

Wyoming

Grade 4 and 8 Public Schools State Mathematics 2017

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 12 assessment years (at grade 8 in 1990; and at both grades 4 and 8 in 1992, 1996, 2000, 2003, 2005, 2007, 2009, 2011, 2013, 2015, and 2017), although not all states may have participated or met the criteria for reporting in every year. All 50 states, the District of Columbia, Department of Defense Education Activity schools (DoDEA), and Puerto Rico participated in the 2017 mathematics assessment at grades 4 and 8.

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

- *The Nation's Report Card™, Mathematics 2017*
- 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.

KEY FINDINGS FOR 2017

Grade 4:

- In 2017, the average mathematics score for fourth-grade students in Wyoming was 248. This was higher than that for the nation's public schools (239).
- The average score for students in Wyoming in 2017 (248) was higher than that in 1992 (225) and was not significantly different from that in 2015 (247).
- In 2017, the percentage of students in Wyoming who performed at or above *Proficient* was 51 percent. This was greater than that for the nation's public schools (40 percent).
- The percentage of students in Wyoming who performed at or above *Proficient* in 2017 (51 percent) was greater than that in 1992 (19 percent) and was not significantly different from that in 2015 (48 percent).
- In 2017, the percentage of students in Wyoming who performed at or above *Basic* was 89 percent. This was greater than that for the nation's public schools (79 percent).
- The percentage of students in Wyoming who performed at or above *Basic* in 2017 (89 percent) was greater than that in 1992 (69 percent) and was not significantly different from that in 2015 (88 percent).

Grade 8:

- In 2017, the average mathematics score for eighth-grade students in Wyoming was 289. This was higher than that for the nation's public schools (282).
- The average score for students in Wyoming in 2017 (289) was higher than that in 1990 (272) and was not significantly different from that in 2015 (287).
- In 2017, the percentage of students in Wyoming who performed at or above *Proficient* was 38 percent. This was greater than that for the nation's public schools (33 percent).
- The percentage of students in Wyoming who performed at or above *Proficient* in 2017 (38 percent) was greater than that in 1990 (19 percent) and was not significantly different from that in 2015 (35 percent).
- In 2017, the percentage of students in Wyoming who performed at or above *Basic* was 79 percent. This was greater than that for the nation's public schools (69 percent).
- The percentage of students in Wyoming who performed at or above *Basic* in 2017 (79 percent) was greater than that in 1990 (64 percent) and was not significantly different from that in 2015 (78 percent).

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

Introduction

What Was Assessed?

The content for each NAEP assessment is determined by the National Assessment Governing Board. 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

<https://www.nagb.org/content/nagb/assets/documents/publications/frameworks/mathematics/2017-mathematics-framework.pdf>.

For grades 4 and 8, the mathematics framework for the 2017 assessment is similar to earlier versions that guided the 1990, 1992, 1996, 2000, 2003, 2005, 2007, 2009, 2011, 2013, and 2015 mathematics assessments. Although the frameworks are updated periodically, the mathematics content objectives for grades 4 and 8 have not changed substantially, allowing students' performance in 2017 to be compared with previous years.

Content Areas and Mathematical Complexity

The 2017 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 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.

- **Number properties and operations** measures students' understanding of ways to represent, calculate, and estimate with numbers.
- **Measurement** assesses students' knowledge of measurement for such attributes as capacity, length, area, volume, time, angles, and rates.
- **Geometry** measures students' knowledge and understanding of shapes in two and three dimensions and relationships between shapes such as symmetry and transformations.
- **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. Most students' 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/itmrlsx/>.

Some questions in the 2017 assessment incorporated the use of calculators (four-function calculators at grade 4 and scientific or graphing calculators at grade 8), rulers, protractors (at grade 8), 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, Department of Defense Education Activity schools (DoDEA), and Puerto Rico participated in the 2017 mathematics assessment at grades 4 and 8. 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 to the public. A minimum of 85 percent participation is required for schools in each subject and grade combination. Participation rates for the 2017 mathematics assessment are available on the NAEP website at http://www.nationsreportcard.gov/reading_math_2017/#mathematics/about#participation.

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 DoDEA or Bureau of Indian Education schools.

How Is Student Mathematics Performance Reported?

The 2017 state results are compared to results from 10 earlier assessments at grade 4 and from 11 earlier assessments at grade 8.

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. 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: Achievement levels are performance standards that describe what students should know and be able to do. Results are reported as percentages of students performing at or above three achievement levels (Basic, Proficient, and Advanced). Students performing at or above the Proficient level on NAEP assessments demonstrate solid academic performance and competency over challenging subject matter. It should be noted that the NAEP Proficient achievement level does not represent grade level proficiency as determined by other assessment standards (e.g., state or district assessments).

INTERPRETING THE RESULTS

NAEP achievement-level setting is based on the collective judgments of a broadly representative panel of teachers, education specialists, and members of the general public. NAEP achievement levels, however, should continue to be used on a trial basis and be interpreted with caution. It should be noted that, in accordance with NAEP legislation, the National Assessment Governing Board (NAGB) sets the achievement levels, and the National Center for Education Statistics (NCES) determines the technical feasibility for their use. The NCES Commissioner has used various independent reviews commissioned by the Department of Education in making decisions about the trial status of the achievement levels. The decision to maintain the trial status is primarily due to the necessity indicated from those reviews for further research to document the validity of the NAEP achievement levels. Read more about [NAEP achievement levels](#) and how they are set.

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 analytic skills appropriate to the subject matter.
- *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 2017 State Assessment

Descriptions of fourth-grade achievement levels for 2017 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 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 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 in the shaded boxes indicate the lowest point on the 0-500 scale at which the achievement-level range begins.

SOURCE: National Assessment Governing Board. (2016). *Mathematics Framework for the 2017 National Assessment of Educational Progress*. Washington, DC.

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 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 in the shaded boxes indicate the lowest point on the 0-500 scale at which the achievement-level range begins.

SOURCE: National Assessment Governing Board. (2016). *Mathematics Framework for the 2017 National Assessment of Educational Progress*. Washington, DC.

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) and/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 and/or ELL students. In 2000, NAEP was administered using a split sample of schools—one sample in which accommodations were permitted for SD and/or ELL 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. Please note that bullet statements only reference the results from the 2000 assessment where accommodations were permitted. Results for the assessment years when accommodations were not permitted in state NAEP assessments (1990, 1992, 1996) are reported in the same tables as the results when accommodations were permitted (2000, 2003, 2005, 2007, 2009, 2011, 2013, 2015, and 2017).

NAEP 2017 Digitally Based Mathematics Assessment

While 2017 marked the first year a mathematics DBA was administered, a small portion of the students sampled took a mathematics PBA. NAEP administered the assessment in both modes—DBA and PBA—to investigate potential differences in performance between students taking the assessment on a tablet and students taking the paper-based assessment. Each participating student, however, took the assessment in only one mode.

It is important for NAEP to assess as many students selected to participate as possible. Assessing representative samples of students, including students with disabilities (SD) and English language learners (ELL), helps to ensure that NAEP results accurately reflect the educational performance of all students in the target population, and can continue to serve as a meaningful measure of U.S. students' academic achievement over time. To ensure that all selected students from the population can be assessed, many of the same accommodations that SD and ELL students use on other tests are provided for those students participating in NAEP. Read more about [accommodations available in NAEP](#). Accommodations were first made available for the mathematics assessment in 1996. In the 2017 NAEP mathematics assessment, accommodations were provided for both DBA and PBA. In DBA, some accommodations were provided by the test delivery system (e.g., extended time) while others were available outside of the test delivery system (e.g., breaks during test). DBA also included a set of accessibility features, referred to as [universal design elements](#) that were available to all students.

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. Comparisons over time or between groups are based on statistical tests that consider both the size of the differences and the standard errors of the two statistics being compared. Standard errors are margins of error, and estimates based on smaller groups are likely to have larger margins of error. The size of the standard errors may also be influenced by other factors such as how representative the assessed students are of the entire population. 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 percentages are discussed in this report only when they are significant from a statistical perspective. Significant differences between 2017 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.

Score or percentage differences or gaps cited in this report are calculated based on differences between unrounded numbers. Therefore, the reader may find that the score or percentage difference cited in the text or tables may not be identical to the difference obtained from subtracting the rounded values shown in the accompanying tables or figures.

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 2017 Mathematics Overall Average Score and Achievement-Level Results for Public School Students

Overall mathematics results for public school students from Wyoming are reported in this section, as well as regional and national results. The regions defined by the U.S. Census Bureau are Northeast, South, Midwest, and West (<http://nces.ed.gov/nationsreportcard/hsts/tabulations/regions.asp>). Trend data by region are not provided for assessment years prior to 2003.

Prior to 2000, testing accommodations were not provided for SD and/or ELL students 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.

Tables 1-A and 1-B show the overall performance results of grades 4 and 8 public school students in Wyoming, the nation, and the region. Prior to 2003, the list of states that comprise a given region for NAEP 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, 2009, 2011, 2013, 2015, and 2017. The first column of results presents the average score on the NAEP mathematics scale. The remaining columns show the scores at selected percentiles. Percentiles indicate the percentages of students whose scores fell at or below a particular score. For example, the 25th percentile defines the cut point for the lowest 25 percent of students within the distribution of scale scores.

Grade 4 Scale Score Results

- In 2017, the average scale score for students in Wyoming was 248. This was higher than that for students across the nation (239).
- In Wyoming, the average scale score for students in 2017 was not significantly different from that in 2015 (247). Similarly, the average scale score for students in public schools across the nation in 2017 was not significantly different from that in 2015 (240).
- In Wyoming, the average scale score for students in 2017 was higher than the scores in 1992, 1996, 2000, 2003, 2005, 2007, 2009, and 2011. However, it was not significantly different from the scores in 2013 and 2015.

