathematics (288) that was higher than that of male students in public schools across the nation (283). Similarly, female students in Wyoming had an average scale score (284) that was higher than that of female students across the nation (281).
- In Wyoming, the average scale score of male students in 2009 was higher than the scores of male students in 1990, 1992, 1996, 2000, 2003, and 2005, but not found to be significantly different from the score of male students in 2007.
- In Wyoming, the average scale score of female students in 2009 was higher than the scores of female students in 1990, 1992, 1996, and 2000, but not found to be significantly different from the scores of female students in 2003, 2005, and 2007.

Grade 8 Achievement-Level Results by Gender

- The percentage of male students in Wyoming's public schools who were at or above *Proficient* in 2009 (38 percent) was not significantly different from that of male students in the nation (34 percent).
- The percentage of female students in Wyoming's public schools who were at or above *Proficient* in 2009 (31 percent) was not significantly different from that of female students in the nation (31 percent).
- In Wyoming, the percentage of male students performing at or above *Proficient* in 2009 was greater than the corresponding percentages of students in 1990, 1992, 1996, 2000, and 2005, but not significantly different from the corresponding percentages of students in 2003 and 2007.
- In Wyoming, the percentage of female students performing at or above *Proficient* in 2009 was greater than the corresponding percentages of students in 1990, 1992, 1996, and 2000, but not significantly different from the corresponding percentages of students in 2003, 2005, and 2007.

Table 4-B

The Nation's Report Card 2009 State Assessment

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

Gender, year and jurisdiction		Percentage of students	Average scale score	Below *Basic*	At or above *Basic*	At or above *Proficient*	At *Advanced*
Male							
1990[1]	Nation (public)	51	262*	49*	51*	17*	2*
	Wyoming	51	274*	34*	66*	21*	2*
1992[1]	Nation (public)	52	266*	45*	55*	20*	3*
	Wyoming	50	275*	34*	66*	21*	2*
1996[1]	Nation (public)	52*	270*	40*	60*	24*	4*
	Wyoming	51	276*	31*	69*	24*	3*
2000[1]	Nation (public)	50	276*	34*	66*	29*	6*
	Wyoming	50	277*	30*	70*	26*	4*
2000	Nation (public)	50	273*	38*	62*	26*	5*
	Wyoming	51	276*	32*	68*	24*	4*
2003	Nation (public)	50	277*	33*	67*	29*	6*
	Wyoming	53	284*	24	76	34	5*
2005	Nation (public)	51	278*	32*	68*	30*	6*
	Wyoming	52	283*	24	76	31*	4*
2007	Nation (public)	51	281*	29*	71*	33*	8*
	Wyoming	52	288	20	80	37	7
2009	Nation (public)	51	283	28	72	34	8
	Wyoming	51	288	20	80	38	8
Female							
1990[1]	Nation (public)	49	261*	49*	51*	14*	2*
	Wyoming	49	270*	39*	61*	16*	1*
1992[1]	Nation (public)	48	267*	44*	56*	20*	3*
	Wyoming	50	275*	32*	68*	21*	2*
1996[1]	Nation (public)	48*	271*	39*	61*	21*	3*
	Wyoming	49	274*	32*	68*	20*	2*
2000[1]	Nation (public)	50	273*	36*	64*	24*	4*
	Wyoming	50	276*	31*	69*	24*	3*
2000	Nation (public)	50	271*	38*	62*	23*	4*
	Wyoming	49	276*	31*	69*	23*	3*
2003	Nation (public)	50	275*	34*	66*	26*	4*
	Wyoming	47	283	22	78	30	3*
2005	Nation (public)	49	277*	33*	67*	27*	5*
	Wyoming	48	281	23	77	27	3*
2007	Nation (public)	49	279*	30	70	29*	6*
	Wyoming	48	286	20	80	34	6
2009	Nation (public)	49	281	29	71	31	7
	Wyoming	49	284	24	76	31	6

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

[1]Accommodations were not permitted for this assessment.

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

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

Student Eligibility for the National School Lunch Program

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

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

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

- In 2009, students in Wyoming eligible for free/reduced-price lunch had an average mathematics scale score of 234. This was lower than that of students in Wyoming not eligible for this program (246).
- In 2009, students in Wyoming 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 12 points. In 1996, the average score for students in Wyoming who were eligible for free/reduced-price school lunch was lower than the score of those not eligible by 15 points.
- Students in Wyoming eligible for free/reduced-price lunch had an average scale score (234) in 2009 that was higher than that of students in the nation who were eligible (228).
- In Wyoming, students eligible for free/reduced-price lunch had an average mathematics scale score in 2009 that was higher than that of eligible students in 1996 and 2000, but not found to be significantly different from that of eligible students in 2003, 2005, and 2007.

