Wyoming

Grades 4 and 8 Public Schools State Report Mathematics 2019

This report provides selected results for Wyoming's public school students at grades 4 and 8 from the 2019 National Assessment of Educational Progress (NAEP) assessment in mathematics. Results are reported by average scale scores and by NAEP achievement levels (*NAEP Basic, NAEP Proficient,* and *NAEP Advanced*).

State-level results in mathematics are available for 13 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, 2017, and 2019), although not all states may have participated or met the criteria for reporting in every assessment year. All 50 states, the District of Columbia, Department of Defense Education Activity (DoDEA) schools, and Puerto Rico participated in the 2019 mathematics assessment at grades 4 and 8.

For more information about the assessment, visit the NAEP page of the NCES website at: https://nces.ed.gov/nationsreportcard/, which contains

- The Nation's Report Card[™], Mathematics 2019,
- The full set of national, state, and district results in an interactive database, and
- Released test questions, scoring guides, and item-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 2019

Grade 4:

- In 2019, the average mathematics scale score for fourth-grade students in Wyoming was 246. This was higher than that for the nation's public schools (240).
- The average scale score for students in Wyoming in 2019 (246) was higher than that in 1992 (225) and was lower than that in 2017 (248).
- In 2019, the percentage of students in Wyoming who performed at or above *NAEP Proficient* was 48 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 *NAEP Proficient* in 2019 (48 percent) was greater than that in 1992 (19 percent) and was not significantly different from that in 2017 (51 percent).
- In 2019, the percentage of students in Wyoming who performed at or above *NAEP Basic* was 87 percent. This was greater than that for the nation's public schools (80 percent).
- The percentage of students in Wyoming who performed at or above *NAEP Basic* in 2019 (87 percent) was greater than that in 1992 (69 percent) and was not significantly different from that in 2017 (89 percent).

Grade 8:

- In 2019, the average mathematics scale score for eighth-grade students in Wyoming was 286. This was higher than that for the nation's public schools (281).
- The average scale score for students in Wyoming in 2019 (286) was higher than that in 1990 (272) and was lower than that in 2017 (289).
- In 2019, the percentage of students in Wyoming who performed at or above *NAEP Proficient* was 37 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 *NAEP Proficient* in 2019 (37 percent) was greater than that in 1990 (19 percent) and was not significantly different from that in 2017 (38 percent).
- In 2019, the percentage of students in Wyoming who performed at or above NAEP Basic was 76 percent. This
 was greater than that for the nation's public schools (68 percent).
- The percentage of students in Wyoming who performed at or above *NAEP Basic* in 2019 (76 percent) was greater than that in 1990 (64 percent) and was smaller than that in 2017 (79 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 National Assessment of Educational Progress (NAEP) mathematics assessment measures students' knowledge and skills in mathematics and their ability to solve problems in mathematical and real-world contexts. Performance results are reported for the nation overall, for states and jurisdictions, and for 27 districts participating in the Trial Urban District Assessment (TUDA). The 2019 NAEP mathematics assessment was the second digitally based assessment. In 2017, the NAEP mathematics assessment transitioned from a paper-based assessment (PBA) to a digitally based assessment (DBA) at grades 4 and 8. A multi-step process was used for the transition from PBA to DBA, with the careful intent to preserve trend lines that show student performance over time. The process involved administering the assessment in both the DBA and PBA formats to randomly equivalent groups of students and ensured that the results from the 2017 and 2019 mathematics assessments could be compared to results from previous years. The 2019 mathematics DBA continues the mathematics trend line that extends back to 1990 at grade 8 and 1992 at both grades 4 and 8.

The NAEP Mathematics Assessment Framework

The National Assessment Governing Board oversees the development of NAEP frameworks that describe the subject-specific knowledge and thinking skills to be assessed in each subject and how the assessment questions should be designed and scored. The NAEP mathematics assessment framework specifies five broad content areas and three levels of mathematical complexity.

Mathematics Content Areas

To ensure a balance of content and to allow students to demonstrate a variety of ways of knowing and doing mathematics, the framework specifies assessing fourth- and eighth-grade students in five broad areas of mathematical content. This division into content areas is not intended to separate mathematics into discrete elements, but to provide a helpful classification scheme that describes the full spectrum of mathematical content assessed by NAEP.

- Number properties and operations measures students' understanding of ways to represent, calculate, and estimate with numbers.
- **Measurement** assesses students' knowledge, including the use of instruments and the application of processes for attributes such 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.

Levels of Mathematical Complexity

Each NAEP question assesses an objective that can be associated with one of the mathematics content areas. Each question also makes certain demands on students' thinking. These demands determine the mathematical complexity of an item. Mathematical complexity deals with what the students are asked to do in a question. Incorporating levels of complexity in assessment design allows for a balanced testing of mathematical thinking. The framework describes three levels of mathematical complexity.

- Low complexity questions typically specify what a student is to do, which usually involves carrying 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 on students' thinking 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 https://nces.ed.gov/nationsreportcard/data/.

Some questions in the 2019 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 (DoDEA) schools, and Puerto Rico participated in the 2019 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 (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 in NAEP state-level assessment since 2003. Participation rates for the 2019 mathematics assessment are available on the NAEP website at https://www.nationsreportcard.gov/mathematics/about/samples?anchor=footer&grade=4.

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 (BIE) schools.

How Is Student Mathematics Performance Reported?

The 2019 state results are compared to results from 11 earlier assessments at grade 4 and from 12 earlier assessments at grade 8.

Scale Scores: Student performance is reported as an average scale 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.

NAEP Achievement Levels: NAEP 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 (*NAEP Basic*, *NAEP Proficient*, and *NAEP Advanced*). Students performing at or above the *NAEP 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 judgments of a broadly representative panel of teachers, education specialists, and members of the general public. The authorizing legislation for NAEP requires that the achievement levels be used on a trial basis until the Commissioner of the National Center for Education Statistics (NCES) determines that the achievement levels are reasonable, valid, and informative to the public (20 USC § 9622(e)(2) (C)). The NCES Commissioner's determination is to be based on a congressionally mandated, rigorous, and independent evaluation. The latest evaluation of the achievement levels was conducted by a committee convened by the National Academies of Sciences, Engineering, and Medicine in 2016. The evaluation concluded that further evidence should be gathered to determine whether the achievement levels are reasonable, valid, and informative. Accordingly, the NCES Commissioner determined that the trial status of the achievement levels should be maintained at this time. Read more about how NAEP achievement levels are set. In 2018, the National Assessment Governing Board issued a revised Policy Statement clarifying that the NAEP Proficient level is not intended to reflect grade-level performance expectations but is specific to performance on NAEP assessments. Read the Governing Board Policy Statement here.

- NAEP Basic, one of the three NAEP achievement levels, denoting partial mastery of prerequisite knowledge
 and skills that are fundamental for performance at the NAEP Proficient level. NAEP also reports the proportion
 of students whose scores place them below the NAEP Basic achievement level.
- NAEP Proficient, one of the three NAEP achievement levels, representing solid academic performance for
 each NAEP assessment. Students reaching this level have demonstrated competency over challenging
 subject matter, including subject-matter knowledge, application of such knowledge to real-world situations, and
 analytical skills appropriate to the subject matter.
- NAEP Advanced, one of the three NAEP achievement levels, denoting superior performance beyond NAEP
 Proficient.

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

As provided by law, NCES, upon review of congressionally mandated evaluations of NAEP, has determined that NAEP 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 NAEP achievement-level descriptions are summarized in Figures 1-A and 1-B.

Figure 1-A

The Nation's Report Card 2019 State Assessment

Descriptions of fourth-grade NAEP achievement levels for 2019 NAEP mathematics assessment

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

Level (214)

Fourth-graders performing at the *NAEP 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.

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

Level

(249)

Fourth-graders performing at the *NAEP 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 *NAEP 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.

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

Level
(282)

Fourth-graders performing at the *NAEP 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 to 500 scale at which the NAEP achievement-level range begins. SOURCE: National Assessment Governing Board. (2018). Mathematics Framework for the 2019 National Assessment of Educational Progress. Washington, DC.

The Nation's Report Card 2019 State Assessment

Figure 1-B

Descriptions of eighth-grade NAEP achievement levels for 2019 NAEP mathematics assessment

NAEP Eighth-grade students performing at the NAEP 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.

(262)

Eighth-graders performing at the *NAEP 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 *NAEP Proficient* level, students at the *NAEP 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.

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

(299)

Eighth-graders performing at the *NAEP 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 *NAEP 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.

NAEP Eighth-grade students performing at the NAEP Advanced level should be able to reach beyond the recognition,

Advanced identification, and application of mathematical rules in order to generalize and synthesize concepts and principles

Level in the five NAEP content areas.

(333)

Eighth-graders performing at the *NAEP 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 *NAEP 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 to 500 scale at which the NAEP achievement-level range begins. SOURCE: National Assessment Governing Board. (2018). *Mathematics Framework for the 2019 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, 2017 and 2019).

2019 NAEP Digitally Based Mathematics Assessment

The 2019 NAEP digitally based mathematics assessment was designed to continue reporting trends in student performance dating back to 1990, while keeping pace with the new generation of classroom environments in which digital technology has become an increasing part of students' learning. The 2019 assessment content was developed with the same mathematics framework used to develop the 2009 through 2015 paper-based assessments and the 2017 digitally based assessment.

At grades 4 and 8, approximately two-thirds of the questions from the 2015 paper-based assessment were adapted to the 2017 digitally based assessment. The previously used paper-based assessment questions were adapted to fit a tablet screen but the mathematical content was not changed. The goal of adapting questions was to retain the same measurement targets as the original version of the question. At each grade, six of the ten assessment blocks used only questions that had been adapted from the 2015 paper-based assessment and were assembled to be as similar as possible to corresponding paper-based blocks. Four of the ten blocks consisted of new questions developed for digital administration.

The assessment was administered on tablet computers supplied by NAEP using a secure, local NAEP network. This allowed the NAEP administrators to create a stable administration environment that would not be influenced by school-based equipment or school internet connectivity, thereby maintaining consistency across the assessed schools. Students were able to interact with the tablets via touchscreen, with an attached keyboard, or using a stylus provided by NAEP. The digitally based mathematics assessment provided students with a variety of onscreen tools, including an equation editor for entering numbers and expressions using the correct mathematical symbols; a scratchwork tool for annotating figures, performing computations, drawing diagrams, and highlighting portions of a question; and a calculator. At the beginning of the assessment session, students viewed an interactive tutorial that provided the information needed to take the assessment on tablet; for example, it explains how to progress through questions, how to indicate answers for multiple choice questions, and how to use onscreen tools effectively when answering questions. The interactive nature of the tutorial allowed students to familiarize themselves with the digital delivery system before beginning the actual assessment. See how the mathematics digitally based assessment was presented to students.

In addition to the digitally based assessment, a random subsample of students was administered the complete 2015 paper-based version of the assessment in 2017. NAEP administered the assessment in both modes—paper-based and digitally based—in all the sampled schools to investigate potential differences in performance between students taking the assessment on a tablet and students taking the paper-based assessment. However, in schools with fewer than 21 students, all students were assigned to either the digitally or paper-based assessment. Each participating student, however, took the assessment in only one mode. See how mathematics questions looked in the paper-based version of the grade 4 and grade 8 assessments and how the same questions appeared in the digitally based

version.

After the administration of the assessment, the National Center for Education Statistics (NCES) conducted rigorous analyses of the data and aligned the 2017 results to previous assessment years using a two-step process.

- First, common item linking was used to calculate the trend line from 2015 to 2017 based on the paper-based assessment results. This kind of linking was possible because the majority of 2017 assessment questions were also administered in 2015 and showed the same statistical properties.
- Second, common population linking was used to align the 2017 paper-based assessment results with the
 2017 digital assessment results. This kind of linking was possible because the samples of students for each
 assessment mode were randomly equivalent; that is, each random sample included students from the same
 school, ensuring that the students' educational experiences and characteristics were equivalent.

Once the common population linking aligned the digital results to the paper results on the national level, the analyses evaluated whether the linking allowed for fair and meaningful comparisons for national student groups as well as for states and districts. These evaluations supported making trend comparisons between the digital assessment and previous paper-based assessments for subgroups, states, and districts.

These analyses—common item linking based on paper results and common population linking of paper results to digital results—enabled NCES to successfully maintain the mathematics trend line while transitioning to digital assessment in 2017 and to continue the trend line for the 2019 and subsequent digital assessments.

Interpreting the 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 scale 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 2019 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 2019 Mathematics Overall Average Score and NAEP 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 (https://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 Average Scale Score Results

Student performance is reported as an average scale 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 since 2003. The first column of results presents the average scale 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 Average Scale Score Results

- In 2019, the average scale score for students in Wyoming was 246. This was higher than that for students across the nation (240).
- In Wyoming, the average scale score for students in 2019 was lower than that in 2017 (248). However, the
 average scale score for students in public schools across the nation in 2019 was higher than that in 2017
 (239).
- In Wyoming, the average scale score for students in 2019 was higher than the scores in 1992, 1996, 2000, 2003, 2005, 2007, 2009, and 2011. However, it was lower than the score in 2017.

Grade 8 Average Scale Score Results

- In 2019, the average scale score for students in Wyoming was 286. This was higher than that for students across the nation (281).
- In Wyoming, the average scale score for students in 2019 was lower than that in 2017 (289). Similarly, the
 average scale score for students in public schools across the nation in 2019 was lower than that in 2017 (282).
- In Wyoming, the average scale score for students in 2019 was higher than the scores in 1990, 1992, 1996, 2000, 2003, and 2005. However, it was lower than the score in 2017.

Table 1-A

The Nation's Report Card 2019 State Assessment

Average scale scores and selected percentile scores in NAEP mathematics for fourth-grade public school students, by year and jurisdiction: Various years, 1992–2019

Voor and jurisdiction		Average scale score	10th percentile	25th percentile	50th percentile	75th percentile	90th percentile
Year and jurisdiction	N. (1 (1 (1 (1 (1 (1 (1 (1 (1 (1		-	-	-	-	
1992 ¹	Nation (public)	219*	176*	197*	220*	241*	259*
10001	Wyoming	225*	191*	209*	226*	244*	258*
1996 ¹	Nation (public)	222*	180*	201*	224*	244*	261*
1	Wyoming	223*	186*	205*	225*	243*	259*
2000 ¹	Nation (public)	226*	185*	206*	228*	249*	265*
	Wyoming	229*	193*	212*	231*	249*	264*
2000	Nation (public)	224*	183*	203*	225*	247*	264*
	Wyoming	229*	192*	211*	231*	249*	264*
2003	Nation (public)	234*	196*	215*	235*	254*	270*
	West ²	230*	191	210*	231*	251*	267*
	Wyoming	241*	210	226	242*	257*	271*
2005	Nation (public)	237*	199	219*	239*	257*	272*
	West ²	233*	193	213*	235*	254*	270*
	Wyoming	243*	210	227	244*	260*	274*
2007	Nation (public)	239*	201*	221*	241	259*	274*
	West ²	233*	191	213*	236*	256*	272*
	Wyoming	244*	211	228	246	261*	274*
2009	Nation (public)	239*	201*	221	241*	259*	275*
	West ²	235*	193	214	236*	256*	273*
	Wyoming	242*	210	226	243*	259*	272*
2011	Nation (public)	240	202*	222*	242	260*	276*
	West ²	237	196	216	239	259	276
	Wyoming	244*	211	228	245	261*	275*
2013	Nation (public)	241*	202*	222*	243*	262	278*
	West ²	238	197*	218	239	259	276
	Wyoming	247	214*	231	248	263	277*
2015	Nation (public)	240	201*	221	241	260*	277*
	West ²	235	195	215	237	257	274*
	Wyoming	247	211	230	248	265	280
2017	Nation (public)	239*	197	219*	241*	261	279
	West ²	235*	192	213*	236*	258	276
	Wyoming	248*	212	230	250	267	282
2019	Nation (public)	240	198	220	242	262	279
	West ²	237	193	216	239	259	278
	Wyoming	246	209	228	247	265	280

^{*} Value is significantly different (p < .05) from the value for the same jurisdiction in 2019.

¹ Accommodations were not permitted for this assessment.

² Region in which jurisdiction is located. Regional data are not provided for years prior to 2003 to be consistent with the U.S. Census Bureau defined regions.
NOTE: The NAEP grade 4 mathematics scale ranges from 0 to 500. 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, 1992–2019 Mathematics Assessments.

The Nation's Report Card 2019 State Assessment

Table 1-B

Average scale scores and selected percentile scores in NAEP mathematics for eighth-grade public school students, by year and jurisdiction: Various years, 1990–2019

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
2019	Nation (public)	281	230	254	281	308	332
	West ²	278	226	250	278	307	332
	Wyoming	286	240	264	287	311	330

^{*} Value is significantly different (p < .05) from the value for the same jurisdiction in 2019.

 $^{^{\}mbox{\scriptsize 1}}$ 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, 1990–2019 Mathematics Assessments.

Overall NAEP Achievement-Level Results

Student results are reported as the percentages of students performing relative to performance standards set by the 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 *NAEP Basic*, at or above *NAEP Basic*, at or above *NAEP Proficient*, and at *NAEP Advanced*. Because the percentages are cumulative from *NAEP Basic* to *NAEP Proficient* to *NAEP Advanced*, they may sum to more than 100 percent. Only the percentage of students performing at or above *NAEP Basic* (which includes the students at *NAEP Proficient* and *NAEP Advanced*) plus the students below *NAEP Basic* will sum to 100 percent.