Grade 8 Scale Score Results

- In 2017, the average scale score for students in Wyoming was 289. This was higher than that for students across the nation (282).
- In Wyoming, the average scale score for students in 2017 was not significantly different from that in 2015 (287). Similarly, the average scale score for students in public schools across the nation in 2017 was not significantly different from that in 2015 (281).
- In Wyoming, the average scale score for students in 2017 was higher than the scores in 1990, 1992, 1996, 2000, 2003, 2005, and 2009. However, it was not significantly different from the scores in 2007, 2011, 2013, and 2015.

**Table
1-B**

The Nation's Report Card 2017 State Assessment

Average scale scores and selected percentile scores in NAEP mathematics for eighth-grade public school students, by year and jurisdiction: Various years, 1990–2017

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*
2011	Nation (public)	283	236*	259*	284*	308	329*
	West ²	278	228	253	279	304*	327*
	Wyoming	288	246	268	289	309*	328
2013	Nation (public)	284*	236*	260*	285*	309	330*
	West ²	280	231	255*	281	306	327*
	Wyoming	288	249	268	289	310	327*
2015	Nation (public)	281	234	257*	282	307*	328*
	West ²	279	230	254	280	305	327*
	Wyoming	287	245	266	287	308*	328
2017	Nation (public)	282	232	255	282	309	332
	West ²	280	228	252	280	308	332
	Wyoming	289	246	267	289	312	332

* Value is significantly different ($p < .05$) from the value for the same jurisdiction in 2017.

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. All differences were calculated and tested using unrounded numbers.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 1990–2017 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 2017, the percentage of Wyoming's students who performed at or above *Proficient* was 51 percent. This was greater than the percentage of the nation's public school students who performed at or above *Proficient* (40 percent).
- In Wyoming, the percentage of students who performed at or above *Proficient* in 2017 was greater than the percentages in 1992, 1996, 2000, 2003, 2005, 2007, 2009, 2011, and 2013, but was not significantly different from the percentage in 2015.
- In 2017, the percentage of Wyoming's students who performed at or above *Basic* was 89 percent. This was greater than the percentage of the nation's public school students who performed at or above *Basic* (79 percent).
- In Wyoming, the percentage of students who performed at or above *Basic* in 2017 was greater than the percentages in 1992, 1996, and 2000, but was not significantly different from the percentages in 2003, 2005, 2007, 2009, 2011, 2013, and 2015.

Grade 8 Achievement-Level Results

- In 2017, the percentage of Wyoming's students who performed at or above *Proficient* was 38 percent. This was greater than 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 2017 was greater than the percentages in 1990, 1992, 1996, 2000, 2003, 2005, and 2009, but was not significantly different from the percentages in 2007, 2011, 2013, and 2015.
- In 2017, the percentage of Wyoming's students who performed at or above *Basic* was 79 percent. This was greater than the percentage of the nation's public school students who performed at or above *Basic* (69 percent).
- In Wyoming, the percentage of students who performed at or above *Basic* in 2017 was greater than the percentages in 1990, 1992, 1996, and 2000, but was not significantly different from the percentages in 2003, 2005, 2007, 2009, 2011, 2013, and 2015.

**Table
2-B**

The Nation's Report Card 2017 State Assessment

Percentage of eighth-grade public school students at or above NAEP mathematics achievement levels, by year and jurisdiction: Various years, 1990–2017

Year and jurisdiction		Below <i>Basic</i>	At or above <i>Basic</i>	At or above <i>Proficient</i>	At <i>Advanced</i>
1990 ¹	Nation (public)	49*	51*	15*	2*
	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*
2011	Nation (public)	28*	72*	34	8*
	West ²	33	67	30	7*
	Wyoming	20	80	37	7*
2013	Nation (public)	27*	73*	34	8*
	West ²	31	69	31	7*
	Wyoming	19	81	38	7*
2015	Nation (public)	30*	70*	32*	8*
	West ²	32	68	31	7*
	Wyoming	22	78	35	7*
2017	Nation (public)	31	69	33	10
	West ²	33	67	32	10
	Wyoming	21	79	38	9

* Value is significantly different ($p < .05$) from the value for the same jurisdiction in 2017.

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 or above. At or above *Basic* includes *Basic*, *Proficient*, and *Advanced*. At or above *Proficient* includes *Proficient* and *Advanced*. Detail may not sum to totals because of rounding. All differences were calculated and tested using unrounded numbers.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 1990–2017 Mathematics Assessments.

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

All 50 states, the District of Columbia, Department of Defense Education Activity schools (DoDEA), and Puerto Rico participated in the 2017 mathematics assessment at grades 4 and 8. References to "jurisdictions" in the results statements may include states, the District of Columbia, and DoDEA schools.

Comparisons by Scale Scores

Figures 2-A and 2-B compare Wyoming's 2017 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 2017 mathematics assessment.

Grade 4 Scale Score Comparison Results

- The average score for students in Wyoming was higher than 44 jurisdictions, and not significantly different from 8 jurisdictions.

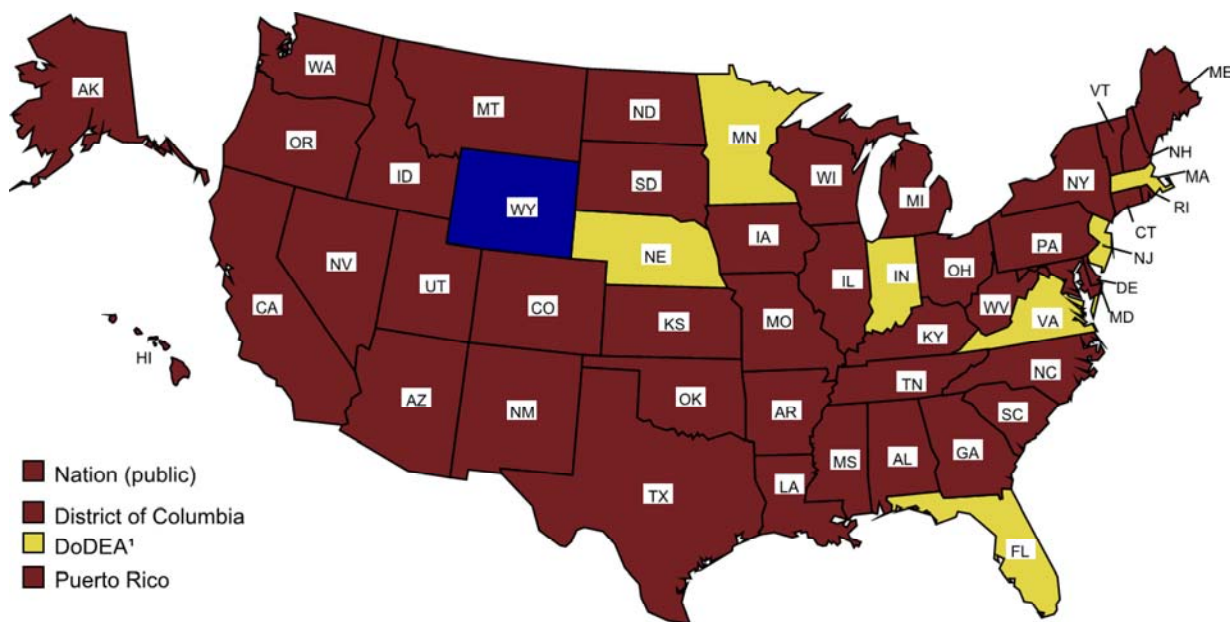
Grade 8 Scale Score Comparison Results

- The average score for students in Wyoming was higher than 36 jurisdictions, not significantly different from 11 jurisdictions, and lower than 5 jurisdictions.

Figure
2-A

The Nation's Report Card 2017 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: 2017



- ☆ Focal state/jurisdiction (Wyoming)
- Higher average scale score than Wyoming (0 jurisdictions)
- Not significantly different from Wyoming (8 jurisdictions)
- Lower average scale score than Wyoming (nation and 44 jurisdictions)

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

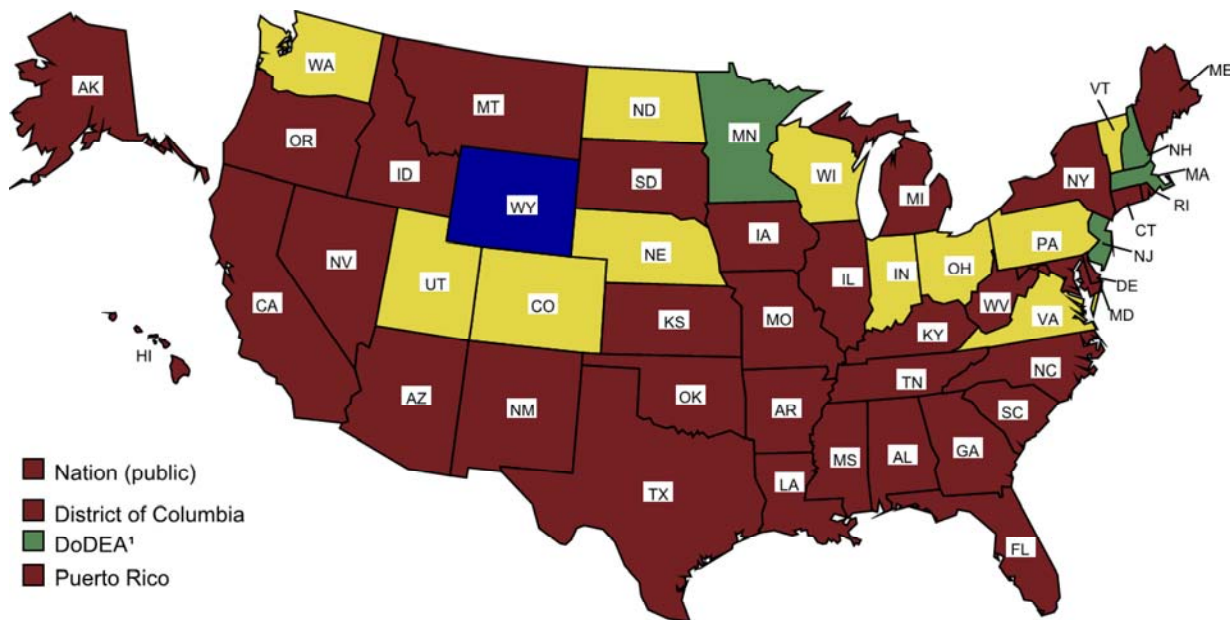
NOTE: Significance tests used a multiple-comparison procedure based on all jurisdictions that participated.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2017 Mathematics Assessment.