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

- In Wyoming, 29 percent of students who were eligible for free/reduced-price lunch and 47 percent of those who were not eligible for this program performed at or above *Proficient* in 2009. These percentages were found to be significantly different from one another.
- For students in Wyoming in 2009 who were eligible for free/reduced-price lunch, the percentage at or above *Proficient* (29 percent) was greater than the corresponding percentage for their counterparts around the nation (22 percent).
- In Wyoming, the percentage of students eligible for free/reduced-price lunch who performed at or above *Proficient* for 2009 was greater than the corresponding percentages for 1996 and 2000, but not found to be significantly different from the corresponding percentages for 2003, 2005, and 2007.

Table 5-A

The Nation's Report Card 2009 State Assessment

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

Eligibility status, year and jurisdiction		Percentage of students	Average scale score	Below *Basic*	At or above *Basic*	At or above *Proficient*	At *Advanced*
Eligible							
1996[1]	Nation (public)	34*	207*	59*	41*	8*	#*
	Wyoming	33	213*	50*	50*	10*	#
2000[1]	Nation (public)	35*	210*	54*	46*	9*	#*
	Wyoming	32	220*	38*	62*	16*	1
2000	Nation (public)	40*	208*	57*	43*	7*	#*
	Wyoming	33	219*	41*	59*	15*	1
2003	Nation (public)	44*	222*	38*	62*	15*	1*
	Wyoming	35	233	20	80	25	2
2005	Nation (public)	46*	225*	33*	67*	19*	1
	Wyoming	36	236	19	81	32	3
2007	Nation (public)	46*	227	30	70	22	1
	Wyoming	36	236	18	82	32	2
2009	Nation (public)	48	228	29	71	22	1
	Wyoming	35	234	21	79	29	2
Not eligible							
1996[1]	Nation (public)	52	231*	27*	73*	25*	3*
	Wyoming	64	228*	29*	71*	23*	2*
2000[1]	Nation (public)	52	236*	21*	79*	33*	4*
	Wyoming	60	234*	21*	79*	30*	2*
2000	Nation (public)	49	235*	23*	77*	32*	4*
	Wyoming	59	234*	22*	78*	30*	3*
2003	Nation (public)	52	244*	12*	88*	45*	6*
	Wyoming	63	246	8	92	47	5
2005	Nation (public)	52*	248*	10*	90*	50*	8*
	Wyoming	60*	247	9	91	49	7
2007	Nation (public)	53*	249	9	91	53	9*
	Wyoming	64	248	8	92	51	6
2009	Nation (public)	51	250	9	91	54	10
	Wyoming	65	246	8	92	47	5

See notes at end of table.

Table 5-A

The Nation's Report Card 2009 State Assessment

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

Eligibility status, year and jurisdiction		Percentage of students	Average scale score	Below *Basic*	At or above *Basic*	At or above *Proficient*	At *Advanced*
Information not available							
1996[1]	Nation (public)	13*	230	28	72	28	3
	Wyoming	3	224	35	65	22	2
2000[1]	Nation (public)	13*	235	23	77	35	3
	Wyoming	8*	227	29	71	23	1
2000	Nation (public)	11*	236	22	78	35	4
	Wyoming	8*	227	30	70	21	2
2003	Nation (public)	4*	235	23	77	34	4
	Wyoming	2*	227	31	69	22	3
2005	Nation (public)	2*	237	21	79	36	5
	Wyoming	3*	244	18	82	51	5
2007	Nation (public)	1	243	17	83	44	8
	Wyoming	#	‡	‡	‡	‡	‡
2009	Nation (public)	1	240	22	78	42	7
	Wyoming	#	‡	‡	‡	‡	‡

#Rounds to zero.

‡Reporting standards not met.

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

[1]Accommodations were not permitted for this assessment.

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

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

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

- In 2009, students in Wyoming eligible for free/reduced-price lunch had an average mathematics scale score of 274. This was lower than that of students in Wyoming not eligible for this program (291).
- In 2009, students in Wyoming 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 17 points. In 1996, the average score for students in Wyoming who were eligible for free/reduced-price school lunch was lower than the score of those not eligible by 15 points.
- Students in Wyoming eligible for free/reduced-price lunch had an average scale score (274) in 2009 that was higher than that of students in the nation who were eligible (266).
- In Wyoming, students eligible for free/reduced-price lunch had an average mathematics scale score in 2009 that was higher than that of eligible students in 1996 and 2000, but not found to be significantly different from that of eligible students in 2003, 2005, and 2007.