Grade 4 NAEP Achievement-Level Results

- In 2019, the percentage of Wyoming's students who performed at or above NAEP Proficient was 48 percent.
 This was greater than the percentage of the nation's public school students who performed at or above NAEP Proficient (40 percent).
- In Wyoming, the percentage of students who performed at or above *NAEP Proficient* in 2019 was greater than the percentages in 1992, 1996, 2000, 2003, 2005, 2007, 2009, and 2011, but was not significantly different from the percentages in 2013, 2015, and 2017.
- In 2019, the percentage of Wyoming's students who performed at or above NAEP Basic was 87 percent. This
 was greater than the percentage of the nation's public school students who performed at or above NAEP
 Basic (80 percent).
- In Wyoming, the percentage of students who performed at or above *NAEP Basic* in 2019 was greater than the percentages in 1992, 1996, and 2000, but was smaller than the percentage in 2013.

Grade 8 NAEP Achievement-Level Results

- In 2019, the percentage of Wyoming's students who performed at or above NAEP Proficient was 37 percent.
 This was greater than the percentage of the nation's public school students who performed at or above NAEP Proficient (33 percent).
- In Wyoming, the percentage of students who performed at or above *NAEP Proficient* in 2019 was greater than the percentages in 1990, 1992, 1996, 2000, 2003, and 2005, but was not significantly different from the percentages in 2007, 2009, 2011, 2013, 2015, and 2017.
- In 2019, the percentage of Wyoming's students who performed at or above NAEP Basic was 76 percent. This
 was greater than the percentage of the nation's public school students who performed at or above NAEP
 Basic (68 percent).
- In Wyoming, the percentage of students who performed at or above NAEP Basic in 2019 was greater than the
 percentages in 1990, 1992, 1996, and 2000, but was smaller than the percentages in 2007, 2011, 2013, and
 2017.

Table 2-A

The Nation's Report Card 2019 State Assessment

Percentage of fourth-grade public school students at or above NAEP mathematics achievement levels, by year and jurisdiction: Various years, 1992–2019

Year and jurisdiction		Below NAEP Basic	At or above NAEP Basic	At or above NAEP Proficient	At NAEP Advanced
1992 ¹	Nation (public)	43*	57*	17*	2*
	Wyoming	31*	69*	19*	1*
1996 ¹	Nation (public)	38*	62*	20*	2*
	Wyoming	36*	64*	19*	1*
2000 ¹	Nation (public)	33*	67*	25*	2*
	Wyoming	27*	73*	25*	2*
2000	Nation (public)	36*	64*	22*	2*
	Wyoming	29*	71*	25*	2*
2003	Nation (public)	24*	76*	31*	4*
	West ²	29*	71*	27*	3*
	Wyoming	13	87	39*	4*
2005	Nation (public)	21	79	35*	5*
	West ²	26*	74*	31*	4*
	Wyoming	13	87	43*	5*
2007	Nation (public)	19*	81*	39*	5*
	West ²	26*	74*	33*	5*
	Wyoming	12	88	44*	5*
2009	Nation (public)	19*	81*	38*	6*
	West ²	25	75	34*	5*
	Wyoming	13	87	40*	4*
2011	Nation (public)	18*	82*	40	6*
	West ²	23	77	37	6
	Wyoming	12	88	44*	5*
2013	Nation (public)	18*	82*	41	8*
	West ²	22	78	38	7
	Wyoming	10*	90*	48	7*
2015	Nation (public)	19	81	39	7*
	West ²	24	76	34	6*
	Wyoming	12	88	48	9
2017	Nation (public)	21*	79*	40	8
	West ²	26*	74*	35	7
	Wyoming	11	89	51	10
2019	Nation (public)	20	80	40	9
	West ²	23	77	37	8
	Wyoming	13	87	48	9

^{*} Value is significantly different (p < .05) from the value for the same jurisdiction in 2019.

¹ Accommodations were not permitted for this assessment.

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

NOTE: The NAEP grade 4 mathematics scale ranges from 0 to 500. Achievement levels correspond to the following points on the NAEP mathematics scales: below *NAEP Basic*,
213 or lower; *NAEP Basic*, 214–248; *NAEP Proficient*, 249–281; and *NAEP Advanced*, 282 or above. At or above *NAEP Basic* includes *NAEP Basic*, *NAEP Proficient*, and *NAEP Advanced*. At or above *NAEP Proficient* includes *NAEP Proficient* and *NAEP 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, 1992–2019 Mathematics Assessments.

Table 2-B

The Nation's Report Card 2019 State Assessment

Percentage of eighth-grade public school students at or above NAEP mathematics achievement levels, by year and jurisdiction: Various years, 1990–2019

Year and jurisdiction		Below NAEP Basic	At or above NAEP Basic	At or above NAEP Proficient	At NAEP Advanced
1990 ¹	Nation (public)	49*	51*	15*	2*
	Wyoming	36*	64*	19*	2*
1992 ¹	Nation (public)	44*	56*	20*	3*
	Wyoming	33*	67*	21*	2*
1996 ¹	Nation (public)	39*	61*	23*	4*
	Wyoming	32*	68*	22*	2*
2000 ¹	Nation (public)	35*	65*	26*	5*
	Wyoming	30*	70*	25*	4*
2000	Nation (public)	38*	62*	25*	5*
	Wyoming	31*	69*	23*	3*
2003	Nation (public)	33*	67*	27*	5*
	West ²	39*	61*	25*	5*
	Wyoming	23	77	32*	4*
2005	Nation (public)	32	68	28*	6*
	West ²	38*	62*	25*	5*
	Wyoming	24	76	29*	3*
2007	Nation (public)	30*	70*	31*	7*
	West ²	36	64	27*	6*
	Wyoming	20*	80*	36	7
2009	Nation (public)	29*	71*	33	7*
	West ²	35	65	28*	6*
	Wyoming	22	78	35	7
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
2019	Nation (public)	32	68	33	10
	West ²	35	65	31	10
	Wyoming	24	76	37	8

^{*} Value is significantly different (p < .05) from the value for the same jurisdiction in 2019.

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 *NAEP Basic*, 261 or lower; *NAEP Basic*, 262–298; *NAEP Proficient*, 299–332; and *NAEP Advanced*, 333 or above. At or above *NAEP Basic* includes *NAEP Basic*, *NAEP Proficient*, and *NAEP Advanced*. At or above *NAEP Proficient* includes *NAEP Proficient* and *NAEP 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, 1990–2019 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 2019 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 Average Scale Scores

Figures 2-A and 2-B compare Wyoming's 2019 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 scale 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 2019 mathematics assessment.

Grade 4 Average Scale Score Comparison Results

• The average scale score for students in Wyoming was higher than 39 jurisdictions, not significantly different from 11 jurisdictions, and lower than 1 jurisdiction.

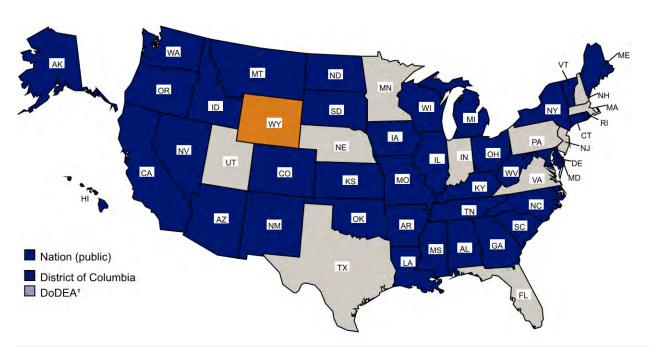
Grade 8 Average Scale Score Comparison Results

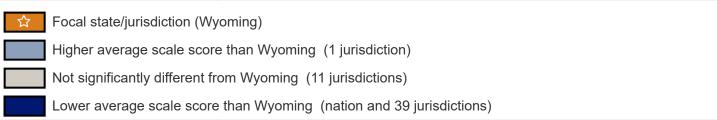
• The average scale score for students in Wyoming was higher than 30 jurisdictions, not significantly different from 17 jurisdictions, and lower than 4 jurisdictions.

Figure 2-A

The Nation's Report Card 2019 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: 2019





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

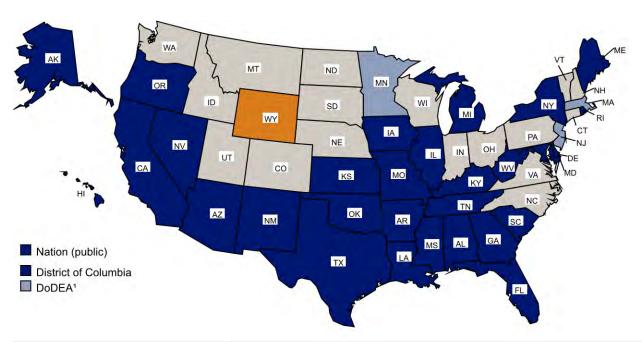
NOTE: Significance tests used a multiple-comparison procedure based on all jurisdictions that participated.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2019 Mathematics Assessment.

Figure 2-B

The Nation's Report Card 2019 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: 2019





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), 2019 Mathematics Assessment.

Comparisons by NAEP Achievement Levels

Figures 3-A and 3-B permit comparisons of all jurisdictions (and the nation) participating in the 2019 NAEP mathematics assessment in terms of percentages of grades 4 and 8 students performing at or above *NAEP Proficient*. The participating states and jurisdictions are grouped into categories that reflect whether the percentage of their students performing at or above *NAEP Proficient* (including *NAEP 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 NAEP achievement level can be conducted online by using the NAEP Data Explorer at https://nces.ed.gov/nationsreportcard/naepdata/.

Grade 4 NAEP Achievement-Level Comparison Results

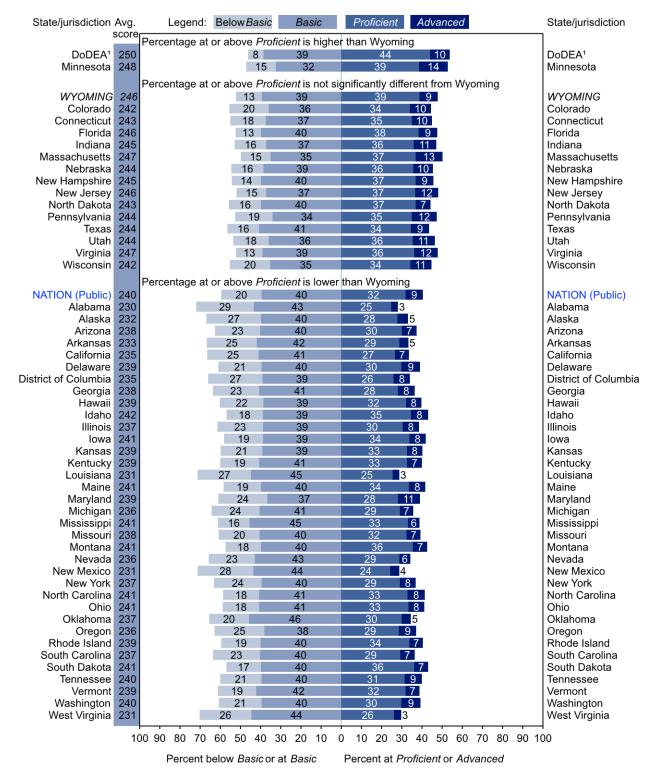
- The percentage of students performing at or above the *NAEP Proficient* level in Wyoming was greater than the percentages in 35 jurisdictions, not significantly different from those in 14 jurisdictions, and smaller than those in 2 jurisdictions.
- The percentage of students performing at or above the *NAEP Basic* level in Wyoming was greater than the percentages in 41 jurisdictions, not significantly different from those in 9 jurisdictions, and smaller than those in 1 jurisdiction (data not shown).

Grade 8 NAEP Achievement-Level Comparison Results

- The percentage of students performing at or above the NAEP Proficient level in Wyoming was greater than the
 percentages in 27 jurisdictions, not significantly different from those in 19 jurisdictions, and smaller than those
 in 5 jurisdictions.
- The percentage of students performing at or above the NAEP Basic level in Wyoming was greater than the
 percentages in 37 jurisdictions, not significantly different from those in 13 jurisdictions, and smaller than those
 in 1 jurisdiction (data not shown).

The Nation's Report Card 2019 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 NAEP Proficient compared with the nation and other participating jurisdictions: 2019



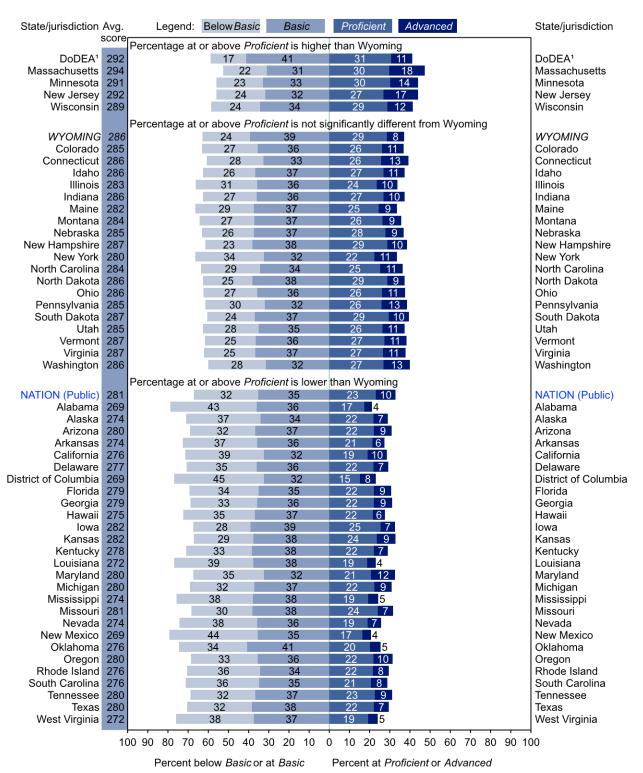
Department of Defense Education Activity (overseas and domestic schools).

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 *NAEP Proficient* category begins, so that they may be compared at *NAEP 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), 2019 Mathematics Assessment.

The Nation's Report Card 2019 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 NAEP Proficient compared with the nation and other participating jurisdictions: 2019



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 *NAEP Proficient* category begins, so that they may be compared at *NAEP 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), 2019 Mathematics Assessment.

Mathematics Performance of Selected Student Groups

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

- race/ethnicity
- gender
- student eligibility for the National School Lunch Program
- type of school location (for 2007, 2009, 2011, 2013, 2015, 2017 and 2019)

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 second column, and the average scale score in the third column. The columns to the right show the percentage of students below *NAEP Basic* and at or above each NAEP 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 2019 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 2019 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 https://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 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 beginning in 2011 so 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
- Native Hawaiian or other Pacific Islander
- American Indian or Alaska Native
- Two or More Races

As in earlier years, students identified as Hispanic were classified as Hispanic in 2011 and subsequent assessment years 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 classified as "Two or More Races" since 2011. Results for these students are presented under the "Two or More Races" category in the graphics and tables in the reports.

When comparing the results for racial/ethnic groups since 2011 to earlier assessment years, the data for Asian and Native Hawaiian/Other Pacific Islander students were combined into the Asian/Pacific Islander category.

Tables 3-A and 3-B show percentage of students and average scale scores by NAEP achievement level for public school students at grades 4 and 8 in Wyoming and the nation, by race/ethnicity.

Grade 4 Average Scale Score Results by Race/Ethnicity

- In 2019, White students in Wyoming had an average scale score that was higher than the average scale scores of Hispanic and American Indian/Alaska Native students.
- In 2019, the average scale score of White students in Wyoming was higher than their respective scores in 1992, 1996, 2000, 2003, 2005, 2007, and 2009, but not significantly different from their respective scores in 2011, 2013, 2015, and 2017.
- In 2019, 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, 2015, and 2017.
- In 2019, the average scale score of American Indian/Alaska Native students in Wyoming was higher than their respective score in 1992, but lower than their respective score in 2013, and not significantly different from their respective scores in 2003, 2007, 2011, 2015, and 2017.
- Data are not reported for Black students in 2019, because reporting standards were not met.
- In 2019, Hispanic students in Wyoming had an average scale score that was lower than that of White students by 11 points. In 1992, the average scale score for Hispanic students was lower than that of White students by 11 points.

Grade 4 NAEP Achievement-Level Results by Race/Ethnicity

- In 2019 in Wyoming, the percentage of White students performing at or above *NAEP Proficient* was greater than the corresponding percentages of Hispanic and American Indian/Alaska Native students.
- In 2019, the percentage of White students in Wyoming performing at or above *NAEP Proficient* was greater than the percentages of their respective peers in 1992, 1996, 2000, 2003, 2005, 2007, and 2009, but not significantly different from the percentages of their respective peers in 2011, 2013, 2015, and 2017.
- In 2019, the percentage of Hispanic students in Wyoming performing at or above *NAEP 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, 2015, and 2017.
- In 2019, the percentage of American Indian/Alaska Native students in Wyoming performing at or above NAEP
 Proficient was not significantly different from the percentages of their respective peers in 1992, 2003, 2007,
 2011, 2013, 2015, and 2017.