Figure
2-B

The Nation's Report Card 2017 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: 2017



- ☆ Focal state/jurisdiction (Wyoming)
- Higher average scale score than Wyoming (5 jurisdictions)
- Not significantly different from Wyoming (11 jurisdictions)
- Lower average scale score than Wyoming (nation and 36 jurisdictions)

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

NOTE: 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), 2017 Mathematics Assessment.

Comparisons by Achievement Levels

Figures 3-A and 3-B permit comparisons of all jurisdictions (and the nation) participating in the NAEP 2017 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 that reflect 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 conducted 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 the *Proficient* level in Wyoming was greater than the percentage in 43 jurisdictions, and not significantly different from those in 9 jurisdictions.
- The percentage of students performing at or above the *Basic* level in Wyoming was greater than the percentage in 45 jurisdictions, not significantly different from those in 6 jurisdictions, and smaller than those in 1 jurisdiction (data not shown).

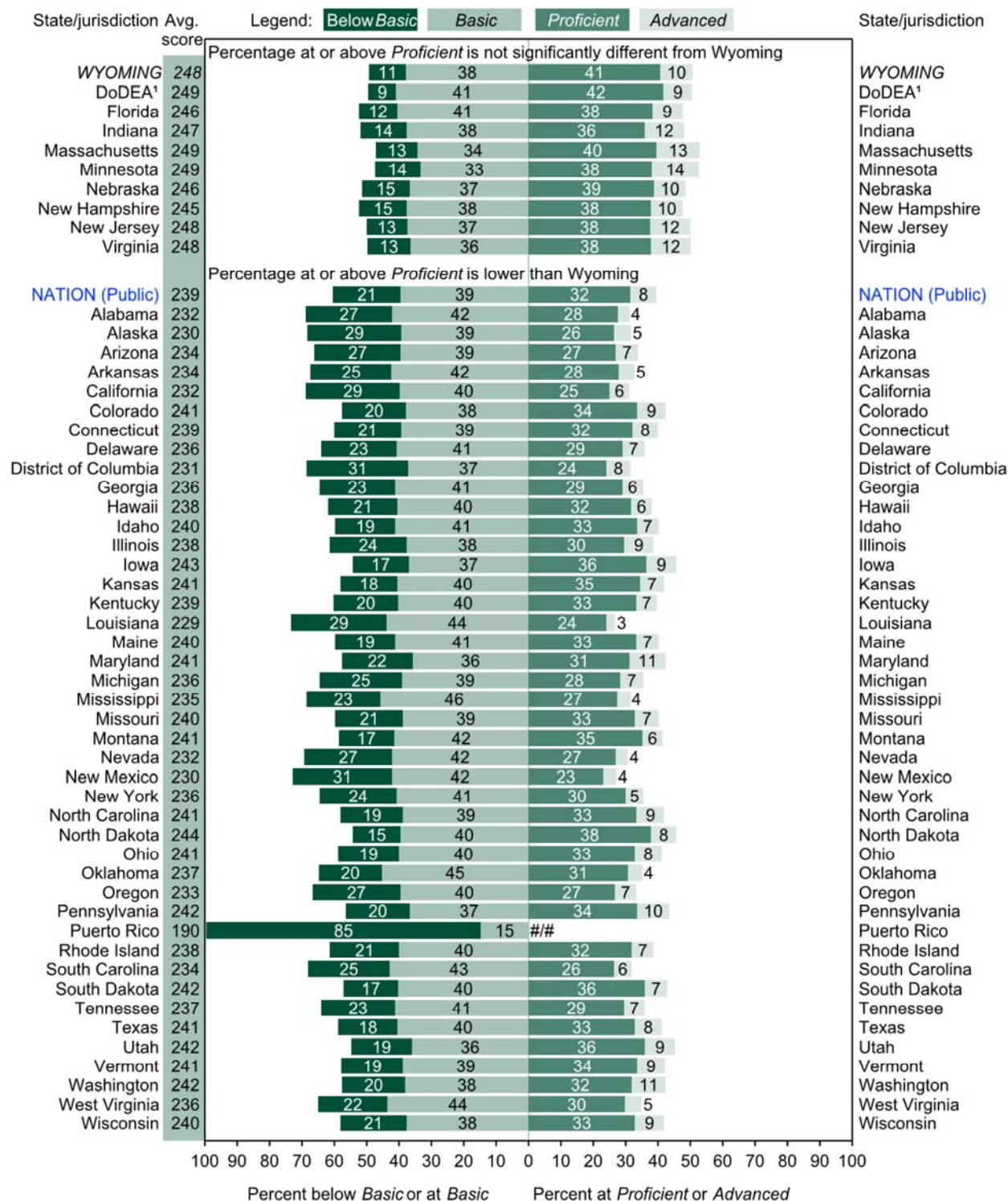
Grade 8 Achievement-Level Comparison Results

- The percentage of students performing at or above the *Proficient* level in Wyoming was greater than the percentage in 28 jurisdictions, not significantly different from those in 20 jurisdictions, and smaller than those in 4 jurisdictions.
- The percentage of students performing at or above the *Basic* level in Wyoming was greater than the percentage in 45 jurisdictions, not significantly different from those in 6 jurisdictions, and smaller than those in 1 jurisdiction (data not shown).

Figure
3-A

The Nation's Report Card 2017 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 jurisdictions: 2017



Rounds to zero.

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

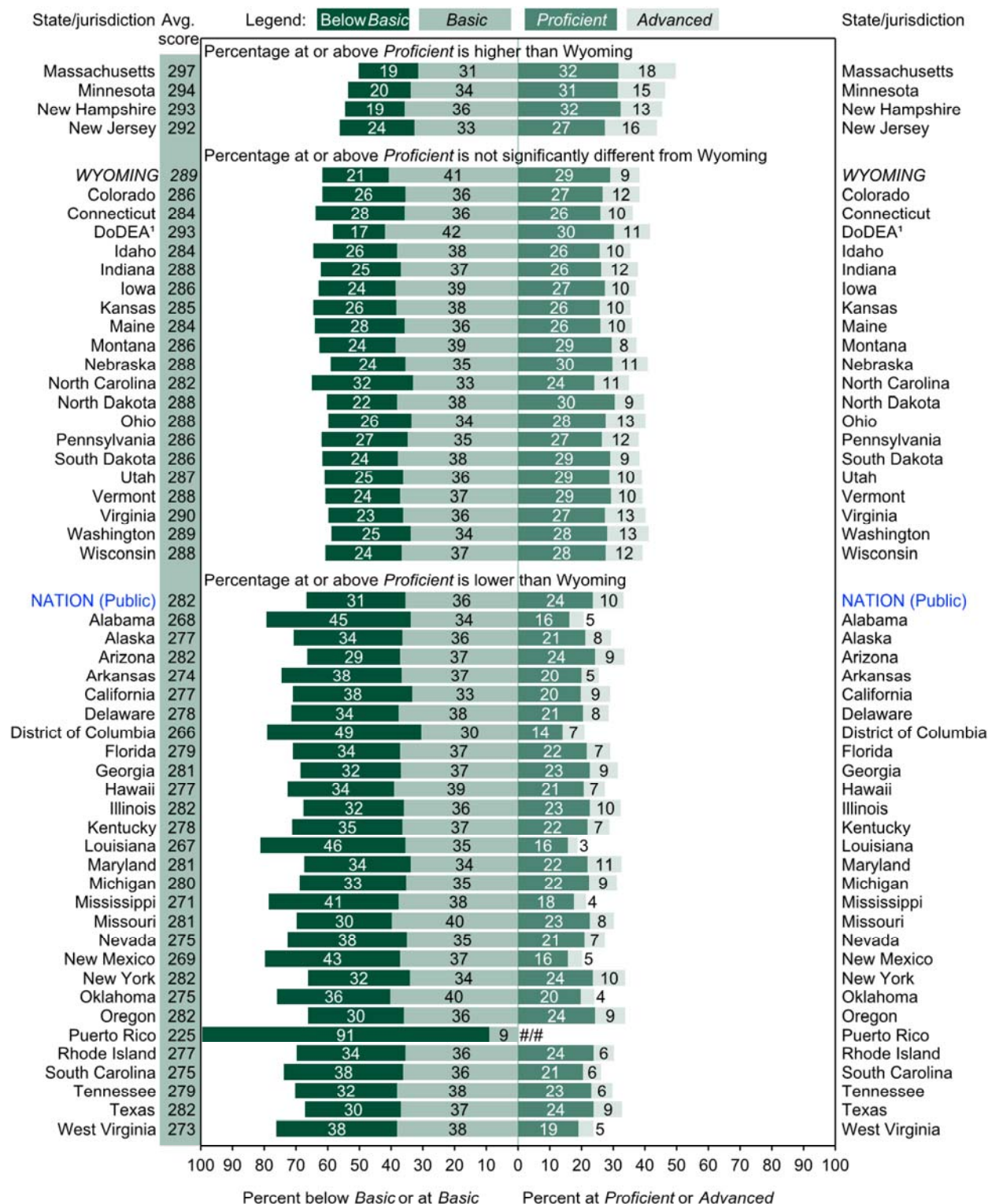
NOTE: The bars above contain percentages of students in each NAEP mathematics achievement level. Achievement levels corresponding to each population of students are aligned at the point where the *Proficient* category begins, so that they may be compared at *Proficient* and above. Detail may not sum to totals because of rounding. All differences were calculated and tested using unrounded numbers. 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), 2017 Mathematics Assessment.