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

- In Wyoming, 20 percent of students who were eligible for free/reduced-price lunch and 41 percent of those who were not eligible for this program performed at or above *Proficient* in 2009. These percentages were found to be significantly different from one another.
- For students in Wyoming in 2009 who were eligible for free/reduced-price lunch, the percentage at or above *Proficient* (20 percent) was not significantly different from the corresponding percentage for their counterparts around the nation (17 percent).
- In Wyoming, the percentage of students eligible for free/reduced-price lunch who performed at or above *Proficient* for 2009 was greater than the corresponding percentages for 1996 and 2000, but not found to be significantly different from the corresponding percentages for 2003, 2005, and 2007.

Table 5-B

The Nation's Report Card 2009 State Assessment

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

Eligibility status, year and jurisdiction		Percentage of students	Average scale score	Below *Basic*	At or above *Basic*	At or above *Proficient*	At *Advanced*
Eligible							
1996[1]	Nation (public)	30*	252*	61*	39*	8*	1*
	Wyoming	21*	262*	46*	54*	11*	1
2000[1]	Nation (public)	28*	255*	56*	44*	10*	1*
	Wyoming	24*	265*	44*	56*	15*	1
2000	Nation (public)	31*	253*	59*	41*	10*	1*
	Wyoming	26*	262*	46*	54*	14*	2
2003	Nation (public)	36*	258*	53*	47*	11*	1*
	Wyoming	27	271	38	62	18	1
2005	Nation (public)	39*	261*	49*	51*	13*	1*
	Wyoming	30	272	35	65	17	1
2007	Nation (public)	41*	265*	45*	55*	15*	2
	Wyoming	28	275	33	67	23	3
2009	Nation (public)	43	266	43	57	17	2
	Wyoming	29	274	33	67	20	2
Not eligible							
1996[1]	Nation (public)	56	279*	29*	71*	29*	5*
	Wyoming	73*	277*	28*	72*	24*	3*
2000[1]	Nation (public)	55	285*	24*	76*	35*	7*
	Wyoming	72	281*	25*	75*	28*	4*
2000	Nation (public)	54	283*	26*	74*	34*	7*
	Wyoming	70	281*	25*	75*	27*	4*
2003	Nation (public)	58*	287*	22*	78*	37*	7*
	Wyoming	72	288*	18	82	37	5*
2005	Nation (public)	59*	288*	21*	79*	39*	8*
	Wyoming	70	287*	19	81	34*	4*
2007	Nation (public)	58*	291*	19*	81*	42*	10*
	Wyoming	72	291	15	85	41	8
2009	Nation (public)	56	293	17	83	45	12
	Wyoming	71	291	17	83	41	9

See notes at end of table.

Table 5-B

The Nation's Report Card 2009 State Assessment

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

Eligibility status, year and jurisdiction		Percentage of students	Average scale score	Below *Basic*	At or above *Basic*	At or above *Proficient*	At *Advanced*
Information not available							
1996[1]	Nation (public)	14*	278	31	69	29	5
	Wyoming	6	285	22	78	34	5
2000[1]	Nation (public)	16*	273*	37*	63*	26*	4*
	Wyoming	4	274	33	67	21	4
2000	Nation (public)	15*	271*	38*	62*	24*	4*
	Wyoming	5	269	40	60	19	4
2003	Nation (public)	6*	278	32	68	29	6
	Wyoming	1	‡	‡	‡	‡	‡
2005	Nation (public)	3*	277*	34	66	28	6
	Wyoming	#	‡	‡	‡	‡	‡
2007	Nation (public)	1	274*	36	64	28	6
	Wyoming	#	‡	‡	‡	‡	‡
2009	Nation (public)	1	284	28	72	35	10
	Wyoming	#	‡	‡	‡	‡	‡

#Rounds to zero.

‡Reporting standards not met.

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

[1]Accommodations were not permitted for this assessment.

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

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

Type of Location

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

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

Grade 4 Scale Score Results by Type of Location

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

Grade 4 Achievement-Level Results by Type of Location

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

Table 6-A

The Nation's Report Card 2009 State Assessment

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

Type of location, year and jurisdiction		Percentage of students	Average scale score	Below *Basic*	At or above *Basic*	At or above *Proficient*	At *Advanced*
City							
2007	Nation (public)	29	233	26	74	32	5
	Wyoming	24 *	243	14	86	43	4
2009	Nation (public)	30	234	25	75	32	5
	Wyoming	23	242	13	87	41	5
Suburb							
2007	Nation (public)	37	243	15	85	44	7
	Wyoming	3	238	19	81	30	5
2009	Nation (public)	36	243	16	84	44	7
	Wyoming	3	‡	‡	‡	‡	‡
Town							
2007	Nation (public)	12	238	18	82	36	4
	Wyoming	40 *	245	10	90	45	5
2009	Nation (public)	12	237	19	81	35	4
	Wyoming	41	242	11	89	40	3
Rural							
2007	Nation (public)	22	240	16	84	39	5
	Wyoming	34	244	11	89	45	4
2009	Nation (public)	22	240	16	84	39	5
	Wyoming	33	242	13	87	41	4

‡Reporting standards not met.