The Nation's Report Card 2019 State Assessment

Percentage of fourth-grade public school students, average scale score, and achievement-level results in NAEP mathematics, by race/ethnicity, year, and jurisdiction: Various years, 1992–2019

					Percent				
Race/ethnicity, jurisdiction	Race/ethnicity, year, and jurisdiction		Average scale score	Below NAEP Basic	At or above NAEP Basic	At or above NAEP Proficient	At NAEP Advanced		
White									
1992 ¹	Nation (public)	72*	227*	32*	68*	22*	2*		
	Wyoming	90*	227*	29*	71*	20*	1*		
1996 ¹	Nation (public)	71*	230*	27*	73*	25*	3*		
	Wyoming	89*	225*	34*	66*	20*	1*		
2000 ¹	Nation (public)	67*	234*	22*	78*	32*	3*		
	Wyoming	89*	231*	24*	76*	27*	2*		
2000	Nation (public)	62*	233*	24*	76*	30*	3*		
	Wyoming	89*	231*	25*	75*	27*	2*		
2003	Nation (public)	58*	243*	13*	87*	42*	5*		
	Wyoming	86*	243*	11	89	42*	4*		
2005	Nation (public)	57*	246*	11	89	47*	7*		
	Wyoming	85*	245*	11	89	45*	5*		
2007	Nation (public)	55*	248	9*	91*	51	8*		
	Wyoming	84*	246*	9	91	48*	5*		
2009	Nation (public)	54*	248	10*	90*	50	8*		
	Wyoming	84*	244*	10	90	44*	5*		
2011	Nation (public)	52*	249	9*	91*	52	9*		
	Wyoming	80*	246	9	91	47	6*		
2013	Nation (public)	51*	250*	9*	91*	54	10*		
	Wyoming	79	249	7	93	52	7		
2015	Nation (public)	49*	248	10*	90*	51	10*		
	Wyoming	78	250	8	92	54	10		
2017	Nation (public)	47*	248	12	88	51	11		
	Wyoming	80	250	9	91	54	11		
2019	Nation (public)	46	249	12	88	52	12		
	Wyoming	78	249	10	90	52	10		

The Nation's Report Card 2019 State Assessment

Percentage of fourth-grade public school students, average scale score, and achievement-level results in NAEP mathematics, by race/ethnicity, year, and jurisdiction: Various years, 1992–2019—Continued

				Percent				
Race/ethnicity, year, and jurisdiction		Percentage of students	Average scale score	Below NAEP Basic	At or above NAEP Basic	At or above NAEP Proficient	At NAEP Advanced	
Black								
1992 ¹	Nation (public)	18*	192*	78*	22*	2*	#	
	Wyoming	1	‡	‡	‡	‡	‡	
1996 ¹	Nation (public)	17	199*	70*	30*	4*	#	
	Wyoming	2	‡	‡	‡	‡	‡	
2000 ¹	Nation (public)	17*	204*	64*	36*	5*	#	
	Wyoming	1	‡	‡	‡	‡	‡	
2000	Nation (public)	17	203*	65*	35*	4*	#*	
	Wyoming	1	‡	‡	‡	‡	‡	
2003	Nation (public)	17*	216*	46*	54*	10*	#*	
	Wyoming	1	‡	‡	‡	‡	‡	
2005	Nation (public)	17*	220*	40*	60*	13*	1*	
	Wyoming	1	‡	‡	‡	‡	‡	
2007	Nation (public)	17*	222*	37	63	15*	1*	
	Wyoming	2	‡	‡	‡	‡	‡	
2009	Nation (public)	16*	222*	37	63	15*	1*	
	Wyoming	2	‡	‡	‡	‡	‡	
2011	Nation (public)	16	224	34	66	17*	1*	
	Wyoming	1	‡	‡	‡	‡	‡	
2013	Nation (public)	16	224	34	66	18	1*	
	Wyoming	1	‡	‡	‡	‡	‡	
2015	Nation (public)	15	224	35	65	19	1*	
	Wyoming	1	‡	‡	‡	‡	‡	
2017	Nation (public)	15	223	37	63	19	2	
	Wyoming	1	‡	‡	‡	‡	‡	
2019	Nation (public)	15	224	35	65	20	2	
See notes at end of to	Wyoming	1	‡	‡	‡	‡	‡	

The Nation's Report Card 2019 State Assessment

Percentage of fourth-grade public school students, average scale score, and achievement-level results in NAEP mathematics, by race/ethnicity, year, and jurisdiction: Various years, 1992–2019—Continued

				Percent				
Race/ethnicity, year, and jurisdiction		Percentage of students	Average scale score	Below NAEP Basic	At or above NAEP Basic	At or above NAEP Proficient	At NAEP Advanced	
Hispanic								
1992 ¹	Nation (public)	7*	201*	68*	32*	5*	#	
	Wyoming	6*	216*	45*	55*	10*	#	
1996 ¹	Nation (public)	9*	204*	63*	37*	7*	#	
	Wyoming	6*	207*	59*	41*	5*	#	
2000 ¹	Nation (public)	11*	209*	55*	45*	8*	#	
	Wyoming	8*	212*	49*	51*	9*	#	
2000	Nation (public)	16*	207*	59*	41*	7*	#*	
	Wyoming	7*	214*	50*	50*	9*	1	
2003	Nation (public)	19*	221*	38*	62*	15*	1*	
	Wyoming	8*	229*	24	76	20*	1	
2005	Nation (public)	20*	225*	33*	67*	19*	1*	
	Wyoming	9*	234	22	78	31	3	
2007	Nation (public)	21*	227*	31*	69*	22*	1*	
	Wyoming	10*	229*	27	73	23*	1	
2009	Nation (public)	22*	227*	30	70	21*	1*	
	Wyoming	11*	231*	23	77	22*	#	
2011	Nation (public)	24*	229*	28	72	24*	2*	
	Wyoming	14	235	20	80	31	2	
2013	Nation (public)	25*	230	27	73	26	2*	
	Wyoming	13*	235	20	80	29	3	
2015	Nation (public)	26*	230	27	73	26	3	
	Wyoming	15	234	21	79	28	3	
2017	Nation (public)	27	229	30*	70*	26	3	
	Wyoming	12*	237	20	80	36	5	
2019	Nation (public)	28	231	27	73	28	3	
	Wyoming	15	238	18	82	36	4	

The Nation's Report Card 2019 State Assessment

Percentage of fourth-grade public school students, average scale score, and achievement-level results in NAEP mathematics, by race/ethnicity, year, and jurisdiction: Various years, 1992–2019—Continued

					Perc	ent	
Race/ethnicity, jurisdiction	Race/ethnicity, year, and jurisdiction		Average scale score	Below NAEP Basic	At or above NAEP Basic	At or above NAEP Proficient	At NAEP Advanced
Asian/Pacific I	slander						
1992 ¹	Nation (public)	3*	231*	26*	74*	27*	4*
	Wyoming	1	‡	‡	‡	‡	‡
1996 ¹	Nation (public)	3*	225*	35*	65*	20*	5*
	Wyoming	1	‡	‡	‡	‡	‡
2000 ¹	Nation (public)	‡	‡	‡	‡	‡	‡
	Wyoming	1	‡	‡	‡	‡	‡
2000	Nation (public)	‡	‡	‡	‡	‡	‡
	Wyoming	1	‡	‡	‡	‡	‡
2003	Nation (public)	4*	246*	13*	87*	48*	10*
	Wyoming	1	‡	‡	‡	‡	‡
2005	Nation (public)	4*	251*	11*	89*	54*	14*
	Wyoming	1	‡	‡	‡	‡	‡
2007	Nation (public)	5*	254*	9	91	59*	16*
	Wyoming	1	‡	‡	‡	‡	‡
2009	Nation (public)	5	255*	9	91	61*	18*
	Wyoming	1	‡	‡	‡	‡	‡
2011	Nation (public)	5	256*	9	91	62*	20*
	Wyoming	1	‡	‡	‡	‡	‡
2013	Nation (public)	5	258	9	91	64	23
	Wyoming	1	‡	‡	‡	‡	‡
2015	Nation (public)	5	256*	10	90	61	22
	Wyoming	1	‡	‡	‡	‡	‡
2017	Nation (public)	6	258	10	90	64	24
	Wyoming	1	‡	‡	‡	‡	‡
2019	Nation (public)	5	261	9	91	67	27
See notes at end of t	Wyoming	1	‡	‡	‡	‡	‡

The Nation's Report Card 2019 State Assessment

Percentage of fourth-grade public school students, average scale score, and achievement-level results in NAEP mathematics, by race/ethnicity, year, and jurisdiction: Various years, 1992–2019—Continued

					Percent				
Race/ethnicity jurisdiction	Race/ethnicity, year, and jurisdiction		Average scale score	Below NAEP Basic	At or above NAEP Basic	At or above NAEP Proficient	At NAEP Advanced		
American Indi	an/Alaska Native								
1992 ¹	Nation (public)	1	‡	‡	‡	‡	‡		
	Wyoming	2	205*	63*	37*	3	#		
1996 ¹	Nation (public)	1	‡	‡	‡	‡	‡		
	Wyoming	2*	‡	‡	‡	‡	‡		
2000 ¹	Nation (public)	1	‡	‡	‡	‡	‡		
	Wyoming	1*	‡	‡	‡	‡	‡		
2000	Nation (public)	1	207*	61*	39*	8*	#		
	Wyoming	3	‡	‡	‡	‡	‡		
2003	Nation (public)	1*	224*	35	65	18*	1*		
	Wyoming	3	221	37	63	16	2		
2005	Nation (public)	1*	227	31	69	22	2		
	Wyoming	3	‡	‡	‡	‡	‡		
2007	Nation (public)	1	229	28	72	26	3		
	Wyoming	3	227	26	74	21	#		
2009	Nation (public)	1*	227	32	68	23	2		
	Wyoming	3	‡	‡	‡	‡	‡		
2011	Nation (public)	1	227	32	68	24	2		
	Wyoming	3	223	38	62	23	2		
2013	Nation (public)	1	228	30	70	24	2		
	Wyoming	4	232*	23	77	26	2		
2015	Nation (public)	1	228	30	70	24	2		
	Wyoming	4	220	41	59	18	3		
2017	Nation (public)	1	228	31	69	25	3		
	Wyoming	3	221	35	65	15	#		
2019	Nation (public)	1	228	32	68	25	4		
	Wyoming	3	219	40	60	11	1		

[#] Rounds to zero.

NOTE: The NAEP grade 4 mathematics scale ranges from 0 to 500. Achievement levels correspond to the following points on the NAEP mathematics scales: below NAEP Basic, 213 or lower; NAEP Basic, 214–248; NAEP Proficient, 249–281; and NAEP Advanced, 282 or above. At or above NAEP Basic includes NAEP Basic, NAEP Proficient, and NAEP Advanced. At or above NAEP Proficient includes NAEP Proficient and NAEP 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, 1992-2019 Mathematics Assessments.

[‡] Reporting standards not met.

* Value is significantly different (p < .05) from the value for the same jurisdiction and student group in 2019.

¹ Accommodations were not permitted for this assessment.

Grade 8 Average Scale Score Results by Race/Ethnicity

- In 2019, White students in Wyoming had an average scale score that was higher than the average scale scores of Hispanic and American Indian/Alaska Native students.
- In 2019, the average scale scores of White and Hispanic students in Wyoming were higher than their respective scores in 1990, 1992, 1996, 2000, 2003, and 2005, but not significantly different from their respective scores in 2007, 2009, 2011, 2013, 2015, and 2017.
- In 2019, the average scale score of American Indian/Alaska Native students in Wyoming was not significantly different from their respective scores in 1990, 1996, 2000, 2003, 2005, 2013, 2015, and 2017.
- Data are not reported for Black students in 2019, because reporting standards were not met.
- In 2019, Hispanic students in Wyoming had an average scale score that was lower than that of White students by 17 points. In 1990, the average scale score for Hispanic students was lower than that of White students by 16 points.

Grade 8 NAEP Achievement-Level Results by Race/Ethnicity

- In 2019 in Wyoming, the percentage of White students performing at or above NAEP Proficient was greater than the corresponding percentages of Hispanic and American Indian/Alaska Native students.
- In 2019, the percentage of White students in Wyoming performing at or above *NAEP Proficient* was greater than the percentages of their respective peers in 1990, 1992, 1996, 2000, 2003, and 2005, but not significantly different from the percentages of their respective peers in 2007, 2009, 2011, 2013, 2015, and 2017.
- In 2019, the percentage of Hispanic students in Wyoming performing at or above *NAEP Proficient* was 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, 2015, and 2017.
- In 2019, the percentage of American Indian/Alaska Native students in Wyoming performing at or above NAEP
 Proficient was not significantly different from the percentages of their respective peers in 1990, 1996, 2003,
 2005, 2013, 2015, and 2017.

Table 3-B

The Nation's Report Card 2019 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, 1990–2019

				Percent				
Race/ethnicity	Race/ethnicity, year, and jurisdiction		Average scale score	Below NAEP Basic	At or above NAEP Basic	At or above NAEP Proficient	At NAEP Advanced	
White								
1990 ¹	Nation (public)	73*	269*	41*	59*	18*	3*	
	Wyoming	86*	274*	34*	66*	20*	2*	
1992 ¹	Nation (public)	72*	276*	34*	66*	25*	3*	
	Wyoming	91*	277*	30*	70*	22*	2*	
1996 ¹	Nation (public)	70*	280*	28*	72*	29*	5*	
	Wyoming	90*	277*	29*	71*	23*	3*	
2000 ¹	Nation (public)	69*	284*	24*	76*	33*	6*	
	Wyoming	91*	279*	28*	72*	26*	4*	
2000	Nation (public)	63*	283*	25*	75*	33*	6*	
	Wyoming	90*	278*	28*	72*	25*	4*	
2003	Nation (public)	62*	287*	21	79	36*	7*	
	Wyoming	89*	286*	20	80	35*	5*	
2005	Nation (public)	60*	288*	21	79	37*	7*	
	Wyoming	87*	284*	21	79	32*	4*	
2007	Nation (public)	58*	290	19*	81*	41*	9*	
	Wyoming	86*	290	17	83	39	7	
2009	Nation (public)	56*	292	18*	82*	43	10*	
	Wyoming	84*	289	18	82	38	8	
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	
2019	Nation (public)	48	291	21	79	43	13	
	Wyoming	77	291	19	81	41	10	

Table 3-B

The Nation's Report Card 2019 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, 1990–2019—Continued

					Perc	Percent		
Race/ethnicity, jurisdiction	Race/ethnicity, year, and jurisdiction		Average scale score	Below NAEP Basic	At or above NAEP Basic	At or above NAEP Proficient	At NAEP Advanced	
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	‡	‡	‡	‡	‡	
2019	Nation (public)	15	259	54	46	13	2	
	Wyoming	1	‡	‡	‡	‡	‡	

Table 3-B

The Nation's Report Card 2019 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, 1990–2019—Continued

					Perc	ent	
Race/ethnicity, jurisdiction	Race/ethnicity, year, and jurisdiction		Average scale score	Below NAEP Basic	At or above NAEP Basic	At or above NAEP Proficient	At NAEP Advanced
Hispanic							
1990 ¹	Nation (public)	7*	245*	67*	33*	7*	1*
	Wyoming	6*	257*	58*	42*	8*	#
1992 ¹	Nation (public)	8*	247*	67*	33*	6*	#*
	Wyoming	5*	262*	51	49	11*	1
1996 ¹	Nation (public)	9*	250*	62*	38*	8*	1
	Wyoming	5*	256*	54*	46*	7*	#
2000 ¹	Nation (public)	11*	252*	60*	40*	8*	#*
	Wyoming	6*	254*	58*	42*	8*	#
2000	Nation (public)	14*	252*	60*	40*	8*	#*
	Wyoming	5*	257*	54*	46*	8*	1
2003	Nation (public)	15*	258*	53*	47*	11*	1*
	Wyoming	7*	265*	46	54	13*	1
2005	Nation (public)	17*	261*	50*	50*	13*	1*
	Wyoming	7*	265*	43	57	11*	#
2007	Nation (public)	19*	264*	46	54	15*	2*
	Wyoming	8*	274	36	64	22	3
2009	Nation (public)	21*	266	44	56	17*	2*
	Wyoming	10*	269	40	60	15*	3
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
2019	Nation (public)	27	268	43	57	19	3
	Wyoming	14	274	36	64	25	4

Table 3-B

The Nation's Report Card 2019 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, 1990–2019—Continued

					Perc	ent	
Race/ethnicity jurisdiction	Race/ethnicity, year, and jurisdiction		Average scale score	Below NAEP Basic	At or above NAEP Basic	At or above NAEP Proficient	At NAEP Advanced
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	‡	‡	‡	‡	‡
2019	Nation (public)	6	309	15	85	61	32
See notes at end of	Wyoming	1	‡	‡	‡	‡	‡

Table 3-B

The Nation's Report Card 2019 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, 1990–2019—Continued

					Perc	ent	
Race/ethnicity, year, and jurisdiction		Percentage of students	Average scale score	Below NAEP Basic	At or above NAEP Basic	At or above NAEP Proficient	At NAEP Advanced
American Indi	an/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
2019	Nation (public)	1	263	48	52	15	3
	Wyoming	4	258	57	43	12	3

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 NAEP Basic, 261 or lower; NAEP Basic, 262-298; NAEP Proficient, 299-332; and NAEP Advanced, 333 or above. At or above NAEP Basic includes NAEP Basic, NAEP Proficient, and NAEP Advanced. At or above NAEP Proficient includes NAEP Proficient and NAEP 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, 1990-2019 Mathematics Assessments.