Figure
3-B

The Nation's Report Card 2017 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 jurisdictions: 2017



Rounds to zero.

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

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. All differences were calculated and tested using unrounded numbers. The shaded bars are graphed using unrounded numbers. Significance tests used a multiple-comparison procedure based on all jurisdictions that participated.

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, 2009, 2011, 2013, 2015, and 2017)

NAEP collects information on race/ethnicity, gender, and student eligibility for the National School Lunch Program eligibility from school records. Type of school location is based on standard definitions established by the Federal Office of Management and Budget using population and geographic information from the U.S. Census Bureau. Schools are assigned to these categories in the NCES Common Core of Data based on their physical address. The parent's highest level of education for grade 8 is derived from student questionnaires.

Results for each of the student groups 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.

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 2017 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 2017 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

Prior to 2011, student race/ethnicity was obtained from school records and reported for the six mutually exclusive categories shown below:

- White
- Black
- Hispanic
- Asian/Pacific Islander
- American Indian/Alaska Native
- Unclassified (not shown in tables)

Students who identified with more than one of the other five categories were classified as "Other" and were included as part of the "Unclassified" category along with students who had a background other than the ones listed or whose race/ethnicity could not be determined.

In compliance with new standards from the U.S. Office of Management and Budget for collecting and reporting data on race/ethnicity, additional information was collected in 2011 so that results could be reported separately for Asian students, Native Hawaiian/Other Pacific Islander students, and students identifying with two or more races. Beginning in 2011, all of the students participating in NAEP were identified as one of the seven racial/ethnic categories listed below:

- White
- Black or African American
- Hispanic
- Asian
- American Indian/Alaska Native
- Native Hawaiian/Other Pacific Islander
- Two or more races

As in earlier years, students identified as Hispanic were classified as Hispanic in 2011, 2013, 2015, and 2017 even if they were also identified with another racial/ethnic group. Students who identified with two or more of the other racial/ethnic groups (e.g., White and Black) would have been classified as "Other" and reported as part of the "Unclassified" category prior to 2011, and were classified as "Two or more races" in 2011, 2013, 2015, and 2017.

When comparing the results for racial/ethnic groups prior to 2011, data for Asian and Native Hawaiian/Other Pacific Islander students are combined into a single Asian/Pacific Islander category.

Tables 3-A and 3-B show average scale scores and percentage of students by achievement level 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 2017, White students in Wyoming had an average scale score that was higher than the average scores of Hispanic and American Indian/Alaska Native students.
- In 2017, the average scale score of White students in Wyoming was higher than their respective scores in 1992, 1996, 2000, 2003, 2005, 2007, 2009, and 2011, but not significantly different from their respective scores in 2013 and 2015.
- In 2017, the average scale score of Hispanic students in Wyoming was higher than their respective scores in 1992, 1996, 2000, 2003, 2007, and 2009, but not significantly different from their respective scores in 2005, 2011, 2013, and 2015.
- In 2017, the average scale score of American Indian/Alaska Native students in Wyoming was higher than their respective score in 1992, but not significantly different from their respective scores in 2003, 2007, 2011, 2013, and 2015.
- Data are not reported for Black students in 2017, because reporting standards were not met.
- In 2017, 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 2017 in Wyoming, the percentage of White students performing at or above *Proficient* was greater than the corresponding percentages of Hispanic and American Indian/Alaska Native students.
- In 2017, the percentage of White students in Wyoming performing at or above *Proficient* was greater than the percentages of their respective peers in 1992, 1996, 2000, 2003, 2005, 2007, 2009, and 2011, but not significantly different from the percentages of their respective peers in 2013 and 2015.
- In 2017, the percentage of Hispanic students in Wyoming performing at or above *Proficient* was greater than the percentages of their respective peers in 1992, 1996, 2000, 2003, 2007, and 2009, but not significantly different from the percentages of their respective peers in 2005, 2011, 2013, and 2015.
- In 2017, the percentage of American Indian/Alaska Native students in Wyoming performing at or above *Proficient* was not significantly different from the percentages of their respective peers in 1992, 2003, 2007, 2011, 2013, and 2015.

Grade 8 Scale Score Results by Race/Ethnicity

- In 2017, White students in Wyoming had an average scale score that was higher than the average scores of Hispanic and American Indian/Alaska Native students.
- In 2017, the average scale scores of White and Hispanic students in Wyoming were higher than their respective scores in 1990, 1992, 1996, 2000, 2003, 2005, and 2009, but not significantly different from their respective scores in 2007, 2011, 2013, and 2015.
- In 2017, the average scale score of American Indian/Alaska Native students in Wyoming was higher than their respective scores in 1990, 1996, 2000, and 2015, but not significantly different from their respective scores in 2003, 2005, and 2013.
- Data are not reported for Black students in 2017, because reporting standards were not met.
- In 2017, Hispanic students in Wyoming had an average score that was lower than that of White students by 17 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 2017 in Wyoming, the percentage of White students performing at or above *Proficient* was greater than the corresponding percentages of Hispanic and American Indian/Alaska Native students.
- In 2017, the percentages of White and Hispanic students in Wyoming performing at or above *Proficient* were greater than the percentages of their respective peers in 1990, 1992, 1996, 2000, 2003, 2005, and 2009, but not significantly different from the percentages of their respective peers in 2007, 2011, 2013, and 2015.
- In 2017, the percentage of American Indian/Alaska Native students in Wyoming performing at or above *Proficient* was greater than the percentage in 1996, but not significantly different from the percentages of their respective peers in 1990, 2003, 2005, 2013, and 2015.

**Table
3-B**

The Nation's Report Card 2017 State Assessment

Percentage of eighth-grade public school students, average scale score, and achievement-level results in NAEP mathematics, by race/ethnicity, year, and jurisdiction: Various years, 1990–2017

Race/ethnicity, year, and jurisdiction		Percentage of students	Average scale score	Percent			
				Below <i>Basic</i>	At or above <i>Basic</i>	At or above <i>Proficient</i>	At <i>Advanced</i>
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*
2011	Nation (public)	54*	293	17*	83*	43	10*
	Wyoming	82*	291	16	84	41	8
2013	Nation (public)	53*	293	17*	83*	44	11*
	Wyoming	81*	290	17	83	40	7*
2015	Nation (public)	51	291	19	81	42	10*
	Wyoming	79	290	18	82	39	8
2017	Nation (public)	50	292	20	80	43	13
	Wyoming	78	292	18	82	42	11

See notes at end of table.

**Table
3-B**

The Nation's Report Card 2017 State Assessment

Percentage of eighth-grade public school students, average scale score, and achievement-level results in NAEP mathematics, by race/ethnicity, year, and jurisdiction: Various years, 1990–2017—Continued

Race/ethnicity, year, and jurisdiction		Percentage of students	Average scale score	Percent			
				Below <i>Basic</i>	At or above <i>Basic</i>	At or above <i>Proficient</i>	At <i>Advanced</i>
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	‡	‡	‡	‡	‡
2011	Nation (public)	16*	262*	50*	50*	13	1
	Wyoming	1	‡	‡	‡	‡	‡
2013	Nation (public)	15	263*	49*	51*	14	2
	Wyoming	1	‡	‡	‡	‡	‡
2015	Nation (public)	15	260	53	47	12	1
	Wyoming	1	‡	‡	‡	‡	‡
2017	Nation (public)	15	260	54	46	13	2
	Wyoming	1	‡	‡	‡	‡	‡

See notes at end of table.

**Table
3-B**

The Nation's Report Card 2017 State Assessment

Percentage of eighth-grade public school students, average scale score, and achievement-level results in NAEP mathematics, by race/ethnicity, year, and jurisdiction: Various years, 1990–2017—Continued

Race/ethnicity, year, and jurisdiction		Percentage of students	Average scale score	Percent			
				Below <i>Basic</i>	At or above <i>Basic</i>	At or above <i>Proficient</i>	At <i>Advanced</i>
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
2011	Nation (public)	23*	269	40*	60*	20	3*
	Wyoming	12*	271	37	63	20	2
2013	Nation (public)	23*	271*	38*	62*	21	3
	Wyoming	12*	278	29	71	26	3
2015	Nation (public)	25	269	40	60	19	3
	Wyoming	14	273	35	65	18	2
2017	Nation (public)	25	268	43	57	20	3
	Wyoming	14	275	33	67	23	3

See notes at end of table.

**Table
3-B**

The Nation's Report Card 2017 State Assessment

Percentage of eighth-grade public school students, average scale score, and achievement-level results in NAEP mathematics, by race/ethnicity, year, and jurisdiction: Various years, 1990–2017—Continued

Race/ethnicity, year, and jurisdiction	Percentage of students	Average scale score	Percent			
			Below <i>Basic</i>	At or above <i>Basic</i>	At or above <i>Proficient</i>	At <i>Advanced</i>
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	‡	‡	‡	‡	‡
2011 Nation (public)	6	302*	15	85	55*	22*
Wyoming	1	‡	‡	‡	‡	‡
2013 Nation (public)	5*	306	13	87	60	25
Wyoming	1	‡	‡	‡	‡	‡
2015 Nation (public)	6	305	14	86	58	25
Wyoming	1	‡	‡	‡	‡	‡
2017 Nation (public)	6	310	14	86	62	30
Wyoming	1	‡	‡	‡	‡	‡

See notes at end of table.