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

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

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

Grade 8 Scale Score Results by Type of Location

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

Grade 8 Achievement-Level Results by Type of Location

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

Table 6-B

The Nation's Report Card 2009 State Assessment

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

Type of location, year and jurisdiction		Percentage of students	Average scale score	Below *Basic*	At or above *Basic*	At or above *Proficient*	At *Advanced*
City							
2007	Nation (public)	28	273*	38*	62*	25*	5*
	Wyoming	20	285	21	79	33	5
2009	Nation (public)	27	276	36	64	28	6
	Wyoming	19	285	22	78	35	7
Suburb							
2007	Nation (public)	36	285	26	74	36	9*
	Wyoming	#	‡	‡	‡	‡	‡
2009	Nation (public)	36	286	25	75	37	10
	Wyoming	#	‡	‡	‡	‡	‡
Town							
2007	Nation (public)	13	280	29	71	29	5
	Wyoming	44*	290	17	83	39	7
2009	Nation (public)	14	279	30	70	29	5
	Wyoming	42	286	23	77	35	7
Rural							
2007	Nation (public)	22	282*	26	74	32*	6
	Wyoming	37*	285	23	77	34	7
2009	Nation (public)	23	284	25	75	33	7
	Wyoming	39	286	21	79	34	6

#Rounds to zero.

‡Reporting standards not met.

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

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

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

Parents' Highest Level of Education

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

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

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

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

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

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

Table 7

The Nation's Report Card 2009 State Assessment

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

Parental education level, year and jurisdiction		Percentage of students	Average scale score	Below *Basic*	At or above *Basic*	At or above *Proficient*	At *Advanced*
Did not finish high school							
1990[1]	Nation (public)	10	241*	76*	24*	3*	#
	Wyoming	5	255*	59*	41*	3*	#
1992[1]	Nation (public)	8	249*	66*	34*	6*	1
	Wyoming	5	259*	54	46	8	#
1996[1]	Nation (public)	8	254*	56*	44*	8*	1
	Wyoming	5	262	49	51	8	1
2000[1]	Nation (public)	7*	255*	55*	45*	8*	1
	Wyoming	5	258*	53	47	7	1
2000	Nation (public)	8	253*	57*	43*	7*	#*
	Wyoming	4*	259	49	51	8	2
2003	Nation (public)	7*	256*	56*	44*	9*	1*
	Wyoming	5	269	38	62	17	2
2005	Nation (public)	8*	259*	52*	48*	11*	1*
	Wyoming	5	261	49	51	11	1
2007	Nation (public)	8	263*	48	52	12*	1
	Wyoming	5	266	48	52	11	2
2009	Nation (public)	8	265	45	55	14	1
	Wyoming	6	270	39	61	16	2
Graduated from high school							
1990[1]	Nation (public)	25*	255*	59*	41*	8*	#
	Wyoming	23*	263*	49*	51*	10*	1
1992[1]	Nation (public)	25*	257*	55*	45*	10*	1*
	Wyoming	23*	267*	42*	58*	11*	#
1996[1]	Nation (public)	23*	260*	50*	50*	12*	1
	Wyoming	21*	268*	39	61	14*	1
2000[1]	Nation (public)	21*	263*	47*	53*	16*	1
	Wyoming	20	268*	38	62	17	1
2000	Nation (public)	21*	260*	49*	51*	15*	1
	Wyoming	20*	268*	40	60	14*	1
2003	Nation (public)	18*	267*	42*	58*	16*	2*
	Wyoming	18	277	30	70	25	2
2005	Nation (public)	18*	267*	42*	58*	17*	2
	Wyoming	19	274	33	67	19	2
2007	Nation (public)	18	270	40	60	19	2
	Wyoming	18	279	26	74	25	2
2009	Nation (public)	17	270	38	62	19	2
	Wyoming	16	275	32	68	22	3

See notes at end of table.