[‡] Reporting standards not met.

* Value is significantly different (p < .05) from the value for the same jurisdiction and student group in 2019.

¹ Accommodations were not permitted for this assessment.

Tables 4-A and 4-B show percentage of students and average scale scores by NAEP achievement-level data for the seven racial/ethnic categories used since 2011: 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-A

The Nation's Report Card 2019 State Assessment

Percentage of fourth-grade public school students, average scale score, and achievement-level results in NAEP mathematics, by race/ethnicity, year, and jurisdiction: Various years, 2011–2019

					Perc	ent	
Race/ethnicity, jurisdiction	year, and	Percentage of students	Average scale score	Below NAEP Basic	At or above NAEP Basic	At or above NAEP Proficient	At NAEF Advanced
White							
2011	Nation (public)	52*	249	9*	91*	52	9*
	Wyoming	80*	246	9	91	47	6*
2013	Nation (public)	51*	250*	9*	91*	54	10
	Wyoming	79	249	7	93	52	7
2015	Nation (public)	49*	248	10	90	51	10*
	Wyoming	78	250	8	92	54	10
2017	Nation (public)	47*	248	12	88	51	11
	Wyoming	80	250	9	91	54	11
2019	Nation (public)	46	249	12	88	52	12
	Wyoming	78	249	10	90	52	10
Black	,						
2011	Nation (public)	16	224	34	66	17*	1*
2011	Wyoming	1	‡	‡	‡	‡	‡
2013	Nation (public)	16	224	34	66	18	1*
2010	Wyoming	10	‡	‡	‡	‡	‡
2015	Nation (public)	15	224	35	65	19	1
2013	Wyoming	13	‡	‡	‡	‡	
2017	Nation (public)	15	223	37	63	19	‡ 2
2017	Wyoming	15					
2010	, ,	15	‡	‡ 35	‡	‡ 20	‡
2019	Nation (public)		224		65		2
I II a sa a sa i a	Wyoming	1	‡	‡	‡	‡	‡
Hispanic	N. C. (1.1.)	0.4*	000*	00	70	0.4*	0*
2011	Nation (public)	24*	229*	28	72	24*	2*
0040	Wyoming	14	235	20	80	31	2
2013	Nation (public)	25*	230	27	73	26	2*
	Wyoming	13*	235	20	80	29	3
2015	Nation (public)	26*	230	27	73	26	3
	Wyoming	15	234	21	79	28	3
2017	Nation (public)	27	229	30*	70*	26	3
	Wyoming	12*	237	20	80	36	5
2019	Nation (public)	28	231	27	73	28	3
	Wyoming	15	238	18	82	36	4
Asian							
2011	Nation (public)	5	257*	8	92	64*	21*
	Wyoming	1	‡	‡	‡	‡	‡
2013	Nation (public)	5	260	7	93	67	24
	Wyoming	1	‡	‡	‡	‡	‡
2015	Nation (public)	5	259	8	92	64	23
	Wyoming	1	‡	‡	‡	‡	‡
2017	Nation (public)	5	260	8	92	67	26
	Wyoming	1	‡	‡	‡	‡	‡
2019	Nation (public)	5	263	7	93	70	29

				Percent			
						At or above	At
Race/ethnicity, year, and		Percentage	Average	Below	At or above	NAEP	NAEP
jurisdiction		of students	scale score	NAEP Basic	NAEP Basic	Proficient	Advanced
	Wyoming	1	‡	‡	‡	‡	‡

Table

The Nation's Report Card 2019 State Assessment

Percentage of fourth-grade public school students, average scale score, and achievement-level results in NAEP mathematics, by race/ethnicity, year, and jurisdiction: Various years, 2011–2019—Continued

				_	Perc	ent	
Race/ethnicity jurisdiction	, year, and	Percentage of students	Average scale score	Below NAEP Basic	At or above NAEP Basic	At or above NAEP Proficient	At NAEP Advanced
American Ind	ian/Alaska Native						
2011	Nation (public)	1	227	32	68	24	2
	Wyoming	3	223	38	62	23	2
2013	Nation (public)	1	228	30	70	24	2
	Wyoming	4	232*	23	77	26	2
2015	Nation (public)	1	228	30	70	24	2
	Wyoming	4	220	41	59	18	3
2017	Nation (public)	1	228	31	69	25	3
	Wyoming	3	221	35	65	15	#
2019	Nation (public)	1	228	32	68	25	4
	Wyoming	3	219	40	60	11	1
Native Hawaii Islander	ian/Other Pacific						
2011	Nation (public)	#	235	24	76	33	7
	Wyoming	#	‡	‡	‡	‡	‡
2013	Nation (public)	#	235	23	77	32	4
	Wyoming	#	‡	‡	‡	‡	‡
2015	Nation (public)	#	226	35	65	24	3
	Wyoming	#	‡	‡	‡	‡	‡
2017	Nation (public)	#	228	30	70	27	4
	Wyoming	#	‡	‡	‡	‡	‡
2019	Nation (public)	#	230	30	70	29	5
	Wyoming	#	‡	‡	‡	‡	‡
Two or More I	Races						
2011	Nation (public)	2*	244	15	85	43	9
	Wyoming	2*	‡	‡	‡	‡	‡
2013	Nation (public)	3*	244	14	86	45	9
	Wyoming	2*	‡	‡	‡	‡	‡
2015	Nation (public)	3*	244	15	85	44	9
	Wyoming	2	‡	‡	‡	‡	‡
2017	Nation (public)	4*	244	16	84	44	10
	Wyoming	3	‡	‡	‡	‡	‡
2019	Nation (public)	4	243	17	83	44	10
	Wyoming	2	‡	‡	‡	‡	‡

[#] Rounds to zero.

NOTE: The NAEP grade 4 mathematics scale ranges from 0 to 500. Achievement levels correspond to the following points on the NAEP mathematics scales: below NAEP Basic, 213 or lower; NAEP Basic, 214–248; NAEP Proficient, 249–281; and NAEP Advanced, 282 or above. At or above NAEP Basic includes NAEP Basic, NAEP Proficient, and NAEP Advanced. At or above NAEP Proficient includes NAEP Proficient and NAEP 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, 2011-2019 Mathematics Assessments.

[‡] Reporting standards not met.

* Value is significantly different (p < .05) from the value for the same jurisdiction and student group in 2019.

The Nation's Report Card 2019 State Assessment

Table 4-B

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, 2011–2019

					Perc	ent	
Race/ethnicity, jurisdiction	year, and	Percentage of students	Average scale score	Below NAEP Basic	At or above NAEP Basic	At or above NAEP Proficient	At NAEP Advanced
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
2019	Nation (public)	48	291	21	79	43	13
20.0	Wyoming	77	291	19	81	41	10
Black	Try on mig		201		0.		
2011	Nation (public)	16*	262*	50*	50*	13	1*
2011	Wyoming	1	‡	‡	‡	‡	‡
2013	Nation (public)	15	263*	49*	51*	14	2*
2010	Wyoming	1	‡	‡	‡	‡	‡
2015	Nation (public)	15	260	53	47	12	1*
2010	Wyoming	1	‡	‡	‡	‡	‡
2017	Nation (public)	15	260	54	46	13	2
2017	Wyoming	1	‡	‡	‡	‡	‡
2019	Nation (public)	15	259	54	46	13	2
2019	Wyoming	13	239	‡		‡	
Hispanic	vvyorning	1	+	+	‡	+	‡
2011	Nation (public)	23*	269	40*	60*	20	3*
2011	Wyoming	23 12*	209	37	63	20	2
2012	, ,	23*	271*	38*	62*		3*
2013	Nation (public)	23 12*				21	
0045	Wyoming		278	29	71	26	3
2015	Nation (public)	25*	269	40*	60*	19	3
0047	Wyoming	14	273	35	65	18	2
2017	Nation (public)	25*	268	43	57	20	3
0040	Wyoming	14	275	33	67	23	3
2019	Nation (public)	27	268	43	57	19	3
A	Wyoming	14	274	36	64	25	4
Asian	N. C. / 1.1. \	-	005*	40	00	50*	0.4*
2011	Nation (public)	5	305*	12	88	58*	24*
0040	Wyoming	1	‡	‡	‡	‡	‡
2013	Nation (public)	5*	308*	12	88	62	27*
0015	Wyoming	1	‡	‡	‡	‡	‡
2015	Nation (public)	5	307*	12	88	60	26*
	Wyoming	1	‡	‡	‡	‡	‡
2017	Nation (public)	5	312	12	88	65	32
	Wyoming	1	‡	‡	‡	‡	‡
2019	Nation (public)	6	313	12	88	64	33

				Percent			
						At or above	At
Race/ethnicity, year, and		Percentage	Average	Below	At or above	NAEP	NAEP
jurisdiction		of students	scale score	NAEP Basic	NAEP Basic	Proficient	Advanced
	Wyoming	1	‡	‡	‡	‡	‡

Table 4-B

The Nation's Report Card 2019 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, 2011–2019—Continued

					Perc	ent	
Race/ethnicity jurisdiction	, year, and	Percentage of students	Average scale score	Below NAEP Basic	At or above NAEP Basic	At or above NAEP Proficient	At NAEP Advanced
American Ind	ian/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
2019	Nation (public)	1	263	48	52	15	3
	Wyoming	4	258	57	43	12	3
Native Hawaii Islander	an/Other Pacific						
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	#	‡	‡	‡	‡	‡
2019	Nation (public)	#	263	47	53	18	4
	Wyoming	#	‡	‡	‡	‡	‡
Two or More I	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	‡	‡	‡	‡	‡
2019	Nation (public)	3	285	28	72	36	11
	Wyoming	2	274	38	62	28	4

[#] Rounds to zero.

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 NAEP Basic, 261 or lower; NAEP Basic, 262-298; NAEP Proficient, 299-332; and NAEP Advanced, 333 or above. At or above NAEP Basic includes NAEP Basic, NAEP Proficient, and NAEP Advanced. At or above NAEP Proficient includes NAEP Proficient and NAEP 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, 2011-2019 Mathematics Assessments.

[‡] Reporting standards not met.

* Value is significantly different (p < .05) from the value for the same jurisdiction and student group in 2019.

Grade 8 Average Scale Score Results by Gender

- In 2019, male students in Wyoming had an average scale score in mathematics (285) that was lower than that of female students (288). This performance gap was narrower than that of 1990 (5 points in favor of males).
- In 2019, male students in Wyoming had an average scale score in mathematics (285) that was higher than that of male students in public schools across the nation (280). Similarly, female students in Wyoming had an average scale score (288) that was higher than that of female students across the nation (282).
- In Wyoming, the average scale score of male students in 2019 was higher than the scores of male students in 1990, 1992, 1996, and 2000, but lower than the scores of male students in 2009, 2011, 2013, and 2017, and not significantly different from the scores of male students in 2003, 2005, 2007, and 2015.
- In Wyoming, the average scale score of female students in 2019 was higher than the scores of female students in 1990, 1992, 1996, 2000, 2003, 2005, and 2009, but not significantly different from the scores of female students in 2007, 2011, 2013, 2015, and 2017.

Grade 8 NAEP Achievement-Level Results by Gender

- In the 2019 assessment, 35 percent of male students and 39 percent of female students performed at or above NAEP 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 *NAEP Proficient* in 2019 (35 percent) was not significantly different from that of male students in the nation (33 percent).
- The percentage of female students in Wyoming's public schools who were at or above *NAEP Proficient* in 2019 (39 percent) was greater than that of female students in the nation (33 percent).
- In Wyoming, the percentage of male students performing at or above *NAEP Proficient* in 2019 was greater than the corresponding percentages of students in 1990, 1992, 1996, and 2000, but smaller than the percentage of students in 2011, and not significantly different from the corresponding percentages of students in 2003, 2005, 2007, 2009, 2013, 2015, and 2017.
- In Wyoming, the percentage of female students performing at or above *NAEP Proficient* in 2019 was greater than the corresponding percentages of students in 1990, 1992, 1996, 2000, 2003, 2005, 2009, and 2011, but not significantly different from the corresponding percentages of students in 2007, 2013, 2015, and 2017.

Table 5-A

The Nation's Report Card 2019 State Assessment

Percentage of fourth-grade public school students, average scale score, and achievement-level results in NAEP mathematics, by gender, year, and jurisdiction: Various years, 1992–2019

					Perc	ent	
Gender, year, a	Gender, year, and jurisdiction		Average scale score	Below NAEP Basic	At or above NAEP Basic	At or above NAEP Proficient	At NAEP Advanced
Male							
1992 ¹	Nation (public)	50	220*	41*	59*	19*	2*
	Wyoming	50	227*	30*	70*	21*	1*
1996 ¹	Nation (public)	51	224*	37*	63*	22*	3*
	Wyoming	50	224*	36*	64*	20*	2*
2000 ¹	Nation (public)	51	227*	32*	68*	27*	3*
	Wyoming	53	230*	25*	75*	27*	2*
2000	Nation (public)	51	225*	35*	65*	25*	3*
	Wyoming	53	230*	27*	73*	27*	3*
2003	Nation (public)	51	235*	23*	77*	34*	5*
	Wyoming	52	242*	12	88	41*	4*
2005	Nation (public)	51	238*	20	80	37*	6*
	Wyoming	51	244*	12	88	45*	6*
2007	Nation (public)	51	240*	18*	82*	41*	7*
	Wyoming	51	244*	12	88	46*	5*
2009	Nation (public)	51	240*	19	81	40*	7*
	Wyoming	52	243*	12	88	43*	4*
2011	Nation (public)	51	241	18*	82*	41*	7*
	Wyoming	51	245	12	88	46	6*
2013	Nation (public)	51	242	18*	82*	42	8*
	Wyoming	52	247	10	90	48	7*
2015	Nation (public)	51	241	19	81	41*	8*
	Wyoming	50	248	12	88	51	10
2017	Nation (public)	51	240*	21*	79*	41*	9*
	Wyoming	52	249	11	89	53	12
2019	Nation (public)	51	242	20	80	43	10
See notes at end of ta	Wyoming	51	248	12	88	51	10

Table 5-A

The Nation's Report Card 2019 State Assessment

Percentage of fourth-grade public school students, average scale score, and achievement-level results in NAEP mathematics, by gender, year, and jurisdiction: Various years, 1992–2019—Continued

					Perc	ent	
Gender, year, a	Gender, year, and jurisdiction		Average scale score	Below NAEP Basic	At or above NAEP Basic	At or above NAEP Proficient	At NAEP Advanced
Female							
1992 ¹	Nation (public)	50	218*	44*	56*	16*	1*
	Wyoming	50	224*	33*	67*	17*	1*
1996 ¹	Nation (public)	49	221*	39*	61*	17*	1*
	Wyoming	50	223*	36*	64*	18*	1*
2000 ¹	Nation (public)	49	225*	34*	66*	22*	2*
	Wyoming	47	228*	29*	71*	23*	2*
2000	Nation (public)	49	223*	38*	62*	20*	1*
	Wyoming	47	227*	30*	70*	22*	1*
2003	Nation (public)	49	233*	25*	75*	29*	3*
	Wyoming	48	240*	14	86	36*	2*
2005	Nation (public)	49	236*	21	79	33*	4*
	Wyoming	49	242	13	87	40	4*
2007	Nation (public)	49	238	19*	81*	36	4*
	Wyoming	49	243	11	89	43	4*
2009	Nation (public)	49	238	19	81	37	5*
	Wyoming	48	241	14	86	38*	4*
2011	Nation (public)	49	239*	18*	82*	39	6*
	Wyoming	49	243	13	87	42	5*
2013	Nation (public)	49	241*	18*	82*	40*	7
	Wyoming	48	246	9*	91*	47	6
2015	Nation (public)	49	239	19*	81*	38	6*
	Wyoming	50	246	11	89	46	8
2017	Nation (public)	49	238	21	79	38	7
	Wyoming	48	246	11	89	48	8
2019	Nation (public)	49	238	20	80	38	7
	Wyoming	49	244	13	87	44	7

^{*} Value is significantly different (p < .05) from the value for the same jurisdiction and student group in 2019.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 1992–2019 Mathematics Assessments.

¹ Accommodations were not permitted for this assessment.

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

Grade 8 Average Scale Score Results by Gender

- In 2019, male students in Wyoming had an average scale score in mathematics (285) that was lower than that of female students (288). This performance gap was narrower than that of 1990 (5 points in favor of males).
- In 2019, male students in Wyoming had an average scale score in mathematics (285) that was higher than that of male students in public schools across the nation (280). Similarly, female students in Wyoming had an average scale score (288) that was higher than that of female students across the nation (282).
- In Wyoming, the average scale score of male students in 2019 was higher than the scores of male students in 1990, 1992, 1996, and 2000, but lower than the scores of male students in 2009, 2011, 2013, and 2017, and not significantly different from the scores of male students in 2003, 2005, 2007, and 2015.
- In Wyoming, the average scale score of female students in 2019 was higher than the scores of female students in 1990, 1992, 1996, 2000, 2003, 2005, and 2009, but not significantly different from the scores of female students in 2007, 2011, 2013, 2015, and 2017.