**Table
3-B**

The Nation's Report Card 2017 State Assessment

Percentage of eighth-grade public school students, average scale score, and achievement-level results in NAEP mathematics, by race/ethnicity, year, and jurisdiction: Various years, 1990–2017—Continued

Race/ethnicity, year, and jurisdiction		Percentage of students	Average scale score	Percent			
				Below <i>Basic</i>	At or above <i>Basic</i>	At or above <i>Proficient</i>	At <i>Advanced</i>
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	‡	‡	‡	‡	‡
2011	Nation (public)	1	266	45	55	17	4
	Wyoming	3	‡	‡	‡	‡	‡
2013	Nation (public)	1*	270	40	60	21	3
	Wyoming	3	269	36	64	16	1
2015	Nation (public)	1	267	43	57	19	3
	Wyoming	3	251*	63	37	6	#
2017	Nation (public)	1	268	43	57	19	4
	Wyoming	3	268	45	55	18	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 2017.

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 or above. At or above *Basic* includes *Basic*, *Proficient*, and *Advanced*. At or above *Proficient* includes *Proficient* and *Advanced*. 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. All differences were calculated and tested using unrounded numbers.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 1990–2017 Mathematics Assessments.

Tables 4-A and 4-B show average scale scores and percentage of students by achievement-level data for the seven racial/ethnic categories used in 2011, 2013, 2015, and 2017: White, Black, Hispanic, Asian, American Indian/Alaska Native, Native Hawaiian/Other Pacific Islander, and Two or more races at grades 4 and 8 in Wyoming and the nation.

**Table
4-B**

The Nation's Report Card 2017 State Assessment

Percentage of eighth-grade public school students, average scale score, and achievement-level results in NAEP mathematics, by race/ethnicity, year, and jurisdiction: Various years, 2011–2017

Race/ethnicity, year, and jurisdiction		Percentage of students	Average scale score	Percent			
				Below <i>Basic</i>	At or above <i>Basic</i>	At or above <i>Proficient</i>	At <i>Advanced</i>
White							
2011	Nation (public)	54*	293	17*	83*	43	10*
	Wyoming	82*	291	16	84	41	8
2013	Nation (public)	53*	293	17*	83*	44	11*
	Wyoming	81*	290	17	83	40	7*
2015	Nation (public)	51	291	19	81	42	10*
	Wyoming	79	290	18	82	39	8
2017	Nation (public)	50	292	20	80	43	13
	Wyoming	78	292	18	82	42	11
Black							
2011	Nation (public)	16*	262*	50*	50*	13	1
	Wyoming	1	‡	‡	‡	‡	‡
2013	Nation (public)	15	263*	49*	51*	14	2
	Wyoming	1	‡	‡	‡	‡	‡
2015	Nation (public)	15	260	53	47	12	1
	Wyoming	1	‡	‡	‡	‡	‡
2017	Nation (public)	15	260	54	46	13	2
	Wyoming	1	‡	‡	‡	‡	‡
Hispanic							
2011	Nation (public)	23*	269	40*	60*	20	3*
	Wyoming	12*	271	37	63	20	2
2013	Nation (public)	23*	271*	38*	62*	21	3
	Wyoming	12*	278	29	71	26	3
2015	Nation (public)	25	269	40	60	19	3
	Wyoming	14	273	35	65	18	2
2017	Nation (public)	25	268	43	57	20	3
	Wyoming	14	275	33	67	23	3
Asian							
2011	Nation (public)	5	305*	12	88	58*	24*
	Wyoming	1	‡	‡	‡	‡	‡
2013	Nation (public)	5*	308	12	88	62	27
	Wyoming	1	‡	‡	‡	‡	‡
2015	Nation (public)	5	307	12	88	60	26
	Wyoming	1	‡	‡	‡	‡	‡
2017	Nation (public)	5	312	12	88	65	32
	Wyoming	1	‡	‡	‡	‡	‡

See notes at end of table.

**Table
4-B**

The Nation's Report Card 2017 State Assessment

Percentage of eighth-grade public school students, average scale score, and achievement-level results in NAEP mathematics, by race/ethnicity, year, and jurisdiction: Various years, 2011–2017—Continued

Race/ethnicity, year, and jurisdiction		Percentage of students	Average scale score	Percent			
				Below <i>Basic</i>	At or above <i>Basic</i>	At or above <i>Proficient</i>	At <i>Advanced</i>
American Indian/Alaska Native							
2011	Nation (public)	1	266	45	55	17	4
	Wyoming	3	‡	‡	‡	‡	‡
2013	Nation (public)	1*	270	40	60	21	3
	Wyoming	3	269	36	64	16	1
2015	Nation (public)	1	267	43	57	19	3
	Wyoming	3	251*	63	37	6	#
2017	Nation (public)	1	268	43	57	19	4
	Wyoming	3	268	45	55	18	4
Native Hawaiian/Other Pacific Islander							
2011	Nation (public)	#	265	45	55	19	3
	Wyoming	#	‡	‡	‡	‡	‡
2013	Nation (public)	#	274	34	66	24	4
	Wyoming	#	‡	‡	‡	‡	‡
2015	Nation (public)	#	277	35	65	30	6
	Wyoming	#	‡	‡	‡	‡	‡
2017	Nation (public)	#	272	38	62	23	5
	Wyoming	#	‡	‡	‡	‡	‡
Two or More Races							
2011	Nation (public)	2*	286	24	76	37	10
	Wyoming	1	‡	‡	‡	‡	‡
2013	Nation (public)	2*	286	24	76	37	10
	Wyoming	1*	‡	‡	‡	‡	‡
2015	Nation (public)	2*	283	28	72	35	9*
	Wyoming	2	‡	‡	‡	‡	‡
2017	Nation (public)	3	285	28	72	36	12
	Wyoming	2	‡	‡	‡	‡	‡

Rounds to zero.

‡ Reporting standards not met.

* Value is significantly different ($p < .05$) from the value for the same jurisdiction and student group in 2017.

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 or above. At or above *Basic* includes *Basic*, *Proficient*, and *Advanced*. At or above *Proficient* includes *Proficient* and *Advanced*. Black includes African American and Hispanic includes Latino. Race categories exclude Hispanic origin. Detail may not sum to totals because of rounding. All differences were calculated and tested using unrounded numbers.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 2011–2017 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 5-A and 5-B show average scale scores and percentage of students by 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 2017, male students in Wyoming had an average score in mathematics (249) that was higher than that of female students (246). In 1992, male students in Wyoming had an average score in mathematics (227) that was higher than that of female students (224).
- In 2017, male students in Wyoming had an average scale score in mathematics (249) 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 (246) that was higher than that of female students across the nation (238).
- In Wyoming, the average scale score of male students in 2017 was higher than the scores of male students in 1992, 1996, 2000, 2003, 2005, 2007, 2009, 2011, and 2013, but not significantly different from the score of male students in 2015.
- In Wyoming, the average scale score of female students in 2017 was higher than the scores of female students in 1992, 1996, 2000, 2003, 2005, 2007, 2009, and 2011, but not significantly different from the scores of female students in 2013 and 2015.

Grade 4 Achievement-Level Results by Gender

- In the 2017 assessment, 53 percent of male students and 48 percent of female students performed at or above *Proficient* in Wyoming. The difference between these percentages was statistically significant.
- The percentage of male students in Wyoming's public schools who were at or above *Proficient* in 2017 (53 percent) was greater than that of male students in the nation (41 percent).
- The percentage of female students in Wyoming's public schools who were at or above *Proficient* in 2017 (48 percent) was greater than that of female students in the nation (38 percent).
- In Wyoming, the percentage of male students performing at or above *Proficient* in 2017 was greater than the corresponding percentages of students in 1992, 1996, 2000, 2003, 2005, 2007, 2009, 2011, and 2013, but not significantly different from the percentage of students in 2015.
- In Wyoming, the percentage of female students performing at or above *Proficient* in 2017 was greater than the corresponding percentages of students in 1992, 1996, 2000, 2003, 2005, 2007, 2009, and 2011, but not significantly different from the corresponding percentages of students in 2013 and 2015.

Grade 8 Scale Score Results by Gender

- In 2017, male students in Wyoming had an average score in mathematics (289) that was not significantly different from that of female students (289). This performance gap was narrower than that of 1990 (5 points).
- In 2017, male students in Wyoming had an average scale score in mathematics (289) that was higher than that of male students in public schools across the nation (282). Similarly, female students in Wyoming had an average scale score (289) that was higher than that of female students across the nation (282).
- In Wyoming, the average scale score of male students in 2017 was higher than the scores of male students in 1990, 1992, 1996, 2000, 2003, 2005, and 2015, but not significantly different from the scores of male students in 2007, 2009, 2011, and 2013.
- In Wyoming, the average scale score of female students in 2017 was higher than the scores of female students in 1990, 1992, 1996, 2000, 2003, 2005, 2009, and 2011, but not significantly different from the scores of female students in 2007, 2013, and 2015.

Grade 8 Achievement-Level Results by Gender

- In the 2017 assessment, 39 percent of male students and 38 percent of female students performed at or above *Proficient* in Wyoming. The difference between these percentages was not statistically significant.
- The percentage of male students in Wyoming's public schools who were at or above *Proficient* in 2017 (39 percent) was greater than 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 2017 (38 percent) was greater than that of female students in the nation (33 percent).
- In Wyoming, the percentage of male students performing at or above *Proficient* in 2017 was greater than the corresponding percentages of students in 1990, 1992, 1996, 2000, 2003, and 2005, but not significantly different from the corresponding percentages of students in 2007, 2009, 2011, 2013, and 2015.
- In Wyoming, the percentage of female students performing at or above *Proficient* in 2017 was greater than the corresponding percentages of students in 1990, 1992, 1996, 2000, 2003, 2005, and 2009, but not significantly different from the corresponding percentages of students in 2007, 2011, 2013, and 2015.