Table 7

The Nation's Report Card 2009 State Assessment

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

Parental education level, year and jurisdiction		Percentage of students	Average scale score	Below *Basic*	At or above *Basic*	At or above *Proficient*	At *Advanced*
Some education after high school							
1990[1]	Nation (public)	17	267*	43*	57*	15*	3*
	Wyoming	23*	276*	29*	71*	18*	1*
1992[1]	Nation (public)	18*	270*	40*	60*	20*	3*
	Wyoming	22*	279*	27*	73*	23*	2*
1996[1]	Nation (public)	19*	279*	29*	71*	26*	4
	Wyoming	20	277*	27*	73*	21*	1*
2000[1]	Nation (public)	18	279*	28*	72*	27*	3
	Wyoming	17	280*	25	75	26	3
2000	Nation (public)	18	277*	30*	70*	26*	3*
	Wyoming	17	278*	27*	73*	25*	4
2003	Nation (public)	18*	280*	27*	73*	28*	4*
	Wyoming	19	284	19	81	31	3
2005	Nation (public)	18*	280*	27*	73*	28*	4*
	Wyoming	19	283	21	79	29	3
2007	Nation (public)	17	283	24	76	32	5
	Wyoming	21	288	15	85	35	5
2009	Nation (public)	17	283	24	76	32	5
	Wyoming	19	288	17	83	33	6
Graduated from college							
1990[1]	Nation (public)	39*	274*	34*	66*	25*	4*
	Wyoming	43*	280*	26*	74*	27*	3*
1992[1]	Nation (public)	40*	279*	30*	70*	31*	5*
	Wyoming	42*	282*	24*	76*	29*	3*
1996[1]	Nation (public)	40*	281*	28*	72*	34*	7*
	Wyoming	44	283*	23*	77*	31*	4*
2000[1]	Nation (public)	43*	286*	24*	76*	39*	9*
	Wyoming	48	285*	22*	78*	32*	5*
2000	Nation (public)	41*	285*	25*	75*	38*	9*
	Wyoming	47	284*	22*	78*	32*	5*
2003	Nation (public)	45	287*	23*	77*	39*	8*
	Wyoming	48	291	16	84	41	7
2005	Nation (public)	45*	289*	22*	78*	41*	10*
	Wyoming	47	290*	15	85	39*	5*
2007	Nation (public)	46	291*	20*	80*	43*	11*
	Wyoming	47	295	13	87	46	10
2009	Nation (public)	46	294	18	82	46	13
	Wyoming	48	295	15	85	46	10

See notes at end of table.

Table 7

The Nation's Report Card 2009 State Assessment

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

Parental education level, year and jurisdiction		Percentage of students	Average scale score	Below *Basic*	At or above *Basic*	At or above *Proficient*	At *Advanced*
Unknown							
1990[1]	Nation (public)	9*	240*	71*	29*	5*	#
	Wyoming	6*	246*	71*	29*	4*	#
1992[1]	Nation (public)	9*	251*	62*	38*	9*	#
	Wyoming	7*	261*	53*	47*	9*	1
1996[1]	Nation (public)	11	253*	59*	41*	10*	1*
	Wyoming	10	257*	54*	46*	5*	#
2000[1]	Nation (public)	11	255*	55*	45*	11*	1*
	Wyoming	10	261*	49	51	12	1
2000	Nation (public)	12	253*	59*	41*	9*	1*
	Wyoming	11	259*	52*	48*	10*	1
2003	Nation (public)	11	258*	53*	47*	12*	1*
	Wyoming	10	265	46	54	17	1
2005	Nation (public)	11*	260*	51*	49*	13*	1*
	Wyoming	9	268	40	60	11	#
2007	Nation (public)	12	263	48	52	15	2
	Wyoming	10	276	32	68	25	3
2009	Nation (public)	12	264	47	53	16	2
	Wyoming	10	271	36	64	19	1

#Rounds to zero.

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

[1]Accommodations were not permitted for this assessment.