Grade 8 NAEP Achievement-Level Results by Gender

- In the 2019 assessment, 35 percent of male students and 39 percent of female students performed at or above NAEP 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 *NAEP Proficient* in 2019 (35 percent) was not significantly different from that of male students in the nation (33 percent).
- The percentage of female students in Wyoming's public schools who were at or above *NAEP Proficient* in 2019 (39 percent) was greater than that of female students in the nation (33 percent).
- In Wyoming, the percentage of male students performing at or above *NAEP Proficient* in 2019 was greater than the corresponding percentages of students in 1990, 1992, 1996, and 2000, but smaller than the percentage of students in 2011, and not significantly different from the corresponding percentages of students in 2003, 2005, 2007, 2009, 2013, 2015, and 2017.
- In Wyoming, the percentage of female students performing at or above *NAEP Proficient* in 2019 was greater than the corresponding percentages of students in 1990, 1992, 1996, 2000, 2003, 2005, 2009, and 2011, but not significantly different from the corresponding percentages of students in 2007, 2013, 2015, and 2017.

Table 5-B

The Nation's Report Card 2019 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, 1990–2019

					Perc	ent	
Gender, year,	and jurisdiction	Percentage of students	Average scale score	Below NAEP Basic	At or above NAEP Basic	At or above NAEP Proficient	At NAEP Advanced
Male							
1990 ¹	Nation (public)	51	262*	49*	51*	17*	2*
	Wyoming	51	274*	34*	66*	21*	2*
1992 ¹	Nation (public)	52	266*	45*	55*	20*	3*
	Wyoming	50	275*	34*	66*	21*	2*
1996 ¹	Nation (public)	52	270*	40*	60*	24*	4*
	Wyoming	51	276*	31*	69*	24*	3*
2000 ¹	Nation (public)	50	276*	34	66	29*	6*
	Wyoming	50	277*	30	70	26*	4*
2000	Nation (public)	50	273*	38*	62*	26*	5*
	Wyoming	51	276*	32*	68*	24*	4*
2003	Nation (public)	50*	277*	33	67	29*	6*
	Wyoming	53*	284	24	76	34	5*
2005	Nation (public)	51*	278*	32*	68*	30*	6*
	Wyoming	52	283	24	76	31	4*
2007	Nation (public)	51*	281	29*	71*	33	8*
	Wyoming	52	288	20	80	37	7
2009	Nation (public)	51*	283*	28*	72*	34*	8*
	Wyoming	51	288*	20	80	38	8
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
2019	Nation (public)	51	280	33	67	33	10
	Wyoming	50	285	25	75	35	8

Table 5-B

The Nation's Report Card 2019 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, 1990–2019—Continued

				Percent				
Gender, year, and jurisdiction		Percentage of students	Average scale score	Below NAEP Basic	At or above NAEP Basic	At or above NAEP Proficient	At NAEP Advanced	
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	
2019	Nation (public)	49	282	31	69	33	9	
	Wyoming	50	288	22	78	39	9	

^{*} Value is significantly different (p < .05) from the value for the same jurisdiction and student group in 2019.

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 NAEP Basic, 261 or lower; NAEP Basic, 262–298; NAEP Proficient, 299–332; and NAEP Advanced, 333 or above. At or above NAEP Basic includes NAEP Basic, NAEP Proficient, and NAEP Advanced. At or above NAEP Proficient includes NAEP Proficient and NAEP 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, 1990–2019 Mathematics Assessments.

¹ Accommodations were not permitted for this assessment.

Eligibility for Free/Reduced-Price School Lunch

NAEP collects data on eligibility for the federal program providing free or reduced-price school lunches. The free/reduced-price lunch component of the National School Lunch Program (NSLP) offered through the U.S. Department of Agriculture (USDA) is designed to ensure that children near or below the poverty line receive nourishing meals. Eligibility is determined through the USDA's Income Eligibility Guidelines, and 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.

As a result of the passage of the Healthy, Hunger-Free Kids Act of 2010, schools can use a new universal meal service option, the "Community Eligibility Provision" (CEP). Through CEP, eligible schools can provide meal service to all students at no charge, regardless of economic status and without the need to collect eligibility data through household applications. CEP became available nationwide in the 2014-2015 school year; as a result, the percentage of students in many states categorized as eligible for NSLP may have increased in comparison to 2013. Therefore, readers should interpret NSLP trend results with caution.

Tables 6-A and 6-B show percentage of students and average scale scores by NAEP 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 Average Scale Score Results by Free/Reduced-Price School Lunch Eligibility

- In 2019, students in Wyoming eligible for free/reduced-price lunch had an average mathematics scale score of 236. This was lower than that of students in Wyoming not eligible for this program (252).
- In 2019, students in Wyoming who were eligible for free/reduced-price school lunch had an average scale
 score that was lower than that of students who were not eligible by 16 points. In 1996, the average scale 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 (236) in 2019 that was higher than that of students in the nation who were eligible (229).
- In Wyoming, students eligible for free/reduced-price lunch had an average mathematics scale score in 2019 that was higher than that of eligible students in 1996, 2000, and 2003, but not significantly different from that of eligible students in 2005, 2007, 2009, 2011, 2013, 2015, and 2017.

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

- In Wyoming, 33 percent of students who were eligible for free/reduced-price lunch and 56 percent of those
 who were not eligible for this program performed at or above NAEP Proficient in 2019. These percentages
 were significantly different from one another.
- For students in Wyoming in 2019 who were eligible for free/reduced-price lunch, the percentage at or above *NAEP Proficient* (33 percent) was greater than the corresponding percentage for their counterparts around the nation (26 percent).
- In Wyoming, the percentage of students eligible for free/reduced-price lunch who performed at or above NAEP
 Proficient in 2019 was greater than the corresponding percentages in 1996, 2000, and 2003, but not
 significantly different from the corresponding percentages in 2005, 2007, 2009, 2011, 2013, 2015, and 2017.

Table 6-A

The Nation's Report Card 2019 State Assessment

Percentage of fourth-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, 1996–2019

					Perc	ent	
Eligibility status	Eligibility status, year, and jurisdiction		Average scale score	Below NAEP Basic	At or above NAEP Basic	At or above NAEP Proficient	At NAEP Advanced
Eligible							
1996 ¹	Nation (public)	34*	207*	59*	41*	8*	#*
	Wyoming	33	213*	50*	50*	10*	#
2000 ¹	Nation (public)	35*	210*	54*	46*	9*	#*
	Wyoming	32	220*	38*	62*	16*	1*
2000	Nation (public)	40*	208*	57*	43*	7*	#*
	Wyoming	33	219*	41*	59*	15*	1*
2003	Nation (public)	44*	222*	38*	62*	15*	1*
	Wyoming	35	233*	20	80	25*	2*
2005	Nation (public)	46*	225*	33*	67*	19*	1*
	Wyoming	36	236	19	81	32	3
2007	Nation (public)	46*	227*	30	70	22*	1*
	Wyoming	36	236	18	82	32	2*
2009	Nation (public)	48*	228*	29	71	22*	1*
	Wyoming	35	234	21	79	29	2*
2011	Nation (public)	52*	229	27*	73*	24*	2*
	Wyoming	41*	236	19	81	32	3*
2013	Nation (public)	54	230*	27*	73*	26	2*
	Wyoming	40*	239	16*	84*	35	3
2015	Nation (public)	55*	229	28	72	24	2*
	Wyoming	41*	237	19	81	34	4
2017	Nation (public)	54	228*	31*	69*	25	3
	Wyoming	41*	239	18	82	38	6
2019	Nation (public)	54	229	29	71	26	3
See notes at end of ta	Wyoming	37	236	22	78	33	5

Table 6-A

The Nation's Report Card 2019 State Assessment

Percentage of fourth-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, 1996–2019—Continued

					Perc	ent	
Eligibility status, year, and jurisdiction		Percentage of students	Average scale score	Below NAEP Basic	At or above NAEP Basic	At or above NAEP Proficient	At NAEP Advanced
Not eligible							
1996 ¹	Nation (public)	52*	231*	27*	73*	25*	3*
	Wyoming	64	228*	29*	71*	23*	2*
2000 ¹	Nation (public)	52*	236*	21*	79*	33*	4*
	Wyoming	60	234*	21*	79*	30*	2*
2000	Nation (public)	49	235*	23*	77*	32*	4*
	Wyoming	59	234*	22*	78*	30*	3*
2003	Nation (public)	52*	244*	12*	88*	45*	6*
	Wyoming	63	246*	8	92	47*	5*
2005	Nation (public)	52*	248*	10	90	50*	8*
	Wyoming	60	247*	9	91	49*	7*
2007	Nation (public)	53*	249*	9	91	53*	9*
	Wyoming	64	248*	8	92	51	6*
2009	Nation (public)	51*	250*	9	91	54*	10*
	Wyoming	65	246*	8	92	47*	5*
2011	Nation (public)	47*	252	8*	92*	57	12*
	Wyoming	59*	249*	7	93	52	7*
2013	Nation (public)	46	254	7*	93*	60*	14*
	Wyoming	60*	252	6	94	56	9
2015	Nation (public)	44*	253	8*	92*	58	13*
	Wyoming	59*	253	7	93	58	12
2017	Nation (public)	45	253	9	91	57	14
	Wyoming	58*	254	7	93	60	13
2019	Nation (public)	45	253	9	91	58	15
	Wyoming	63	252	8	92	56	11

Table 6-A

The Nation's Report Card 2019 State Assessment

Percentage of fourth-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, 1996-2019-Continued

					Percent			
Eligibility status	Eligibility status, year, and jurisdiction		Average scale score	Below NAEP Basic	At or above NAEP Basic	At or above NAEP Proficient	At NAEP Advanced	
Information no	t available							
1996 ¹	Nation (public)	13*	230	28	72	28	3*	
	Wyoming	3	224	35	65	22	2	
2000 ¹	Nation (public)	13*	235	23	77	35	3*	
	Wyoming	8	227	29	71	23	1	
2000	Nation (public)	11*	236	22	78	35	4*	
	Wyoming	8	227	30	70	21	2	
2003	Nation (public)	4*	235	23	77	34	4*	
	Wyoming	2*	227	31	69	22	3	
2005	Nation (public)	2*	237	21	79	36	5*	
	Wyoming	3*	244	18	82	51	5	
2007	Nation (public)	1	243	17	83	44	8	
	Wyoming	#	‡	‡	‡	‡	‡	
2009	Nation (public)	1	240	22	78	42	7	
	Wyoming	#*	‡	‡	‡	‡	‡	
2011	Nation (public)	#*	247	12*	88*	49	10	
	Wyoming	#*	‡	‡	‡	‡	‡	
2013	Nation (public)	1	255	9*	91*	60*	18	
	Wyoming	#*	‡	‡	‡	‡	‡	
2015	Nation (public)	1	246	15	85	49	11	
	Wyoming	#	‡	‡	‡	‡	‡	
2017	Nation (public)	1	238	22	78	38	8	
	Wyoming	#*	‡	‡	‡	‡	‡	
2019	Nation (public)	1	239	20	80	40	9	
# Rounds to zero	Wyoming	1	‡	‡	‡	‡	‡	

[#] Rounds to zero.

NOTE: The NAEP grade 4 mathematics scale ranges from 0 to 500. Achievement levels correspond to the following points on the NAEP mathematics scales: below NAEP Basic, 213 or lower; NAEP Basic, 214–248; NAEP Proficient, 249–281; and NAEP Advanced, 282 or above. At or above NAEP Basic includes NAEP Basic, NAEP Proficient, and NAEP Advanced. At or above NAEP Proficient includes NAEP Proficient and NAEP 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, 1996-2019 Mathematics Assessments.

[‡] Reporting standards not met.

* Value is significantly different (p < .05) from the value for the same jurisdiction and student group in 2019.

¹ Accommodations were not permitted for this assessment.

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

- In 2019, students in Wyoming eligible for free/reduced-price lunch had an average mathematics scale score of 273. This was lower than that of students in Wyoming not eligible for this program (294).
- In 2019, students in Wyoming who were eligible for free/reduced-price school lunch had an average scale score that was lower than that of students who were not eligible by 21 points. This performance gap was wider than that of 1996 (15 points).
- Students in Wyoming eligible for free/reduced-price lunch had an average scale score (273) in 2019 that was higher than that of students in the nation who were eligible (266).
- In Wyoming, students eligible for free/reduced-price lunch had an average mathematics scale score in 2019 that was higher than that of eligible students in 1996 and 2000, but lower than that of eligible students in 2013, and not significantly different from that of eligible students in 2003, 2005, 2007, 2009, 2011, 2015, and 2017.

Grade 8 NAEP 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 44 percent of those
 who were not eligible for this program performed at or above NAEP Proficient in 2019. These percentages
 were significantly different from one another.
- For students in Wyoming in 2019 who were eligible for free/reduced-price lunch, the percentage at or above *NAEP 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 NAEP
 Proficient in 2019 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, 2015, and 2017.

Table 6-B

The Nation's Report Card 2019 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, 1996–2019

					Perc	ent	
Eligibility status	Eligibility status, year, and jurisdiction		Average scale score	Below NAEP Basic	At or above NAEP Basic	At or above NAEP Proficient	At NAEP Advanced
Eligible							
1996 ¹	Nation (public)	30*	252*	61*	39*	8*	1*
	Wyoming	21*	262*	46*	54*	11*	1
2000 ¹	Nation (public)	28*	255*	56*	44*	10*	1*
	Wyoming	24*	265*	44*	56*	15*	1
2000	Nation (public)	31*	253*	59*	41*	10*	1*
	Wyoming	26*	262*	46*	54*	14*	2
2003	Nation (public)	36*	258*	53*	47*	11*	1*
	Wyoming	27*	271	38	62	18*	1
2005	Nation (public)	39*	261*	49*	51*	13*	1*
	Wyoming	30*	272	35	65	17*	1
2007	Nation (public)	41*	265	45	55	15*	2*
	Wyoming	28*	275	33	67	23	3
2009	Nation (public)	43*	266	43*	57*	17*	2*
	Wyoming	29*	274	33	67	20	2
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
2019	Nation (public)	50	266	46	54	18	3
See notes at end of ta	Wyoming	34	273	36	64	24	3

Table 6-B

The Nation's Report Card 2019 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, 1996–2019—Continued

					Perc	ent	
Eligibility status jurisdiction	Eligibility status, year, and jurisdiction		Average scale score	Below NAEP Basic	At or above NAEP Basic	At or above NAEP Proficient	At NAEP Advanced
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
2019	Nation (public)	49	296	18	82	48	16
See notes at end of tab	Wyoming	66	294	17	83	44	11

Table 6-B

The Nation's Report Card 2019 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, 1996-2019-Continued

					Perc	ent	
Eligibility status, year, and jurisdiction		Percentage of students	Average scale score	Below NAEP Basic	At or above NAEP Basic	At or above NAEP Proficient	At NAEP Advanced
Information no	t 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	‡	‡	‡	‡	‡
2019	Nation (public)	1	286	29	71	38	15
# Rounds to zero	Wyoming	1	‡	‡	‡	‡	‡

[#] Rounds to zero.

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 NAEP Basic, 261 or lower; NAEP Basic, 262–298; NAEP Proficient, 299–332; and NAEP Advanced, 333 or above. At or above NAEP Basic includes NAEP Proficient and NAEP 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, 1996-2019 Mathematics Assessments.

[‡] Reporting standards not met.

* Value is significantly different (p < .05) from the value for the same jurisdiction and student group in 2019.

¹ Accommodations were not permitted for this assessment.

Type of Location

NAEP results are reported for four mutually exclusive categories of school location: city, suburb, town, and rural. The categories are 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.

In 2007, the classification system was revised; therefore, trend comparisons to previous years are not available. The new locale codes are based on an address's proximity to an urbanized area (a densely settled core with densely settled surrounding areas). The original system was based on metropolitan statistical areas. To distinguish the two systems, the new system is referred to as "urban-centric locale codes." The urban-centric locale code system classifies territory into four major types: city, suburban, town, and rural. Each type has three subcategories. For city and suburb, these are gradations of size—large, midsize, and small. Towns and rural areas are further distinguished by their distance from an urbanized area. They can be characterized as fringe, distant, or remote.

Tables 7-A and 7-B show percentage of students and average scale scores by NAEP achievement-level data for public school students at grades 4 and 8 in Wyoming and the nation, by type of location since 2007.

Grade 4 Average Scale Score Results by Type of Location

- In 2019, 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 2019, 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 2019, students attending public schools in city locations in Wyoming had an average scale score that was lower than the average scale score of students in city locations in 2011, 2013, 2015, and 2017 in Wyoming, but not significantly different from the average scale score of students in city locations in 2007 and 2009 in Wyoming.
- In 2019, 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, 2015, and 2017 in
 Wyoming.
- In 2019, 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, 2015, and 2017 in Wyoming.

Grade 4 NAEP Achievement-Level Results by Type of Location

- In 2019, the percentage of students in Wyoming's public schools in city locations who performed at or above *NAEP Proficient* was smaller than the corresponding percentages of students in town and rural schools.
- The percentages of students in Wyoming's public schools in city, town, and rural locations who performed at or above *NAEP Proficient* in 2019 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 city locations who performed at or above NAEP
 Proficient in 2019 was smaller than that of students in city locations in 2011, 2013, 2015, and 2017 in
 Wyoming, but not significantly different from that of students in city locations in 2007 and 2009 in Wyoming.
- The percentage of students in Wyoming's public schools in town locations who performed at or above *NAEP Proficient* in 2019 was greater than that of students in town locations in 2009 and 2011 in Wyoming, but not significantly different from that of students in town locations in 2007, 2013, 2015, and 2017 in Wyoming.
- The percentage of students in Wyoming's public schools in rural locations who performed at or above *NAEP Proficient* in 2019 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, 2015, and 2017 in Wyoming.