**Table
5-B**

The Nation's Report Card 2017 State Assessment

Percentage of eighth-grade public school students, average scale score, and achievement-level results in NAEP mathematics, by gender, year, and jurisdiction: Various years, 1990–2017

Gender, year, and jurisdiction		Percentage of students	Average scale score	Percent			
				Below <i>Basic</i>	At or above <i>Basic</i>	At or above <i>Proficient</i>	At <i>Advanced</i>
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
2011	Nation (public)	51	283	28*	72*	34	9*
	Wyoming	51	290	18	82	41	9
2013	Nation (public)	51	284*	27*	73*	35	9*
	Wyoming	52	290	18	82	39	7*
2015	Nation (public)	51	281	30	70	32*	8*
	Wyoming	52	286*	23	77	35	7*
2017	Nation (public)	51	282	31	69	34	11
	Wyoming	51	289	22	78	39	10

See notes at end of table.

**Table
5-B**

The Nation's Report Card 2017 State Assessment

Percentage of eighth-grade public school students, average scale score, and achievement-level results in NAEP mathematics, by gender, year, and jurisdiction: Various years, 1990–2017—Continued

Gender, year, and jurisdiction		Percentage of students	Average scale score	Percent			
				Below <i>Basic</i>	At or above <i>Basic</i>	At or above <i>Proficient</i>	At <i>Advanced</i>
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
2011	Nation (public)	49	282	28*	72*	33	7*
	Wyoming	49	285*	21	79	34	5*
2013	Nation (public)	49	283*	27*	73*	34	7*
	Wyoming	48	287	21	79	36	6
2015	Nation (public)	49	281	29	71	32	7*
	Wyoming	48	288	20	80	36	8
2017	Nation (public)	49	282	31	69	33	9
	Wyoming	49	289	20	80	38	8

* Value is significantly different ($p < .05$) from the value for the same jurisdiction and student group in 2017.

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 or above. At or above *Basic* includes *Basic*, *Proficient*, and *Advanced*. At or above *Proficient* includes *Proficient* and *Advanced*. Detail may not sum to totals because of rounding. All differences were calculated and tested using unrounded numbers.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 1990–2017 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 data for this category of students are included as an indicator of lower family income. NAEP first collected information on participation in this program in 1996; therefore, cross-year comparisons to assessments prior to 1996 cannot be made.

Tables 6-A and 6-B show average scale scores and percentage of students by 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 2017, students in Wyoming eligible for free/reduced-price lunch had an average mathematics scale score of 239. This was lower than that of students in Wyoming not eligible for this program (254).
- In 2017, 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 by 15 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 (239) in 2017 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 2017 that was higher than that of eligible students in 1996, 2000, 2003, and 2009, but not significantly different from that of eligible students in 2005, 2007, 2011, 2013, and 2015.

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

- In Wyoming, 38 percent of students who were eligible for free/reduced-price lunch and 60 percent of those who were not eligible for this program performed at or above *Proficient* in 2017. These percentages were significantly different from one another.
- For students in Wyoming in 2017 who were eligible for free/reduced-price lunch, the percentage at or above *Proficient* (38 percent) was greater than the corresponding percentage for their counterparts around the nation (25 percent).
- In Wyoming, the percentage of students eligible for free/reduced-price lunch who performed at or above *Proficient* in 2017 was greater than the corresponding percentages in 1996, 2000, 2003, 2007, 2009, and 2011, but not significantly different from the corresponding percentages in 2005, 2013, and 2015.

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

- In 2017, students in Wyoming eligible for free/reduced-price lunch had an average mathematics scale score of 276. This was lower than that of students in Wyoming not eligible for this program (296).
- In 2017, 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 by 20 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 (276) in 2017 that was higher than that of students in the nation who were eligible (267).
- In Wyoming, students eligible for free/reduced-price lunch had an average mathematics scale score in 2017 that was higher than that of eligible students in 1996, 2000, 2003, and 2005, but not significantly different from that of eligible students in 2007, 2009, 2011, 2013, and 2015.

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

- In Wyoming, 24 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 2017. These percentages were significantly different from one another.
- For students in Wyoming in 2017 who were eligible for free/reduced-price lunch, the percentage at or above *Proficient* (24 percent) was greater than the corresponding percentage for their counterparts around the nation (18 percent).
- In Wyoming, the percentage of students eligible for free/reduced-price lunch who performed at or above *Proficient* in 2017 was greater than the corresponding percentages in 1996, 2000, 2003, and 2005, but not significantly different from the corresponding percentages in 2007, 2009, 2011, 2013, and 2015.

**Table
6-B**

The Nation's Report Card 2017 State Assessment

Percentage of eighth-grade public school students, average scale score, and achievement-level results in NAEP mathematics, by National School Lunch Program eligibility status, year, and jurisdiction: Various years, 1996–2017

Eligibility status, year, and jurisdiction		Percentage of students	Average scale score	Percent			
				Below <i>Basic</i>	At or above <i>Basic</i>	At or above <i>Proficient</i>	At <i>Advanced</i>
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
2011	Nation (public)	48*	269*	41*	59*	19	2*
	Wyoming	35*	277	30	70	26	4
2013	Nation (public)	50	270*	39*	61*	20	3
	Wyoming	36	279	28	72	26	3
2015	Nation (public)	52*	268	42*	58*	18	2*
	Wyoming	35	274	35	65	20	3
2017	Nation (public)	49	267	45	55	18	3
	Wyoming	37	276	32	68	24	3

See notes at end of table.

**Table
6-B**

The Nation's Report Card 2017 State Assessment

Percentage of eighth-grade public school students, average scale score, and achievement-level results in NAEP mathematics, by National School Lunch Program eligibility status, year, and jurisdiction:
Various years, 1996–2017—Continued

Eligibility status, year, and jurisdiction		Percentage of students	Average scale score	Percent			
				Below <i>Basic</i>	At or above <i>Basic</i>	At or above <i>Proficient</i>	At <i>Advanced</i>
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*
2011	Nation (public)	52*	295	16*	84*	47	13*
	Wyoming	65*	293*	14	86	43	9*
2013	Nation (public)	50	297	14*	86*	49	14*
	Wyoming	63	294*	14	86	45	9*
2015	Nation (public)	47*	296	16*	84*	48	13*
	Wyoming	64	294	14	86	44	10*
2017	Nation (public)	50	297	17	83	48	16
	Wyoming	62	296	14	86	47	13

See notes at end of table.

**Table
6-B**

The Nation's Report Card 2017 State Assessment

Percentage of eighth-grade public school students, average scale score, and achievement-level results in NAEP mathematics, by National School Lunch Program eligibility status, year, and jurisdiction:
Various years, 1996–2017—Continued

Eligibility status, year, and jurisdiction		Percentage of students	Average scale score	Percent			
				Below <i>Basic</i>	At or above <i>Basic</i>	At or above <i>Proficient</i>	At <i>Advanced</i>
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	#	‡	‡	‡	‡	‡
2011	Nation (public)	#*	275*	37*	63*	26*	6*
	Wyoming	#	‡	‡	‡	‡	‡
2013	Nation (public)	1*	285	29	71	39	13
	Wyoming	#*	‡	‡	‡	‡	‡
2015	Nation (public)	1	293	21	79	45	17
	Wyoming	#	‡	‡	‡	‡	‡
2017	Nation (public)	1	293	23	77	46	17
	Wyoming	1	‡	‡	‡	‡	‡

Rounds to zero.

‡ Reporting standards not met.

* Value is significantly different ($p < .05$) from the value for the same jurisdiction and student group in 2017.

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 or above. At or above *Basic* includes *Basic*, *Proficient*, and *Advanced*. At or above *Proficient* includes *Proficient* and *Advanced*. Detail may not sum to totals because of rounding. All differences were calculated and tested using unrounded numbers.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 1996–2017 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 results for 2007, 2009, 2011, 2013, 2015, and 2017 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 7-A and 7-B show average scale scores and percentage of students by achievement-level data for public school students at grades 4 and 8 in Wyoming and the nation, by type of location (for 2007, 2009, 2011, 2013, 2015, and 2017 only).

Grade 4 Scale Score Results by Type of Location

- In 2017, the average scale score of students in Wyoming attending public schools in city locations was not significantly different from the scores of students in suburban, town, and rural schools.
- In 2017, students attending public schools in city, town, and rural locations in Wyoming had average scale scores that were higher than the average scale scores of students in city, town, and rural locations in the nation.
- In 2017, students attending public schools in suburban locations in Wyoming had an average scale score that was not significantly different from the average scale score of students in suburban locations in the nation.
- In 2017, students attending public schools in city locations in Wyoming had an average scale score that was higher than the average scale score of students in city locations in 2007 and 2009 in Wyoming, but not significantly different from the average scale score of students in city locations in 2011, 2013, and 2015 in Wyoming.
- In 2017, students attending public schools in suburban locations in Wyoming had an average scale score that was not significantly different from the average scale score of students in suburban locations in 2007, 2011, 2013, and 2015 in Wyoming.
- In 2017, students attending public schools in town locations in Wyoming had an average scale score that was higher than the average scale score of students in town locations in 2007, 2009, and 2011 in Wyoming, but not significantly different from the average scale score of students in town locations in 2013 and 2015 in Wyoming.
- In 2017, students attending public schools in rural locations in Wyoming had an average scale score that was higher than the average scale score of students in rural locations in 2009 in Wyoming, but not significantly different from the average scale score of students in rural locations in 2007, 2011, 2013, and 2015 in Wyoming.

Grade 4 Achievement-Level Results by Type of Location

- In 2017, the percentage of students in Wyoming's public schools in city locations who performed at or above *Proficient* was not significantly different from the corresponding percentages of students in suburban, town, and rural schools.
- The percentages of students in Wyoming's public schools in city, town, and rural locations who performed at or above *Proficient* in 2017 were greater than those of students in city, town, and rural locations in the nation.
- The percentage of students in Wyoming's public schools in suburban locations who performed at or above *Proficient* in 2017 was not significantly different from those of students in suburban locations in the nation.