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

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

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

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

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

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

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

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

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

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

Table 8-A

The Nation's Report Card 2009 State Assessment

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

Year and testing status		SD and/or ELL		SD		ELL	
		Wyoming	Nation	Wyoming	Nation	Wyoming	Nation
1992[1]	**Identified**	**10**	**10**	**9**	**7**	**1**	**3**
	Excluded	4	7	3	5	#	2
	Assessed under standard conditions	7	4	6	3	1	1
1996[1]	**Identified**	**13**	**16**	**12**	**12**	**1**	**4**
	Excluded	4	6	4	5	#	2
	Assessed under standard conditions	9	9	8	7	#	2
2000	**Identified**	**15**	**19**	**14**	**13**	**2**	**7**
	Excluded	2	4	2	3	#	1
	Assessed under standard conditions	8	10	6	5	2	5
	Assessed with accommodations	6	5	6	4	#	1
2003	**Identified**	**18**	**22**	**15**	**14**	**4**	**11**
	Excluded	1	4	1	3	#	1
	Assessed under standard conditions	6	10	3	4	3	7
	Assessed with accommodations	11	8	11	7	1	2
2005	**Identified**	**19**	**23**	**15**	**14**	**5**	**10**
	Excluded	2	3	1	3	#	1
	Assessed under standard conditions	6	10	3	4	3	7
	Assessed with accommodations	11	10	11	8	1	3
2007	**Identified**	**18**	**23**	**15**	**14**	**4**	**11**
	Excluded	2	3	2	3	#	1
	Assessed under standard conditions	6	10	4	3	2	7
	Assessed with accommodations	10	10	9	8	1	3
2009	**Identified**	**18**	**23**	**16**	**13**	**2**	**10**
	Excluded	1	2	1	2	#	1
	Assessed under standard conditions	5	9	4	3	1	6
	Assessed with accommodations	12	11	11	8	1	4

Rounds to zero.

[1] Accommodations were not permitted for this assessment year.

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

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

Table 8-B

The Nation's Report Card 2009 State Assessment

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

Year and testing status		SD and/or ELL		SD		ELL	
		Wyoming	Nation	Wyoming	Nation	Wyoming	Nation
1990[1]	**Identified**	**8**	**—**	**8**	**—**	**1**	**—**
	Excluded	3	—	3	—	#	—
	Assessed under standard conditions	5	—	4	—	#	—
1992[1]	**Identified**	**9**	**10**	**9**	**8**	**#**	**2**
	Excluded	4	6	4	5	#	2
	Assessed under standard conditions	5	4	5	3	#	1
1996[1]	**Identified**	**10**	**11**	**10**	**9**	**1**	**3**
	Excluded	2	5	2	4	#	1
	Assessed under standard conditions	8	7	8	5	1	2
2000	**Identified**	**13**	**14**	**12**	**11**	**2**	**4**
	Excluded	1	4	1	3	#	1
	Assessed under standard conditions	9	7	8	5	2	3
	Assessed with accommodations	3	3	3	2	#	1
2003	**Identified**	**17**	**19**	**15**	**14**	**3**	**6**
	Excluded	1	4	1	3	#	1
	Assessed under standard conditions	6	8	4	5	2	4
	Assessed with accommodations	10	7	9	6	1	1
2005	**Identified**	**17**	**19**	**14**	**13**	**4**	**6**
	Excluded	2	4	2	3	#	1
	Assessed under standard conditions	5	7	3	3	3	4
	Assessed with accommodations	10	8	10	7	1	1
2007	**Identified**	**15**	**18**	**13**	**13**	**3**	**7**
	Excluded	2	4	2	4	#	1
	Assessed under standard conditions	4	6	3	2	1	4
	Assessed with accommodations	9	8	9	6	1	2
2009	**Identified**	**15**	**18**	**14**	**13**	**2**	**6**
	Excluded	2	3	2	3	#	#
	Assessed under standard conditions	3	5	2	2	1	3
	Assessed with accommodations	10	10	10	8	1	2

Rounds to zero.

— Not available.

[1] Accommodations were not permitted for this assessment year.

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

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

Table 9-A

The Nation's Report Card 2009 State Assessment

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

SD status, year and jurisdiction		Percentage of students	Average scale score	Below *Basic*	At or above *Basic*	At or above *Proficient*	At *Advanced*
SD							
1992[1]	Nation (public)	‡	‡	‡	‡	‡	‡
	Wyoming	‡	‡	‡	‡	‡	‡
1996[1]	Nation (public)	‡	‡	‡	‡	‡	‡
	Wyoming	‡	‡	‡	‡	‡	‡
2000[1]	Nation (public)	‡	‡	‡	‡	‡	‡
	Wyoming	‡	‡	‡	‡	‡	‡
2000	Nation (public)	10*	198*	71*	29*	6*	1*
	Wyoming	12*	200*	65*	35*	6*	#
2003	Nation (public)	11	214*	50*	50*	12*	1*
	Wyoming	14	221*	39	61	13	1
2005	Nation (public)	12	218*	44*	56*	16*	2*
	Wyoming	14	219*	44*	56*	13	1
2007	Nation (public)	11	220	40	60	19	2
	Wyoming	14	224	36	64	19	1
2009	Nation (public)	12	220	41	59	19	2
	Wyoming	15	227	31	69	20	2
Not SD							
1992[1]	Nation (public)	‡	‡	‡	‡	‡	‡
	Wyoming	‡	‡	‡	‡	‡	‡
1996[1]	Nation (public)	‡	‡	‡	‡	‡	‡
	Wyoming	‡	‡	‡	‡	‡	‡
2000[1]	Nation (public)	‡	‡	‡	‡	‡	‡
	Wyoming	‡	‡	‡	‡	‡	‡
2000	Nation (public)	90*	227*	33*	67*	24*	3*
	Wyoming	88*	233*	24*	76*	27*	2*
2003	Nation (public)	89	236*	21*	79*	34*	4*
	Wyoming	86	244	9	91	43	4
2005	Nation (public)	88	240*	17*	83*	38*	5*
	Wyoming	86	247*	8	92	47	6
2007	Nation (public)	89	241	16	84	41	6
	Wyoming	86	247*	8	92	48*	5
2009	Nation (public)	88	242	16	84	41	6
	Wyoming	85	245	9	91	44	4