Table 7-A

The Nation's Report Card 2019 State Assessment

Percentage of fourth-grade public school students, average scale score, and achievement-level results in NAEP mathematics, by type of location, year, and jurisdiction: Various years, 2007–2019

					Perc	ent	
Type of location jurisdiction	n, year, and	Percentage of students	Average scale score	Below NAEP Basic	At or above NAEP Basic	At or above NAEP Proficient	At NAEP Advanced
City							
2007	Nation (public)	29	233*	26	74	32*	5*
	Wyoming	24	243	14	86	43	4
2009	Nation (public)	30	234	25	75	32	5*
	Wyoming	23	242	13	87	41	5
2011	Nation (public)	29*	235	24	76	33	5*
	Wyoming	21*	246*	12	88	48*	6
2013	Nation (public)	30	236	24	76	35	7
	Wyoming	22	247*	9*	91*	49*	7
2015	Nation (public)	31	236	24	76	35	7
	Wyoming	23	249*	10*	90*	52*	8
2017	Nation (public)	30	234	27*	73*	33	7
	Wyoming	22	248*	11	89	51*	10
2019	Nation (public)	30	235	26	74	35	7
	Wyoming	25	240	17	83	40	7
Suburb							
2007	Nation (public)	37*	243	15*	85*	44	7*
	Wyoming	3*	238	19	81	30	5
2009	Nation (public)	36*	243	16	84	44	7*
	Wyoming	3*	‡	‡	‡	‡	‡
2011	Nation (public)	36*	244	15	85	45	8*
	Wyoming	3*	240	15	85	34	6
2013	Nation (public)	35*	244	15	85	46	9
	Wyoming	3*	241	14	86	35	9
2015	Nation (public)	41	243	16	84	44	9*
	Wyoming	3*	243	12	88	39	6
2017	Nation (public)	40	243	18	82	45	10
	Wyoming	3*	246	15	85	47	11
2019	Nation (public)	40	244	16	84	46	11
	Wyoming	1	‡	‡	‡	‡	‡

Table 7-A

The Nation's Report Card 2019 State Assessment

Percentage of fourth-grade public school students, average scale score, and achievement-level results in NAEP mathematics, by type of location, year, and jurisdiction: Various years, 2007–2019—Continued

					Perc	ent	
Type of locatio jurisdiction	n, year, and	Percentage of students	Average scale score	Below NAEP Basic	At or above NAEP Basic	At or above NAEP Proficient	At NAEP Advanced
Town							
2007	Nation (public)	12*	238	18*	82*	36	4*
	Wyoming	40*	245*	10	90	45	5*
2009	Nation (public)	12*	237	19	81	35	4*
	Wyoming	41*	242*	11	89	40*	3*
2011	Nation (public)	13*	237	19	81	35	4*
	Wyoming	41*	242*	12	88	40*	4*
2013	Nation (public)	11	240*	17*	83*	39	6
	Wyoming	37*	247	9	91	49	7
2015	Nation (public)	11	237	20	80	35	5
	Wyoming	45	247	12	88	48	10
2017	Nation (public)	11	237	21	79	36	6
	Wyoming	46	248	11	89	52	10
2019	Nation (public)	10	237	21	79	37	6
	Wyoming	45	248	11	89	50	10
Rural							
2007	Nation (public)	22*	240	16*	84*	39	5*
	Wyoming	34*	244	11	89	45	4*
2009	Nation (public)	22*	240	16*	84*	39	5*
	Wyoming	33*	242*	13	87	41*	4*
2011	Nation (public)	23*	243*	15*	85*	42	6
	Wyoming	35*	245	11	89	46	6
2013	Nation (public)	25*	243*	14*	86*	44*	7
	Wyoming	37*	246	11	89	47	6
2015	Nation (public)	18	241	16	84	40	6
	Wyoming	29	246	12	88	47	8
2017	Nation (public)	19	240	18	82	41	7
	Wyoming	29	247	11	89	48	10
2019	Nation (public)	19	240	18	82	40	7
+ Deposition atomical	Wyoming	29	248	12	88	51	9

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 2007-2019 Mathematics Assessments.

[‡] Reporting standards not met.

* Value is significantly different (p < .05) from the value for the same jurisdiction and student group in 2019.

NOTE: The NAEP grade 4 mathematics scale ranges from 0 to 500. Achievement levels correspond to the following points on the NAEP mathematics scales: below *NAEP Basic*, 214–248; *NAEP Proficient*, 249–281; and *NAEP Advanced*, 282 or above. At or above *NAEP Basic* includes *NAEP Basic*, *NAEP Proficient*, and *NAEP Advanced*, 282 or above. Advanced. At or above NAEP Proficient includes NAEP Proficient and NAEP Advanced. Detail may not sum to totals because of rounding. All differences were calculated and tested using unrounded numbers.

Grade 8 Average Scale Score Results by Type of Location

- In 2019, the average scale score of students in Wyoming attending public schools in city locations was lower than the score of students in town schools, but was not significantly different from the score of students in rural schools
- In 2019, students attending public schools in city and town locations in Wyoming had average scale scores
 that were higher than the average scale scores of students in city and town locations in the nation.
- In 2019, students attending public schools in rural locations in Wyoming had an average scale score that was not significantly different from the average scale score of students in rural locations in the nation.
- In 2019, students attending public schools in city and town locations in Wyoming had average scale scores
 that were not significantly different from the average scale scores of students in city and town locations in
 2007, 2009, 2011, 2013, 2015, and 2017 in Wyoming.
- In 2019, students attending public schools in rural locations in Wyoming had an average scale score that was lower than the average scale score of students in rural locations in 2017 in Wyoming, but not significantly different from the average scale score of students in rural locations in 2007, 2009, 2011, 2013, and 2015 in Wyoming.

Grade 8 NAEP Achievement-Level Results by Type of Location

- In 2019, the percentage of students in Wyoming's public schools in city locations who performed at or above NAEP Proficient was not significantly different from the corresponding percentages of students in town and rural schools.
- The percentages of students in Wyoming's public schools in city and town locations who performed at or above *NAEP Proficient* in 2019 were greater than those of students in city and town locations in the nation.
- The percentage of students in Wyoming's public schools in rural locations who performed at or above *NAEP Proficient* in 2019 was not significantly different from those of students in rural locations in the nation.
- The percentages of students in Wyoming's public schools in city, town, and rural locations who performed at or above *NAEP Proficient* in 2019 were not significantly different from those of students in city, town, and rural locations in 2007, 2009, 2011, 2013, 2015, and 2017 in Wyoming.

Table 7-B

The Nation's Report Card 2019 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, 2007–2019

					Perc	ent	
Type of location jurisdiction	, year, and	Percentage of students	Average scale score	Below NAEP Basic	At or above NAEP Basic	At or above NAEP Proficient	At NAEP Advanced
City							
2007	Nation (public)	28	273*	38	62	25*	5*
	Wyoming	20*	285	21	79	33	5
2009	Nation (public)	27*	276	36*	64*	28	6*
	Wyoming	19*	285	22	78	35	7
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
2019	Nation (public)	29	276	38	62	28	9
	Wyoming	28	283	28	72	35	8
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	#	‡	‡	‡	‡	‡
2019	Nation (public)	40	286	28	72	38	12
	Wyoming	#	‡	‡	‡	‡	‡

Table 7-B

The Nation's Report Card 2019 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, 2007–2019—Continued

					Perc	ent	
Type of location jurisdiction	n, year, and	Percentage of students	Average scale score	Below NAEP Basic	At or above NAEP Basic	At or above NAEP Proficient	At NAEP Advanced
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
2019	Nation (public)	12	276	35	65	28	6
	Wyoming	49	290	20	80	40	9
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
2019	Nation (public)	19	282	29	71	33	8
# Dayanda ta Hava	Wyoming	23	284	26	74	34	8

[#] Rounds to zero.

* Reporting standards not met.

* Value is significantly different (p < .05) from the value for the same jurisdiction and student group in 2019.

*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 NAEP Basic, NAEP Basic includes NAEP Resignatures and NAEP Resignatures. 261 or lower; NAEP Basic, 262-298; NAEP Proficient, 299-332; and NAEP Advanced, 333 or above. At or above NAEP Basic includes NAEP Basic, NAEP Proficient, and NAEP Advanced. At or above NAEP Proficient includes NAEP Proficient and NAEP 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, 2007-2019 Mathematics Assessments.

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

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.

In March 2010, the National Center for Education Statistics (NCES), working with the National Assessment Governing Board (Governing Board), adopted a new policy to maximize the participation of students with disabilities (SD) and English language learners (ELL).

Today, NAEP continues to explore ways to ensure consistent, inclusive assessment and reporting across all jurisdictions and student populations.

Tables 9-A and 9-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 scale scores and percentages performing below *NAEP Basic*, at or above *NAEP Basic*, at or above *NAEP Proficient*, and at *NAEP Advanced* for grades 4 and 8.

Tables 10-A and 10-B present the percentages of students assessed in Wyoming by ELL status, their average scale scores, and their performance in terms of the percentages below *NAEP Basic*, at or above *NAEP Basic*, at or above *NAEP Proficient*, and at *NAEP 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 9-A

The Nation's Report Card 2019 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, 1992-2019

		SD a	nd/or ELL		SD		ELL
Voar and	d testing status	Wyoming	Nation (public)	Wyoming	Nation (public)	Wyoming	Nation (public)
	Identified	-			(1 /		
1992 ¹		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 1	2	1	2	#	1
	Assessed without accommodations	5	9	4	3	1	6
0044	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
0040	Assessed with accommodations	12	12	11	9	2	4
2013	Identified	18	23	15	14	3	11
	Excluded	1 1	2	1	1	#	#
	Assessed without accommodations	4	7	3	2	1	5
2015	Assessed with accommodations	13	14	11	10	2	5
2015	Identified	18	24	15	14	4	12
	Excluded Assessed without accommodations	1 4	2	1	1	#	1
		13	14	3 12	3 11	2 2	6
2017	Assessed with accommodations	17		12			12
2017	Identified Excluded		25	15	15	3 #	12
	Assessed without accommodations	1 5	10	4	2	1	7
	Assessed without accommodations Assessed with accommodations	10	13	10	9	1	5
2019	Assessed with accommodations Identified	20	27	10 17	16	4	13
2019	Excluded	1	2	17		#	
	Assessed without accommodations	5	10	3	2 3	2	1 7
	Assessed without accommodations Assessed with accommodations	14	15	13	11	2	6
Rounds to		14	13	13	11		0

[#] Rounds to zero.

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, 1992–2019 Mathematics Assessments.

¹ Accommodations were not permitted for this assessment year.

Table 9-B

The Nation's Report Card 2019 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, 1990-2019

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	#	
	Assessed without accommodations	8	7	8	5	1	
2000	Identified	13	14	12	11	2	
2000	Excluded	1	4	1	3	#	
	Assessed without accommodations	9	7	8	5	2	;
	Assessed with accommodations	3	3	3	2	#	
2003	Identified	17	19	15	14	3	
2003	Excluded	1	4	1	3	#	
	Assessed without accommodations	6	8	4	5	2	
	Assessed with accommodations	10	7	9	6	1	
2005	Identified	17	19	14	13	4	
	Excluded	2	4	2	3	#	
	Assessed without accommodations	5	7	3	3	3	
	Assessed with accommodations	10	8	10	7	1	
2007	Identified	15	18	13	13	3	
	Excluded	2	4	2	4	#	
	Assessed without accommodations	4	6	3	2	1	
	Assessed with accommodations	9	8	9	6	1	
2009	Identified	15	18	14	13	2	
	Excluded	2	3	2	3	#	
	Assessed without accommodations	3	5	2	2	1	
	Assessed with accommodations	10	10	10	8	1	
2011	Identified	14	18	13	13	2	
	Excluded	1	3	1	2	#	
	Assessed without accommodations	2	5	1	2	1	
	Assessed with accommodations	11	10	10	9	1	
2013	Identified	16	17	14	13	2	
	Excluded	2	2	1	1	#	
	Assessed without accommodations	2	3	1	1	#	
	Assessed with accommodations	13	12	11	10	2	
2015	Identified	16	19	14	13	3	
	Excluded	1	2	1	1	#	
	Assessed without accommodations	2	5	1	1	1	
	Assessed with accommodations	13	13	12	11	1	
2017	Identified	15	20	14	14	2	
	Excluded	1	2	1	1	#	
	Assessed without accommodations	3	6	2	3	1	
	Assessed with accommodations	11	12	11	10	1	
2019	Identified	16	21	15	15	2	
	Excluded	2	2	2	1	#	
	Assessed without accommodations	3	6	1	2	1	
	Assessed with accommodations	12	13	12	11	1	

Not available.

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, 1990-2019 Mathematics Assessments.

¹ Accommodations were not permitted for this assessment year.

Table 9-A

The Nation's Report Card 2019 State Assessment

Percentage of fourth-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, 2000–2019

				Percent				
SD status, year	, and jurisdiction	Percentage of students	Average scale score	Below NAEP Basic	At or above NAEP Basic	At or above NAEP Proficient	At NAEP Advanced	
SD								
2000	Nation (public)	10*	198*	71*	29*	6*	1*	
	Wyoming	12*	200*	65*	35*	6*	#	
2003	Nation (public)	11*	214	50	50	12*	1*	
	Wyoming	14*	221	39	61	13	1	
2005	Nation (public)	12*	218*	44*	56*	16	2*	
	Wyoming	14*	219	44	56	13	1	
2007	Nation (public)	11*	220*	40*	60*	19*	2	
	Wyoming	14*	224	36	64	19	1	
2009	Nation (public)	12*	220*	41*	59*	19*	2	
	Wyoming	15	227*	31*	69*	20	2	
2011	Nation (public)	12*	218*	45*	55*	17	2*	
	Wyoming	15	226*	32*	68*	20	1	
2013	Nation (public)	13*	218*	45*	55*	18	2	
	Wyoming	15	229*	29*	71*	22	2	
2015	Nation (public)	13*	217*	46*	54*	16	2	
	Wyoming	15	224	36	64	19	2	
2017	Nation (public)	13*	214	52	48	16	2	
	Wyoming	14*	222	42	58	21	4	
2019	Nation (public)	14	214	51	49	16	3	
Con material at and of the	Wyoming	16	220	44	56	18	3	

Table 9-A

The Nation's Report Card 2019 State Assessment

Percentage of fourth-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, 2000-2019—Continued

				Percent			
SD status, year, and jurisdiction		Percentage of students	Average scale score	Below NAEP Basic	At or above NAEP Basic	At or above NAEP Proficient	At NAEP Advanced
Not SD							
2000	Nation (public)	90*	227*	33*	67*	24*	3*
	Wyoming	88*	233*	24*	76*	27*	2*
2003	Nation (public)	89*	236*	21*	79*	34*	4*
	Wyoming	86*	244*	9	91	43*	4*
2005	Nation (public)	88*	240*	17*	83*	38*	5*
	Wyoming	86*	247*	8	92	47*	6*
2007	Nation (public)	89*	241*	16*	84*	41*	6*
	Wyoming	86*	247*	8	92	48*	5*
2009	Nation (public)	88*	242*	16*	84*	41*	6*
	Wyoming	85	245*	9	91	44*	4*
2011	Nation (public)	88*	243*	15	85	43*	7*
	Wyoming	85	247*	9	91	48*	6*
2013	Nation (public)	87*	244	14	86	45	8*
	Wyoming	85	250	6	94	52	7*
2015	Nation (public)	87*	243*	15	85	43	8*
	Wyoming	85	251	7	93	53	10
2017	Nation (public)	87*	243*	16*	84*	43*	9
	Wyoming	86*	252	7	93	56	11
2019	Nation (public)	86	244	15	85	45	10
"5	Wyoming	84	251	7	93	53	10

[#] Rounds to zero.

** Value is significantly different (p < .05) from the value for the same jurisdiction and student group in 2019.

NOTE: The NAEP grade 4 mathematics scale ranges from 0 to 500. Achievement levels correspond to the following points on the NAEP mathematics scales: below NAEP Basic, 213 or lower; NAEP Basic, 214–248; NAEP Proficient, 249–281; and NAEP Advanced, 282 or above. At or above NAEP Basic includes NAEP Basic, NAEP Proficient, and NAEP Advanced. At or above NAEP Proficient includes NAEP Proficient and NAEP 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

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 2000-2019 Mathematics Assessments.

Table 9-B

The Nation's Report Card 2019 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, 2000–2019

					Perc	ent	
SD status, year, and jurisdiction		Percentage of students	Average scale score	Below NAEP Basic	At or above NAEP Basic	At or above NAEP Proficient	At NAEP Advanced
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
2019	Nation (public)	14	247	68	32	9	2
See notes at and of	Wyoming	13	249	65	35	8	1

See notes at end of table.

Table 9-B

The Nation's Report Card 2019 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, 2000-2019—Continued

					Perc	ent	
SD status, year, and jurisdiction		Percentage of students	Average scale score	Below NAEP Basic	At or above NAEP Basic	At or above NAEP Proficient	At NAEP Advanced
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
2019	Nation (public)	86	286	26	74	37	11
	Wyoming	87	292	17	83	42	10

[#] Rounds to zero.