- The percentage of students in Wyoming's public schools in city locations who performed at or above *Proficient* in 2017 was greater than that of students in city locations in 2007 and 2009 in Wyoming, but not significantly different from that of students in city locations in 2011, 2013, and 2015 in Wyoming.
- The percentage of students in Wyoming's public schools in suburban locations who performed at or above *Proficient* in 2017 was not significantly different from that of students in suburban locations in 2007, 2011, 2013, and 2015 in Wyoming.
- The percentage of students in Wyoming's public schools in town locations who performed at or above *Proficient* in 2017 was greater than that of students in town locations in 2007, 2009, and 2011 in Wyoming, but not significantly different from that of students in town locations in 2013 and 2015 in Wyoming.
- The percentage of students in Wyoming's public schools in rural locations who performed at or above *Proficient* in 2017 was greater than that of students in rural locations in 2009 in Wyoming, but not significantly different from that of students in rural locations in 2007, 2011, 2013, and 2015 in Wyoming.

Grade 8 Scale Score Results by Type of Location

- In 2017, the average scale score of students in Wyoming attending public schools in city locations was lower than the scores of students in town and rural schools.
- In 2017, students attending public schools in city, town, and rural locations in Wyoming had average scale scores that were higher than the average scale scores of students in city, town, and rural locations in the nation.
- In 2017, students attending public schools in city locations in Wyoming had an average scale score that was not significantly different from the average scale score of students in city locations in 2007, 2009, 2011, 2013, and 2015 in Wyoming.
- In 2017, students attending public schools in town locations in Wyoming had an average scale score that was higher than the average scale score of students in town locations in 2009 in Wyoming, but not significantly different from the average scale score of students in town locations in 2007, 2011, 2013, and 2015 in Wyoming.
- In 2017, students attending public schools in rural locations in Wyoming had an average scale score that was higher than the average scale score of students in rural locations in 2007 in Wyoming, but not significantly different from the average scale score of students in rural locations in 2009, 2011, 2013, and 2015 in Wyoming.

Grade 8 Achievement-Level Results by Type of Location

- In 2017, the percentage of students in Wyoming's public schools in city locations who performed at or above *Proficient* was smaller than the percentage of students in town schools, but was not significantly different from the percentage of students in rural schools.
- The percentages of students in Wyoming's public schools in city, town, and rural locations who performed at or above *Proficient* in 2017 were greater than those of students in city, town, and rural locations in the nation.
- The percentages of students in Wyoming's public schools in city and rural locations who performed at or above *Proficient* in 2017 were not significantly different from those of students in city and rural locations in 2007, 2009, 2011, 2013, and 2015 in Wyoming.
- The percentage of students in Wyoming's public schools in town locations who performed at or above *Proficient* in 2017 was greater than that of students in town locations in 2009 in Wyoming, but not significantly different from that of students in town locations in 2007, 2011, 2013, and 2015 in Wyoming.

**Table
7-B**

The Nation's Report Card 2017 State Assessment

Percentage of eighth-grade public school students, average scale score, and achievement-level results in NAEP mathematics, by type of location, year, and jurisdiction: Various years, 2007–2017

Type of location, year, and jurisdiction		Percentage of students	Average scale score	Percent			
				Below <i>Basic</i>	At or above <i>Basic</i>	At or above <i>Proficient</i>	At <i>Advanced</i>
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
2011	Nation (public)	29	277	34*	66*	29	7*
	Wyoming	23*	286	21	79	34	7
2013	Nation (public)	28	278	34*	66*	29	7
	Wyoming	23*	287	20	80	36	5
2015	Nation (public)	29	276	35	65	28	7
	Wyoming	28*	284	24	76	33	5
2017	Nation (public)	29	277	37	63	29	9
	Wyoming	30	284	25	75	33	6
Suburb							
2007	Nation (public)	36*	285*	26	74	36*	9*
	Wyoming	#	‡	‡	‡	‡	‡
2009	Nation (public)	36*	286	25*	75*	37	10*
	Wyoming	#	‡	‡	‡	‡	‡
2011	Nation (public)	36*	286	25*	75*	37	9*
	Wyoming	#	‡	‡	‡	‡	‡
2013	Nation (public)	35*	288	24*	76*	39	10*
	Wyoming	#	‡	‡	‡	‡	‡
2015	Nation (public)	41	285	26	74	37	10*
	Wyoming	#	‡	‡	‡	‡	‡
2017	Nation (public)	41	287	27	73	39	12
	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*
2011	Nation (public)	13*	281*	28*	72*	31*	6
	Wyoming	41*	290	18	82	39	8
2013	Nation (public)	13*	281*	28*	72*	32*	6
	Wyoming	48	290	18	82	39	8
2015	Nation (public)	12	279	30	70	28	5
	Wyoming	51*	289	20	80	37	9
2017	Nation (public)	11	278	33	67	28	6
	Wyoming	48	292	18	82	41	11

See notes at end of table.

**Table
7-B**

The Nation's Report Card 2017 State Assessment

Percentage of eighth-grade public school students, average scale score, and achievement-level results in NAEP mathematics, by type of location, year, and jurisdiction: Various years, 2007–2017—Continued

Type of location, year, and jurisdiction		Percentage of students	Average scale score	Percent			
				Below <i>Basic</i>	At or above <i>Basic</i>	At or above <i>Proficient</i>	At <i>Advanced</i>
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
2011	Nation (public)	23*	286*	23*	77*	35*	7
	Wyoming	36*	287	20	80	38	7
2013	Nation (public)	24*	286*	24*	76*	36*	8
	Wyoming	29*	287	20	80	37	5*
2015	Nation (public)	19	282	27	73	31	6*
	Wyoming	22	285	23	77	35	7
2017	Nation (public)	19	282	29	71	32	8
	Wyoming	22	289	20	80	39	10

Rounds to zero.

‡ Reporting standards not met.

* Value is significantly different ($p < .05$) from the value for the same jurisdiction and student group in 2017.

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 or above. At or above *Basic* includes *Basic*, *Proficient*, and *Advanced*. At or above *Proficient* includes *Proficient* and *Advanced*. Detail may not sum to totals because of rounding. All differences were calculated and tested using unrounded numbers.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 2007–2017 Mathematics Assessments.

A More Inclusive NAEP: Students With Disabilities and/or 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.

Exclusion and accommodation rates may vary across jurisdictions. In addition, exclusion and accommodation rates may vary between assessment years, making it difficult to interpret comparisons over time within jurisdictions. Since SD and/or ELL students tend to score below average, 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 SD and/or ELL students 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 grades 4 and 8 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 grades 4 and 8 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 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 scores, and their performance in terms of the percentages below *Basic*, 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 2017 State Assessment

Percentage of fourth-grade public school students identified as students with disabilities (SD) and/or English language learners (ELL) excluded and assessed in NAEP mathematics as a percentage of all students, by assessment year and testing status: Various years, 1992–2017

Year and testing status		SD and/or ELL		SD		ELL	
		Wyoming	Nation (public)	Wyoming	Nation (public)	Wyoming	Nation (public)
1992 ¹	Identified	10	10	9	7	1	3
	Excluded	4	7	3	5	#	2
	Assessed without accommodations	7	4	6	3	1	1
1996 ¹	Identified	13	16	12	12	1	4
	Excluded	4	6	4	5	#	2
	Assessed without accommodations	9	9	8	7	#	2
2000	Identified	15	19	14	13	2	7
	Excluded	2	4	2	3	#	1
	Assessed without accommodations	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 without accommodations	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 without accommodations	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 without accommodations	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 without accommodations	5	9	4	3	1	6
	Assessed with accommodations	12	11	11	8	1	4
2011	Identified	19	23	16	13	4	11
	Excluded	2	2	2	2	#	#
	Assessed without accommodations	5	9	4	3	2	6
	Assessed with accommodations	12	12	11	9	2	4
2013	Identified	18	23	15	14	3	11
	Excluded	1	2	1	1	#	#
	Assessed without accommodations	4	7	3	2	1	5
	Assessed with accommodations	13	14	11	10	2	5
2015	Identified	18	24	15	14	4	12
	Excluded	1	2	1	1	#	1
	Assessed without accommodations	4	8	3	3	2	6
	Assessed with accommodations	13	14	12	11	2	5
2017	Identified	17	25	15	15	3	12
	Excluded	1	2	1	2	#	1
	Assessed without accommodations	5	10	4	4	1	7
	Assessed with accommodations	10	13	10	9	1	5

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, 1992–2017 Mathematics Assessments.

**Table
8-B**

The Nation's Report Card 2017 State Assessment

Percentage of eighth-grade public school students identified as students with disabilities (SD) and/or English language learners (ELL) excluded and assessed in NAEP mathematics as a percentage of all students, by assessment year and testing status: Various years, 1990–2017

Year and testing status		SD and/or ELL		SD		ELL	
		Wyoming	Nation (public)	Wyoming	Nation (public)	Wyoming	Nation (public)
1990 ¹	Identified	8	—	8	—	1	—
	Excluded	3	—	3	—	#	—
	Assessed without accommodations	5	—	4	—	#	—
1992 ¹	Identified	9	10	9	8	#	2
	Excluded	4	6	4	5	#	2
	Assessed without accommodations	5	4	5	3	#	1
1996 ¹	Identified	10	11	10	9	1	3
	Excluded	2	5	2	4	#	1
	Assessed without accommodations	8	7	8	5	1	2
2000	Identified	13	14	12	11	2	4
	Excluded	1	4	1	3	#	1
	Assessed without accommodations	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 without accommodations	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 without accommodations	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 without accommodations	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 without accommodations	3	5	2	2	1	3
	Assessed with accommodations	10	10	10	8	1	2
2011	Identified	14	18	13	13	2	6
	Excluded	1	3	1	2	#	#
	Assessed without accommodations	2	5	1	2	1	3
	Assessed with accommodations	11	10	10	9	1	2
2013	Identified	16	17	14	13	2	6
	Excluded	2	2	1	1	#	#
	Assessed without accommodations	2	3	1	1	#	2
	Assessed with accommodations	13	12	11	10	2	3
2015	Identified	16	19	14	13	3	7
	Excluded	1	2	1	1	#	#
	Assessed without accommodations	2	5	1	1	1	3
	Assessed with accommodations	13	13	12	11	1	3
2017	Identified	15	20	14	14	2	7
	Excluded	1	2	1	1	#	1
	Assessed without accommodations	3	6	2	3	1	3
	Assessed with accommodations	11	12	11	10	1	3

— Not available.