#Rounds to zero.

‡Reporting standards not met.

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

[1]Accommodations were not permitted for this assessment.

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

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

Table 9-B

The Nation's Report Card 2009 State Assessment

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

SD status, year and jurisdiction		Percentage of students	Average scale score	Below *Basic*	At or above *Basic*	At or above *Proficient*	At *Advanced*
SD							
1990[1]	Nation (public)	‡	‡	‡	‡	‡	‡
	Wyoming	‡	‡	‡	‡	‡	‡
1992[1]	Nation (public)	‡	‡	‡	‡	‡	‡
	Wyoming	‡	‡	‡	‡	‡	‡
1996[1]	Nation (public)	‡	‡	‡	‡	‡	‡
	Wyoming	‡	‡	‡	‡	‡	‡
2000[1]	Nation (public)	‡	‡	‡	‡	‡	‡
	Wyoming	‡	‡	‡	‡	‡	‡
2000	Nation (public)	8*	229*	80*	20*	4*	#
	Wyoming	11	234*	77*	23*	1	#
2003	Nation (public)	11*	242*	71*	29*	6*	1*
	Wyoming	14*	248*	70	30	4	#
2005	Nation (public)	11	244*	69*	31*	7*	1*
	Wyoming	13	251	64	36	5	#
2007	Nation (public)	9*	246*	67*	33*	8	1
	Wyoming	12	252	65	35	6	#
2009	Nation (public)	10	249	64	36	9	1
	Wyoming	12	254	61	39	8	1
Not SD							
1990[1]	Nation (public)	‡	‡	‡	‡	‡	‡
	Wyoming	‡	‡	‡	‡	‡	‡
1992[1]	Nation (public)	‡	‡	‡	‡	‡	‡
	Wyoming	‡	‡	‡	‡	‡	‡
1996[1]	Nation (public)	‡	‡	‡	‡	‡	‡
	Wyoming	‡	‡	‡	‡	‡	‡
2000[1]	Nation (public)	‡	‡	‡	‡	‡	‡
	Wyoming	‡	‡	‡	‡	‡	‡
2000	Nation (public)	92*	275*	35*	65*	26*	5*
	Wyoming	89	281*	26*	74*	26*	4*
2003	Nation (public)	89*	280*	29*	71*	30*	5*
	Wyoming	86*	289	16	84	37	5*
2005	Nation (public)	89	281*	28*	72*	31*	6*
	Wyoming	87	287*	18	82	33*	4*
2007	Nation (public)	91*	284*	26*	74*	33*	7*
	Wyoming	88	292	14	86	40	7
2009	Nation (public)	90	285	24	76	35	8
	Wyoming	88	291	17	83	38	8

#Rounds to zero.

‡Reporting standards not met.

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

[1]Accommodations were not permitted for this assessment.