**Value is significantly different (p < .05) from the value for the same jurisdiction and student group in 2019.

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 *NAEP Basic*, 261 or lower; *NAEP Basic*, 262–298; *NAEP Proficient*, 299–332; and *NAEP Advanced*, 333 or above. At or above *NAEP Basic* includes *NAEP Basic*, *NAEP Proficient*, and *NAEP* Advanced. At or above NAEP Proficient includes NAEP Proficient and NAEP 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

Table 10-A

The Nation's Report Card 2019 State Assessment

Percentage of fourth-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, 2000–2019

					Perc	ent	
ELL status, year, and jurisdiction		Percentage of students	Average scale score	Below NAEP Basic	At or above NAEP Basic	At or above NAEP Proficient	At NAEP Advanced
ELL							
2000	Nation (public)	6*	199*	70*	30*	4*	#
	Wyoming	2	‡	‡	‡	‡	‡
2003	Nation (public)	9*	214*	51*	49*	9*	#*
	Wyoming	4	215*	46	54	10	1
2005	Nation (public)	10*	216*	46*	54*	11*	1
	Wyoming	4	223	34	66	15	#
2007	Nation (public)	10*	217*	44*	56*	13*	1
	Wyoming	4	221	39	61	17	1
2009	Nation (public)	10*	218*	43	57	12*	1*
	Wyoming	2*	‡	‡	‡	‡	‡
2011	Nation (public)	11*	219	42	58	14	1
	Wyoming	3	219	41	59	13	#
2013	Nation (public)	11*	219	41	59	14	1
	Wyoming	3*	216*	47	53	8	#
2015	Nation (public)	11*	218	43	57	15	1
	Wyoming	4	217	45	55	10	#
2017	Nation (public)	12*	217*	47*	53*	14	2
	Wyoming	3*	214*	48	52	8	1
2019	Nation (public)	13	219	41	59	16	1
Soo notes at and of	Wyoming	4	225	29	71	15	1

See notes at end of table.

Table 10-A

The Nation's Report Card 2019 State Assessment

Percentage of fourth-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, 2000-2019—Continued

					Perc	ent	
ELL status, yea	ar, and jurisdiction	Percentage of students	Average scale score	Below NAEP Basic	At or above NAEP Basic	At or above NAEP Proficient	At NAEP Advanced
Not ELL							
2000	Nation (public)	94*	226*	34*	66*	24*	3*
	Wyoming	98	229*	28*	72*	25*	2*
2003	Nation (public)	91*	236*	21*	79*	34*	4*
	Wyoming	96	242*	11	89	40*	4*
2005	Nation (public)	90*	239*	18*	82*	38*	5*
	Wyoming	96	244*	12	88	44*	5*
2007	Nation (public)	90*	242*	16*	84*	42*	6*
	Wyoming	96	245	11	89	45	5*
2009	Nation (public)	90*	242*	16	84	41*	6*
	Wyoming	98*	243*	12	88	41*	4*
2011	Nation (public)	89*	243	15*	85*	43	7*
	Wyoming	97	245	11	89	45	6*
2013	Nation (public)	89*	244	15*	85*	45	8*
	Wyoming	97*	247	9*	91*	49	7*
2015	Nation (public)	89*	243	16	84	43	8*
	Wyoming	96	248	10	90	50	9
2017	Nation (public)	88*	242*	18*	82*	43	9*
	Wyoming	97*	249*	10	90	52	10
2019	Nation (public)	87	243	17	83	44	10
"5	Wyoming	96	247	12	88	49	9

[#] Rounds to zero.

NOTE: The NAEP grade 4 mathematics scale ranges from 0 to 500. Achievement levels correspond to the following points on the NAEP mathematics scales: below NAEP Basic, 213 or lower; NAEP Basic, 214–248; NAEP Proficient, 249–281; and NAEP Advanced, 282 or above. At or above NAEP Basic includes NAEP Basic, NAEP Proficient, and NAEP Advanced. At or above NAEP Proficient includes NAEP Proficient and NAEP 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.

[‡] Reporting standards not met.

* Value is significantly different (p < .05) from the value for the same jurisdiction and student group in 2019.

Table 10-B

The Nation's Report Card 2019 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, 2000–2019

					Perc	ent	
ELL status, year, and jurisdiction		Percentage of students	Average scale score	Below NAEP Basic	At or above NAEP Basic	At or above NAEP Proficient	At NAEP Advanced
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	‡	‡	‡	‡	‡
2019	Nation (public)	7	243	73	27	5	1
Soo notes at and of t	Wyoming	2	‡	‡	‡	‡	‡

See notes at end of table.

Table 10-B

The Nation's Report Card 2019 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, 2000-2019—Continued

					Perc	ent	
ELL status, year, and jurisdiction		Percentage of students	Average scale score	Below NAEP Basic	At or above NAEP Basic	At or above NAEP Proficient	At NAEP Advanced
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
2019	Nation (public)	93	284	29	71	35	10
	Wyoming	98	287	23	77	38	9

[#] Rounds to zero.

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 NAEP Basic, 261 or lower; NAEP Basic, 262-298; NAEP Proficient, 299-332; and NAEP Advanced, 333 or above. At or above NAEP Basic includes NAEP Basic, NAEP Proficient, and NAEP Advanced. At or above NAEP Proficient includes NAEP Proficient and NAEP 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.

[‡] Reporting standards not met.

* Value is significantly different (p < .05) from the value for the same jurisdiction and student group in 2019.

Table 11-A

The Nation's Report Card 2019 State Assessment

Number of fourth-grade public school students assessed in NAEP mathematics and weighted percentage excluded, by state/jurisdiction: 2019

State/jurisdiction	Number assessed	Weighted percentage excluded
Nation (public)	143,600	2
Alabama	2,300	2
Alaska	2,200	1
Arizona	2,400	1
Arkansas	2,300	1
California	6,000	3
Colorado	3,200	1
Connecticut	2,300	2
Delaware	2,300	2
Florida	5,600	2
Georgia	3,400	2
Hawaii	2,200	2
Idaho	2,400	1
Illinois	3,500	1
Indiana		1
lowa	2,300	
	2,200	1
Kansas	2,200	1
Kentucky	3,100	2
Louisiana	2,200	2
Maine	2,200	1
Maryland	3,100	2
Massachusetts	3,400	2
Michigan	3,200	2
Minnesota	2,400	2
Mississippi	2,400	1
Missouri	2,300	1
Montana	2,300	1
Nebraska	2,500	1
Nevada	2,500	2
New Hampshire	2,200	1
New Jersey	2,200	2
New Mexico	2,600	2
New York	3,100	3
North Carolina	4,400	1
North Dakota	2,300	2
Ohio	3,500	3
Oklahoma	2,200	2
Oregon Pennsylvania	2,400	1
	3,000	2
Rhode Island	2,300	2
South Carolina	2,400	1
South Dakota	2,300	1
Tennessee	3,100	2
Texas	7,200	3 2
Utah	2,400	
Vermont	2,400	1
Virginia	2,300	1
Washington	2,400	3
West Virginia	2,300	1
Wisconsin	3,400	1
Wyoming	2,100	1
Other jurisdictions		
District of Columbia	2,500	2
DoDEA ¹	2,400	2

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), 2019 Mathematics Assessment.

Table 11-B

The Nation's Report Card 2019 State Assessment

Number of eighth-grade public school students assessed in NAEP mathematics and weighted percentage excluded, by state/jurisdiction: 2019

State/jurisdiction	Number assessed	Weighted percentage excluded
Nation (public)	142,200	2
Alabama	2,300	1
Alaska	2,100	1
Arizona	2,400	2
Arkansas	2,300	2
California	5,900	2
Colorado	3,100	
Connecticut	2,200	2
Delaware	2,300	2
Florida	5,700	2
Georgia	3,600	2
Hawaii	2,200	2
Idaho	2,300	1
Illinois	3,600	1
Indiana	2,200	2
lowa	2,200	1
Kansas	2,300	1
Kentucky	3,100	2
Louisiana	2,100	2
Maine	2,300	1
Maryland	3,100	2
Massachusetts	3,400	2
Michigan	3,300	2
Minnesota	2,400	2
Mississippi	2,300	1
Missouri	2,400	1
Montana	2,300	1
Nebraska	2,400	1
Nevada	2,400	1
New Hampshire	2,100	1
New Jersey	2,200	2
New Mexico	2,800	2
New York	3,000	_ 1
North Carolina	4,400	1
North Dakota	2,200	1
Ohio	3,300	2
Oklahoma	2,200	2
Oregon	2,400	1
Pennsylvania	3,100	1
Rhode Island		•
	2,300	1
South Carolina	2,300	1
South Dakota	2,200	1
Tennessee	3,200	2
Texas	7,100	2
Utah	2,500	1
Vermont	2,500	1_
Virginia	2,200	2
Washington	2,300	2
West Virginia	2,200	1
Wisconsin	3,300	1
Wyoming	2,200	2
Other jurisdictions		
District of Columbia	1,900	2
DoDEA ¹	1,800	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), 2019 Mathematics Assessment.

Where to Find More Information

The NAEP Mathematics Assessment

More information about the 2019 NAEP mathematics assessment and the results can be found on the NAEP website at https://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 https://nces.ed.gov/nationsreportcard/states/.

The *Mathematics Framework for the National Assessment of Educational Progress*, on which this assessment is based, is available at the National Assessment Governing Board website at https://www.nagb.gov/naep-frameworks/mathematics.html.

The NAEP Data Explorer (NDE)

The NAEP Data Explorer (NDE), available at https://nces.ed.gov/nationsreportcard/naepdata/, is an interactive database with which users can design and create tables and perform tests of statistical significance. The NDE includes student, teacher, and school variables for all participating districts, states, and the nation. Data tables are also available for participating districts, with all contextual questions cross-tabulated with the major demographic variables.

Technical Documentation on the Web (TDW)

The Technical Documentation on the Web (TDW) section of the NAEP website is written for researchers and assumes knowledge of educational measurement and testing. TDW contains information about the technical procedures and methods of NAEP: how the assessment is designed and conducted, and how data are analyzed.

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 https://nces.ed.gov/nationsreportcard/about/inclusion.asp#research.

To order publications:

Some recent NAEP publications related to mathematics are accessible via the mathematics page of the NAEP website (https://nces.ed.gov/nationsreportcard/mathematics/, under "Mathematics Publications"). These and others are available through the IES Publications and Products Search site at: https://ies.ed.gov/pubsearch/. 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: https://www.ed.gov/edpubs/.

The NAEP State Report Generator was developed for the NAEP 2019 reports by Phillip Leung, Patricia Donahue, Marc Berger, Rick Hasney, Ming Kuang, and Amy De Santo.

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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Appendix

Technical Procedures for the NAEP 2019 Mathematics Assessment

This appendix provides an overview of some of the technical procedures for the NAEP 2019 mathematics assessment. Information is included about the content of the assessment, school and student samples and participation, inclusion of students with disabilities and/or English language learners, analysis procedures, and interpretation of results. Additional technical information about NAEP assessments is available on the Web at https://www.nces.ed.gov/nationsreportcard/tdw/.

Development of the Mathematics Framework

The National Assessment Governing Board oversees the creation of the NAEP frameworks that provide the theoretical basis for the assessment, the direction for what types of items should be included, and how the items should be designed and scored. While the frameworks describe the general content and design of NAEP subject area assessments, the specifications provide the detailed information used by test developers for constructing the assessments. Both the *Mathematics Framework for the National Assessment of Educational Progress* and *Assessment and Item Specifications for the NAEP Mathematics Assessment* are available on the Governing Board's website at https://www.nagb.gov/naep-frameworks/mathematics.html.

The frameworks for the main NAEP assessments are periodically updated or changed to reflect current curricula and standards. Whenever changes are made to a subject framework, every effort is made to try to maintain the trend lines that permit the reporting of changes in student achievement over time. If, however, the nature of the changes made to an assessment are such that the results would not be comparable to earlier assessments, a new trend line is started.

The 1990 and 1992 mathematics frameworks reflected a two-dimensional "content by ability" matrix design in which questions were classified according to one of five content areas and one of three types of mathematical abilities (conceptual understanding, procedural knowledge, and problem solving). A third dimension, mathematical power (reasoning, connections, and communication), was introduced in the 1996 framework to form a "content by mathematical ability by mathematical power" matrix design that also guided the development of the 2000 and 2003 assessments.

For the 2005 framework, the dimensions of mathematical ability and power were replaced with the dimension of mathematical complexity, which indicates the level of cognitive demand (low, moderate, or high) of each item. In addition, the proportions of assessment questions by content area were changed for grade 8 to reflect the increasing importance of algebraic concepts, and for grade 12 to correspond more closely to the mathematics that high school students experience in a three-year sequence of courses (the equivalent of one year of geometry and two years of algebra). Because of changes in the framework and in administration procedures for grade 12, results from the 2005 twelfth-grade assessment could not be compared to results from previous years. A new trend line was started for grade 12 in 2005, and new mathematics achievement-level descriptions were applied.

There were no changes to the objectives at grades 4 and 8. The 2009 framework was unchanged for the 2011, 2013, 2015, 2017, and 2019 assessments. In 2011, 2017 and 2019, only the grade 4 and grade 8 assessments were administered, but in 2013 and 2015 the grade 4, grade 8, and grade 12 assessments were administered.

Content Areas and Mathematical Complexity

The 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 mathematics content areas.

Content Areas: Although the names of the content areas have changed from one framework to the next, there is a consistent focus across frameworks on collecting information on student performance in five key areas:

- number properties and operations
- measurement
- geometry
- data analysis, statistics, and probability
- algebra

Certain aspects of mathematics, such as computation, occur in all content areas. Although the names of the content areas (as well as some topics in those areas) have changed from one framework to the next, a consistent focus has

remained on measuring student performance in all five content areas. The distribution of questions among each content area differs by grade to reflect the knowledge and skills appropriate for each grade level (table A-1). At grade 12, the measurement and geometry content areas are combined into one for reporting purposes to reflect the fact that the majority of measurement topics suitable for grade 12 students are geometric in nature. Students at grade 12 are provided with a <u>reference sheet</u> containing selected formulas related to geometry, trigonometry, conic sections, interest rates, series, and combinations and permutations.

These divisions are not intended to separate mathematics into discrete elements. Rather, they are intended to provide a helpful classification scheme that describes the full spectrum of mathematical content assessed by NAEP.

Table A-1.

Target percentage distribution of questions in NAEP mathematics, by grade and content area: Various years, 1990–2019

Grade and content area	1990 and 1992	1996, 2000, and 2003	2005–2019	Content area ¹
Grade 4				
Number sense, properties, and operations	45	40	40	Number properties and operations
Measurement	20	20	20	Measurement
Geometry and spatial sense	15	15	15	Geometry
Data analysis, statistics, and probability	10	10	10	Data analysis, statistics, and probability
Algebra and functions	10	15	15	Algebra
Grade 8				
Number sense, properties, and operations	30	25	20	Number properties and operations
Measurement	15	15	15	Measurement
Geometry and spatial sense	20	20	20	Geometry
Data analysis, statistics, and probability	15	15	15	Data analysis, statistics, and probability
Algebra and functions	20	25	30	Algebra

The content area labels were revised in 2005, but test item content remains comparable to previous years.

NOTE: Beginning with the 2017 assessment, NAEP mathematics results are from a digitally based assessment; prior to 2017, results were from a paper-and-pencil based assessment. The data analysis, statistics, and probability content area was called data analysis and probability in the 2005 and 2007 frameworks. 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, 1990–2019 Mathematics Assessments.

Complexity: Items are also classified by mathematical complexity.

- low complexity,
- · moderate complexity, and
- high complexity

Mathematical complexity attempts to focus on the cognitive demands of the assessment question. Each level of complexity includes aspects of knowing and doing mathematics, such as reasoning, performing procedures, understanding concepts, or solving problems. The levels of complexity form an ordered description of the demands an item may make on a student. Items at the low level of complexity, for example, may ask a student to recall a property. At the moderate level, an item may ask the student to make a connection between two properties; at the high level, an item may ask a student to analyze the assumptions made in a mathematical model. This is an example of the distinctions made in item complexity to provide balance in the assessment. The ordering is not intended to imply that mathematics is learned or should be taught in such an ordered way.

The complexity dimension builds on the dimensions of mathematical ability (conceptual understanding, procedural knowledge, and problem solving) and mathematical power (reasoning, connections, and communication) that were used in the mathematics framework for the 1996-2003 NAEP assessments.

The mathematics framework specifies the percentage of questions devoted to each content area by grade.

Sample Questions booklets for the mathematics assessment are available for download.

Content of the 2019 Mathematics Assessment

Each NAEP assessment contains two major components: subject-specific cognitive items that measure the achievement of students in an academic subject; and noncognitive survey questions that are given to students, teachers, and school administrators who participate in the NAEP assessment. NAEP survey questionnaires collect additional information that helps put student achievement results into context and allows meaningful comparison between student groups. NAEP survey questionnaires collect additional information that helps put student achievement results into context and allows meaningful comparison between student groups. Both the cognitive and noncognitive items are developed through a process that includes reviews by external advisory groups and pilot testing. Results from the cognitive items provide information about what students know and can do in a subject area. Information from the background items gives context to NAEP results and/or allows researchers to track factors associated with academic achievement.