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, 1990–2017 Mathematics Assessments.

**Table
9-B**

The Nation's Report Card 2017 State Assessment

Percentage of eighth-grade public school students, average scale score, and achievement-level results in NAEP mathematics, by students with disabilities (SD) status, year, and jurisdiction: Various years, 2000-2017

SD status, year, and jurisdiction		Percentage of students	Average scale score	Percent			
				Below <i>Basic</i>	At or above <i>Basic</i>	At or above <i>Proficient</i>	At <i>Advanced</i>
SD							
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
2011	Nation (public)	11*	249*	65*	35*	9	2
	Wyoming	12	253	60	40	9	1
2013	Nation (public)	12*	248*	66*	34*	8	1*
	Wyoming	13	256	58	42	9	1
2015	Nation (public)	12*	246	68	32	8	1*
	Wyoming	13	254	62	38	7	#
2017	Nation (public)	13	246	70	30	8	2
	Wyoming	13	254	61	39	8	1

See notes at end of table.

**Table
9-B**

The Nation's Report Card 2017 State Assessment

Percentage of eighth-grade public school students, average scale score, and achievement-level results in NAEP mathematics, by students with disabilities (SD) status, year, and jurisdiction: Various years, 2000–2017—Continued

SD status, year, and jurisdiction		Percentage of students	Average scale score	Percent			
				Below <i>Basic</i>	At or above <i>Basic</i>	At or above <i>Proficient</i>	At <i>Advanced</i>
Not SD							
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*
2011	Nation (public)	89*	287	23*	77*	36	9*
	Wyoming	88	292	14	86	41	8*
2013	Nation (public)	88*	288*	22*	78*	38	9*
	Wyoming	87	293	14	86	42	7*
2015	Nation (public)	88*	286	24	76	36	9*
	Wyoming	87	292	15	85	40	8*
2017	Nation (public)	87	287	25	75	37	11
	Wyoming	87	294	15	85	43	11

Rounds to zero.

* Value is significantly different ($p < .05$) from the value for the same jurisdiction and student group in 2017.

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 or above. At or above *Basic* includes *Basic*, *Proficient*, and *Advanced*. At or above *Proficient* includes *Proficient* and *Advanced*. 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. All differences were calculated and tested using unrounded numbers.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 2000–2017 Mathematics Assessments.

**Table
10-B**

The Nation's Report Card 2017 State Assessment

Percentage of eighth-grade public school students, average scale score, and achievement-level results in NAEP mathematics, by English language learner (ELL) status, year, and jurisdiction: Various years, 2000-2017

ELL status, year, and jurisdiction		Percentage of students	Average scale score	Percent			
				Below <i>Basic</i>	At or above <i>Basic</i>	At or above <i>Proficient</i>	At <i>Advanced</i>
ELL							
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	‡	‡	‡	‡	‡
2011	Nation (public)	6*	244	72	28	5	1
	Wyoming	2	‡	‡	‡	‡	‡
2013	Nation (public)	5*	245	69	31	5	1
	Wyoming	2	‡	‡	‡	‡	‡
2015	Nation (public)	6	246	69	31	5	1
	Wyoming	3*	‡	‡	‡	‡	‡
2017	Nation (public)	6	245	72	28	6	1
	Wyoming	2	‡	‡	‡	‡	‡

See notes at end of table.

**Table
10-B**

The Nation's Report Card 2017 State Assessment

Percentage of eighth-grade public school students, average scale score, and achievement-level results in NAEP mathematics, by English language learner (ELL) status, year, and jurisdiction: Various years, 2000–2017—Continued

ELL status, year, and jurisdiction		Percentage of students	Average scale score	Percent			
				Below <i>Basic</i>	At or above <i>Basic</i>	At or above <i>Proficient</i>	At <i>Advanced</i>
Not ELL							
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*
2011	Nation (public)	94*	285	25*	75*	35	8*
	Wyoming	98	288	19	81	38	7*
2013	Nation (public)	95*	286	25*	75*	36	9*
	Wyoming	98	289	18	82	38	7*
2015	Nation (public)	94	284	27	73	34	8*
	Wyoming	97*	288	20	80	36	7
2017	Nation (public)	94	284	28	72	35	10
	Wyoming	98	290	20	80	39	9

Rounds to zero.

‡ Reporting standards not met.

* Value is significantly different ($p < .05$) from the value for the same jurisdiction and student group in 2017.

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 or above. At or above *Basic* includes *Basic*, *Proficient*, and *Advanced*. At or above *Proficient* includes *Proficient* and *Advanced*. 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. All differences were calculated and tested using unrounded numbers.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 2000–2017 Mathematics Assessments.

**Table
11-A**

The Nation's Report Card 2017 State Assessment

Number of fourth-grade public school students assessed in NAEP mathematics and weighted percentage excluded, by state/jurisdiction: 2017

State/jurisdiction	Number assessed	Weighted percentage excluded
Nation (public)	144,000	2
Alabama	2,200	1
Alaska	2,200	1
Arizona	2,300	2
Arkansas	2,300	2
California	6,000	3
Colorado	3,100	1
Connecticut	2,300	2
Delaware	2,300	2
Florida	5,600	3
Georgia	3,600	2
Hawaii	2,300	3
Idaho	2,400	1
Illinois	3,600	2
Indiana	2,400	1
Iowa	2,300	2
Kansas	2,300	1
Kentucky	3,200	2
Louisiana	2,300	2
Maine	2,100	1
Maryland	3,300	1
Massachusetts	3,500	2
Michigan	3,100	3
Minnesota	2,400	2
Mississippi	2,400	1
Missouri	2,300	1
Montana	2,300	1
Nebraska	2,300	2
Nevada	2,400	1
New Hampshire	2,300	1
New Jersey	2,200	2
New Mexico	2,800	2
New York	3,100	2
North Carolina	4,300	2
North Dakota	2,300	1
Ohio	3,100	2
Oklahoma	2,400	2
Oregon	2,200	2
Pennsylvania	3,300	2
Rhode Island	2,400	2
South Carolina	2,400	1
South Dakota	2,300	1
Tennessee	3,200	2
Texas	7,500	3
Utah	2,300	2
Vermont	2,300	1
Virginia	2,300	2
Washington	2,400	2
West Virginia	2,300	1
Wisconsin	3,300	2
Wyoming	2,400	1
Puerto Rico	3,000	0
Other jurisdictions		
District of Columbia	2,200	2
DoDEA ¹	2,300	1

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

NOTE: The number of students assessed is 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), 2017 Mathematics Assessment.

**Table
11-B**

The Nation's Report Card 2017 State Assessment

Number of eighth-grade public school students assessed in NAEP mathematics and weighted percentage excluded, by state/jurisdiction: 2017

State/jurisdiction	Number assessed	Weighted percentage excluded
Nation (public)	140,200	2
Alabama	2,300	2
Alaska	2,200	2
Arizona	2,300	1
Arkansas	2,300	2
California	5,900	2
Colorado	3,100	2
Connecticut	2,300	2
Delaware	2,400	2
Florida	5,700	3
Georgia	3,300	2
Hawaii	2,200	2
Idaho	2,400	1
Illinois	3,500	1
Indiana	2,300	2
Iowa	2,500	1
Kansas	2,200	1
Kentucky	3,100	1
Louisiana	2,100	3
Maine	2,200	2
Maryland	3,200	2
Massachusetts	3,100	2
Michigan	3,000	3
Minnesota	2,300	2
Mississippi	2,300	1
Missouri	2,300	2
Montana	2,300	1
Nebraska	2,400	2
Nevada	2,400	2
New Hampshire	2,200	1
New Jersey	2,300	2
New Mexico	2,900	2
New York	2,900	2
North Carolina	4,300	2
North Dakota	2,300	2
Ohio	2,900	2
Oklahoma	2,300	2
Oregon	2,100	1
Pennsylvania	3,000	2
Rhode Island	2,200	2
South Carolina	2,500	1
South Dakota	2,300	3
Tennessee	3,100	2
Texas	7,300	2
Utah	2,300	1
Vermont	2,100	1
Virginia	2,200	2
Washington	2,200	2
West Virginia	2,200	2
Wisconsin	3,100	2
Wyoming	2,500	1
Puerto Rico	3,100	0
Other jurisdictions		
District of Columbia	1,400	2
DoDEA ¹	1,600	1

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

NOTE: The number of students assessed is 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), 2017 Mathematics Assessment.

Where to Find More Information

The NAEP Mathematics Assessment

The latest news about the NAEP 2017 mathematics assessment and the results can be found on the NAEP website at <http://nces.ed.gov/nationsreportcard/mathematics>. 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 *Mathematics Framework for the 2017 National Assessment of Educational Progress*, on which this assessment is based, is available at the National Assessment Governing Board website at <https://www.nagb.org/content/nagb/assets/documents/publications/frameworks/mathematics/2017-mathematics-framework.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 districts, states, and the nation. Data tables are also available for districts, with all contextual 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 Instruments 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 SD and/or ELL students 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 22207
Alexandria, VA 22304

Call toll free: 1-877-4ED-Pubs (1-877-433-7827)
TTY/TDD: 1-877-576-7734
FAX: 1-703-605-6794
Order online at: <http://www.edpubs.gov>.

The NAEP State Report Generator was developed for the NAEP 2017 reports by Phillip Leung, Patricia Donahue, Marc Berger, Rick Hasney, and Ming Kuang.

What is the Nation's Report Card™?

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

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

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

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