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

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

Table 10-A

The Nation's Report Card 2009 State Assessment

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

ELL status, year and jurisdiction		Percentage of students	Average scale score	Below *Basic*	At or above *Basic*	At or above *Proficient*	At *Advanced*
ELL							
1992[1]	Nation (public)	‡	‡	‡	‡	‡	‡
	Wyoming	‡	‡	‡	‡	‡	‡
1996[1]	Nation (public)	‡	‡	‡	‡	‡	‡
	Wyoming	‡	‡	‡	‡	‡	‡
2000[1]	Nation (public)	‡	‡	‡	‡	‡	‡
	Wyoming	‡	‡	‡	‡	‡	‡
2000	Nation (public)	6*	199*	70*	30*	4*	#
	Wyoming	2	‡	‡	‡	‡	‡
2003	Nation (public)	9	214*	51*	49*	9*	#
	Wyoming	4*	215	46	54	10	1
2005	Nation (public)	10	216	46*	54*	11	1
	Wyoming	4*	223	34	66	15	#
2007	Nation (public)	10	217	44	56	13	1
	Wyoming	4*	221	39	61	17	1
2009	Nation (public)	10	218	43	57	12	1
	Wyoming	2	‡	‡	‡	‡	‡
Not ELL							
1992[1]	Nation (public)	‡	‡	‡	‡	‡	‡
	Wyoming	‡	‡	‡	‡	‡	‡
1996[1]	Nation (public)	‡	‡	‡	‡	‡	‡
	Wyoming	‡	‡	‡	‡	‡	‡
2000[1]	Nation (public)	‡	‡	‡	‡	‡	‡
	Wyoming	‡	‡	‡	‡	‡	‡
2000	Nation (public)	94*	226*	34*	66*	24*	3*
	Wyoming	98	229*	28*	72*	25*	2*
2003	Nation (public)	91	236*	21*	79*	34*	4*
	Wyoming	96*	242	11	89	40	4
2005	Nation (public)	90	239*	18*	82*	38*	5*
	Wyoming	96*	244	12	88	44	5
2007	Nation (public)	90	242	16	84	42	6
	Wyoming	96*	245*	11	89	45*	5
2009	Nation (public)	90	242	16	84	41	6
	Wyoming	98	243	12	88	41	4

#Rounds to zero.

‡Reporting standards not met.

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

[1]Accommodations were not permitted for this assessment.

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

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

Table 10-B

The Nation's Report Card 2009 State Assessment

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

ELL status, year and jurisdiction		Percentage of students	Average scale score	Below *Basic*	At or above *Basic*	At or above *Proficient*	At *Advanced*
ELL							
1990[1]	Nation (public)	‡	‡	‡	‡	‡	‡
	Wyoming	‡	‡	‡	‡	‡	‡
1992[1]	Nation (public)	‡	‡	‡	‡	‡	‡
	Wyoming	‡	‡	‡	‡	‡	‡
1996[1]	Nation (public)	‡	‡	‡	‡	‡	‡
	Wyoming	‡	‡	‡	‡	‡	‡
2000[1]	Nation (public)	‡	‡	‡	‡	‡	‡
	Wyoming	‡	‡	‡	‡	‡	‡
2000	Nation (public)	3*	234*	80*	20*	2*	#
	Wyoming	2	‡	‡	‡	‡	‡
2003	Nation (public)	5	241	74	26	5	1
	Wyoming	3*	254	64	36	7	1
2005	Nation (public)	6	244	71	29	6	1
	Wyoming	4*	251	61	39	3	#
2007	Nation (public)	6	245*	70	30	6	1
	Wyoming	3*	‡	‡	‡	‡	‡
2009	Nation (public)	6	243	72	28	5	1
	Wyoming	2	‡	‡	‡	‡	‡
Not ELL							
1990[1]	Nation (public)	‡	‡	‡	‡	‡	‡
	Wyoming	‡	‡	‡	‡	‡	‡
1992[1]	Nation (public)	‡	‡	‡	‡	‡	‡
	Wyoming	‡	‡	‡	‡	‡	‡
1996[1]	Nation (public)	‡	‡	‡	‡	‡	‡
	Wyoming	‡	‡	‡	‡	‡	‡
2000[1]	Nation (public)	‡	‡	‡	‡	‡	‡
	Wyoming	‡	‡	‡	‡	‡	‡
2000	Nation (public)	97*	273*	37*	63*	26*	5*
	Wyoming	98	276*	30*	70*	24*	4*
2003	Nation (public)	95	278*	31*	69*	29*	5*
	Wyoming	97*	285*	22	78	33	5*
2005	Nation (public)	94	280*	30*	70*	30*	6*
	Wyoming	96*	283*	22	78	30*	4*
2007	Nation (public)	94	282*	27*	73*	33*	7*
	Wyoming	97*	288	19	81	37	7
2009	Nation (public)	94	284	26	74	34	8
	Wyoming	98	287	21	79	35	7

#Rounds to zero.

‡Reporting standards not met.

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

[1]Accommodations were not permitted for this assessment.

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

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

Table 11-A

The Nation's Report Card 2009 State Assessment

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

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

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

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

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

Table 11-B

The Nation's Report Card 2009 State Assessment

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

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

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

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

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

Where to Find More Information

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

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

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

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

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

Publications on the inclusion of students with disabilities and English language learners
References for a variety of research publications related to the assessment of students with special needs may be found at http://nces.ed.gov/nationsreportcard/about/inclusion.asp#research.

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

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

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

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

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