The number of questions in the 2019 mathematics assessment used for reporting results at each grade has remained relatively constant across assessment years. Students spend about one-half of the assessment time responding to multiple-choice questions and one-half responding to two types of constructed-response questions. Short constructed-response questions require students to provide answers to computation problems or to describe solutions in one or two sentences, while extended constructed-response questions require more detailed responses or explanations. Table A-2 shows the approximate percentage distribution of questions administered from 1990 to 2019 by the type of question for each grade level.

Table A-2.

Percentage distribution of administered NAEP mathematics questions, by grade and question type: Various years, 1990–2019

Grade and question type	1990	1992	1996	2000	2003	2005	2007	2009	2011	2013	2015	2017	2019
Grade 4		•											
Multiple choice	71	61	51	60	63	64	69	68	70	70	70	59	57
Short constructed response	29	36	41	34	33	32	27	27	26	27	27	38	41
Extended constructed response	#	3	8	6	4	4	4	5	4	3	3	3	3
Grade 8		'											
Multiple choice	78	62	56	63	65	69	74	72	74	75	73	59	51
Short constructed response	22	34	38	32	29	28	23	23	23	22	24	39	46
Extended constructed response	#	3	7	6	5	4	4	4	3	3	3	2	3

[#] Rounds to zero.

NOTE: Beginning with the 2017 assessment, NAEP mathematics results are from a digitally based assessment; prior to 2017, results were from a paper-and-pencil based assessment. Short constructed-response questions included in the 1990 and 1992 assessments were scored dichotomously (i.e., credit or no credit). Beginning with the 1996 assessment, some of the new short constructed-response questions were scored allowing for partial credit. 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, 1990–2019 Mathematics Assessments.

Cognitive Blocks: The assessment design allowed for broad coverage of the five mathematics content areas and levels of mathematical complexity at each grade, while minimizing the time burden for any one student. This was accomplished through the use of matrix sampling of items in which each student was required to take only a small portion of the entire pool of assessment questions.

The mathematics item pool for each grade was divided up into subsets or "blocks." In 2019, there were a total of 14 cognitive blocks at fourth grade and 14 blocks at eighth grade. Each mathematics assessment form contained two separately timed 30-minute blocks. Each block contained between 14 and 12 questions depending on the balance between multiple-choice, selected-response, and constructed-response questions.

The procedure used for distributing blocks across booklets controlled for position and context effects by balancing the positioning of blocks across booklets and balancing the pairing of blocks within booklets. The procedure also cycled the booklets for administration so that no more than a few students in an assessment section received the same test booklet.

Sample released questions at all three grade levels can be viewed at the NAEP website at https://nces.ed.gov/nationsreportcard/itmrls/. Questions released from the 2005, 2007, 2009, 2011, 2013, and 2017 assessments are classified by content area and level of complexity. Those released from assessments administered

in 2003 and earlier are classified by content area and mathematical ability. Items also may be sorted by difficulty a question type.	nd

NAEP Samples

NAEP assesses representative samples of students rather than the entire student population. The sample selection process utilizes a probability sample design. In this type of sample, each school and each student has a known probability of being selected. Samples are selected according to a multistage design, with students drawn from within sampled public and private schools nationwide. The school probabilities are proportional to the estimated number of students in the grade assessed.

The Common Core of Data (CCD) file serves as the sampling frame for the selection of public schools in each state/jurisdiction. The CCD is a comprehensive list of operating public schools in each jurisdiction that is compiled each school year by the National Center for Education Statistics (NCES). The sample of students in districts participating in TUDA represents an augmentation of the sample of students selected as part of the state samples. All students at more local geographic sampling levels also make up part of the broader samples. For example, the TUDA samples are included as part of the corresponding state samples, just as the state samples are included as part of the national sample.

The Private School Survey (PSS) is a survey of all U.S. private schools carried out biennially by the Census Bureau under contract to NCES. The PSS serves as the sampling frame for private schools. While state and district results are based on samples of public schools only, the national results are based on the combined samples of both public and private schools.

Table A-3 shows the target populations and sample sizes in 2019 for the nation and participating states and jurisdictions at grades 4 and 8. Table A-4 shows the same information for participating urban districts for grades 4 and 8.

Because the schools and students who participate in the assessment represent only a portion of the larger population of interest, the assessment results are weighted to make appropriate inferences about the populations from the student, school, and district samples. Sampling weights are adjusted to account for the disproportionate representation of some groups in the selected sample. This includes oversampling of schools with high concentrations of students from certain racial/ethnic groups and the lower sampling rates of students who attend very small schools.

Table A-3.
Student sample sizes and target populations in NAEP mathematics at grades 4 and 8, by state/jurisdiction: 2019

State/jurisdiction	Sample size	Target population	Sample size	Target populatio
Nation	152,300	3,992,000	150,100	3,909,00
Public	146,400	3,689,000	· ·	3,603,00
		295,000	144,800	
Private	2,600		2,700	300,00
Alabama	2,400	58,000	2,300	51,00
Alaska	2,200	9,000	2,100	8,00
Arizona	2,500	86,000	2,400	86,00
Arkansas	2,400	37,000	2,300	35,00
California	6,200	444,000	6,000	442,00
Colorado	3,300	68,000	3,100	64,00
Connecticut	2,400	38,000	2,300	39,00
Delaware	2,300	10,000	2,300	10,00
Florida	5,700	204,000	5,800	205,00
Georgia	3,400	133,000	3,700	125,00
Hawaii	2,200	12,000	2,300	13,00
Idaho	2,400	23,000	2,400	23,00
Illinois	3,600	137,000	3,600	146,00
				73,00
Indiana	2,400	78,000	2,200	
lowa	2,300	35,000	2,400	37,00
Kansas	2,200	35,000	2,400	34,00
Kentucky	3,100	49,000	3,100	49,00
Louisiana	2,300	53,000	2,200	47,00
Maine	2,300	13,000	2,300	13,00
Maryland	3,200	70,000	3,200	64,00
Massachusetts	3,500	69,000	3,600	70,00
Michigan	3,300	99,000	3,400	102,00
Minnesota	2,400	63,000	2,400	64,00
Mississippi	2,400	37,000	2,300	34,00
Missouri				
	2,400	68,000	2,400	68,00
Montana	2,300	12,000	2,400	11,00
Nebraska	2,500	25,000	2,500	24,00
Nevada	2,600	35,000	2,400	35,00
New Hampshire	2,200	13,000	2,200	14,00
New Jersey	2,200	100,000	2,200	98,00
New Mexico	2,700	25,000	2,800	24,00
New York	3,100	192,000	3,100	191,00
North Carolina	4,400	120,000	4,500	113,00
North Dakota	2,300	9,000	2,300	8,00
Ohio	3,600	130,000	3,400	122,00
Oklahoma	2,300	49,000	2,300	46,00
Oregon	2,400	41,000	2,500	42,00
Pennsylvania	3,200	126,000	3,200	127,00
Rhode Island	2,300	10,000	2,300	11,00
South Carolina	2,400	60,000	2,400	54,00
South Dakota	2,300	11,000	2,300	10,00
Tennessee	3,200	72,000	3,200	71,00
Texas	7,400	406,000	7,200	388,00
Utah	2,400	49,000	2,500	50,00
Vermont	2,400	6,000	2,500	6,00
Virginia	2,300	95,000	2,200	90,00
Washington	2,500	83,000	2,400	75,00
West Virginia	2,300	20,000	2,300	18,00
Wisconsin	3,500	61,000	3,300	60,00
Wyoming	2,200	7,000	2,300	7,00
Other jurisdictions				
BIE ¹	900	3,000	800	3,00
District of Columbia	2,500	6,000	1,900	5,00
DoDEA ²	2,400	6,000	1,800	4,00
	2,400	0,000	1,000	4,00
Puerto Rico - Not available.		_	_	

Not available

NOTE: Beginning with the 2017 assessment, NAEP mathematics results are from a digitally based assessment; prior to 2017, results were from a paper-and-pencil based assessment. The sample size is rounded to the nearest hundred. The target population is rounded to the nearest thousand. Data for BIE and DoDEA schools are counted in the overall national totals, but not in the public school totals. Data for the District of Columbia public schools are counted, along with the states, in the national public school totals. 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), 2019 Mathematics Assessment.

¹ Bureau of Indian Education.

 $^{^{2}\,\}mathrm{Department}$ of Defense Education Activity (overseas and domestic schools).

Table A-4.

Student sample sizes and target populations for Trial Urban District Assessment (TUDA) in mathematics at grades 4 and 8, by urban district: 2019

	Grade	9 4	Grade 8					
Urban district	Sample size	Target population	Sample size	Target population				
Albuquerque	1,100	7,000	1,100	6,000				
Atlanta	1,200	4,000	1,400	3,000				
Austin	1,100	6,000	1,100	5,000				
Baltimore City	1,100	6,000	1,000	5,000				
Boston	1,300	4,000	1,400	3,000				
Charlotte	1,100	12,000	1,100	11,000				
Chicago	1,800	27,000	1,700	26,000				
Clark County (NV)	1,800	24,000	1,700	23,000				
Cleveland	1,300	3,000	1,100	3,000				
Dallas	1,200	12,000	1,200	10,000				
Denver	1,200	7,000	1,000	6,000				
Detroit	1,200	4,000	1,300	3,000				
District of Columbia (DCPS)	1,600	4,000	1,000	2,000				
Duval County (FL)	1,200	10,000	1,200	8,000				
Fort Worth	1,200	6,000	1,200	6,000				
Fresno	1,200	5,000	1,100	5,000				
Guilford County (NC)	1,100	5,000	1,100	5,000				
Hillsborough County (FL)	1,100	16,000	1,200	16,000				
Houston	1,700	17,000	1,600	12,000				
Jefferson County (KY)	1,200	7,000	1,100	7,000				
Los Angeles	1,700	35,000	1,800	31,000				
Miami-Dade	1,800	25,000	1,700	25,000				
Milwaukee	1,200	6,000	1,000	5,000				
New York City	1,800	71,000	1,800	69,000				
Philadelphia	1,100	11,000	1,000	8,000				
San Diego	1,100	8,000	1,200	7,000				
Shelby County (TN)	1,100	8,000	1,200	7,000				

NOTE: Beginning with the 2017 assessment, NAEP mathematics results are from a digitally based assessment; prior to 2017, results were from a paper-and-pencil based assessment. DCPS = District of Columbia Public Schools. The sample size is rounded to the nearest hundred. The target population is rounded to the nearest thousand.

School and Student Participation

National Participation

To ensure unbiased samples, NAEP requires that participation rates be 70 percent or higher to report national results separately for public and private schools. In instances where participation rates meet the 70 percent criteria but fall below 85 percent, a nonresponse bias analysis is conducted; however, results may still be reported.

National school and student participation rates for the 2019 mathematics assessment are presented in table A-5. Student-weighted school participation rates were 96 percent for grade 4 (100 percent for public schools and 53 percent for private schools) and 96 percent for grade 8 (99 percent for public schools and 50 percent for private schools).

State and District Participation

Standards established by the Governing Board require that school participation rates for the original state and district samples need to be at least 85 percent for results to be reported. In 2019, all 52 states and jurisdictions participating in the mathematics assessment at grades 4 and 8 met this participation rate requirement (tables A-6 through A-7). The 27 urban districts participating at grades 4 and 8 also met the criteria for reporting (table A-8).

Table A-5.

National school and student participation rates in NAEP mathematics, by grade and type of school: 2019

Grade and type			Student	participation			
of school	01 11 1		School partic		N		<u> </u>
OI SCHOOL	Student-v	veigntea	School-w	eigntea	Number of schools participating	Student-weighted	Number of students
	Percent before	Percent after	Percent before	Percent after	after substitution	percent	assessed
	substitution	substitution	substitution substitution				
Grade 4							
Nation	96	97	88	90	8,280	94	149,500
Public	100	100	100	100	7,810	93	143,600
Private	53	63	55	62	290	95	2,600
Grade 8							
Nation	96	96	81	84	6,960	92	147,400
Public	99	99	99	99	6,560	92	142,200
Private	50	62	51	60	270	94	2,700

NOTE: Beginning with the 2017 assessment, NAEP mathematics results are from a digitally based assessment; prior to 2017, results were from a paper-and-pencil based assessment. The national totals for schools include Department of Defense Education Activity (overseas and domestic schools) and Bureau of Indian Education schools, which are not included in either the public or private school totals. The national totals for students include students in these schools. Columns of percentages have different denominators. The number of schools is rounded to the nearest ten. The number of students is rounded to the nearest hundred.

 Table A-6.

 Public school and student participation rates in NAEP mathematics at grade 4, by state/jurisdiction: 2019

		School participation			participation
State/jurisdiction	Student-weighted percent	School-weighted percent	Number of schools participating	Student-weighted percent	Number of students assessed
Nation (public)	100	100	7,810	93	143,600
Alabama	100	100	120	95	2,300
Alaska	98	92	160	91	2,200
Arizona	100	100	130	94	2,400
Arkansas	100	100	120	95	2,300
California	99	99	300	94	6,000
Colorado	100	100	170	93	3,200
Connecticut	100	100	120	93	2,300
Delaware	100	100	90	94	2,300
Florida	99	99	280	93	5,600
Georgia	100	100	160	94	3,400
	100	100	120	94	
Hawaii					2,200
Idaho	100	100	130	94	2,400
Illinois	100	100	190	94	3,500
Indiana	100	100	120	94	2,300
lowa	99	99	120	95	2,200
Kansas	100	100	130	94	2,200
Kentucky	100	100	160	95	3,100
Louisiana	100	100	120	93	2,200
Maine	100	99	140	92	2,200
Maryland	100	100	160	93	3,100
Massachusetts	100	100	180	93	3,400
Michigan	100	100	180	93	3,200
Minnesota	100	100	130	92	2,400
Mississippi	100	100	120	95	2,400
Missouri	100	100	130	93	2,300
Montana	100	98	160	93	2,300
Nebraska	100	100	150	95	2,500
Nevada	100	100	130	94	2,500
New Hampshire	100	100	140	90	2,200
New Jersey	99	99	120	93	2,200
New Mexico	99	99	140	93	2,600
New York	100	100	160	89	3,100
North Carolina	100	100	230	93	4,400
North Dakota	99	99	160	95	2,300
Ohio	100	100	200	93	
				93	3,500
Oklahoma	100	100	130		2,200
Oregon	100	100	140	90	2,400
Pennsylvania	100	100	160	93	3,000
Rhode Island	100	100	110	94	2,300
South Carolina	100	100	120	95	2,400
South Dakota	100	98	150	94	2,300
Tennessee	100	100	160	94	3,100
Texas	100	100	360	95	7,200
Utah	100	100	120	92	2,400
Vermont	100	100	210	95	2,400
Virginia	100	100	120	94	2,300
Washington	99	99	130	92	2,400
West Virginia	100	100	130	94	2,300
Wisconsin	99	99	190	92	3,400
Wyoming	100	100	130	93	2,100
Other jurisdictions					
District of Columbia	100	100	120	93	2,500
DoDEA ¹	97	95	90	94	2,400
			90	94	2,400
Puerto Rico - Not available.	_	-	_		

Not available

NOTE: Beginning with the 2017 assessment, NAEP mathematics results are from a digitally based assessment; prior to 2017, results were from a paper-and-pencil based assessment. The number of schools is rounded to the nearest ten. The number of students is rounded to the nearest hundred. The school participation rates are student-weighted percentages before substitution. Columns of percentages have different denominators. Detail may not sum to totals because of rounding.

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

 Table A-7.

 Public school and student participation rates in NAEP mathematics at grade 8, by state/jurisdiction: 2019

		School participation			participation
State/jurisdiction	Student-weighted percent	School-weighted percent	Number of schools participating	Student-weighted percent	Number of students assessed
Nation (public)	99	99	6,560	92	142,200
Alabama	100	100	110	95	2,300
Alaska	98	86	100	88	2,100
Arizona	100	100	120	93	2,400
Arkansas	100	100	110	93	2,300
California	96	93	230	93	5,900
Colorado	100	100	150	90	3,100
Connecticut	100	100	110	91	2,200
Delaware	100	100	60	91	2,300
Florida	99	99	250	92	5,700
Georgia	100	100	130	94	3,600
Hawaii	100	100	60	89	2,200
ldaho	100	100	100	93	2,300
Illinois	100	100	190	91	3,600
Indiana	100	100	110	92	2,200
owa	100	100	120	93	2,400
Kansas	100	100	120	95	2,300
Kentucky	100	100	130	92	3,100
Louisiana	100	100	110	92	2,100
Maine	100	100	110	88	2,300
Maryland	100	100	160	90	3,100
Massachusetts	99	99	150	90	3,400
Michigan	100	100	160	92	3,300
Minnesota	100	96	130	89	2,400
Mississippi	100	100	110	92	2,300
Missouri	100	100	130	93	2,400
Montana	100	100	130	93	2,300
Nebraska	97	99	120	94	2,400
Vevada	100	100	90	91	2,400
New Hampshire	100	100	90	85	2,100
New Jersey	100	100	110	91	2,200
New Mexico	100	100	120	92	2,800
New York	99	97	160	85	3,000
North Carolina	100	100	170	91	4,400
North Dakota	99	99	130	92	2,200
Ohio	100	100	190	93	3,300
Oklahoma	100	100	130	92	2,200
Oregon	100	100	130	89	2,400
Pennsylvania	99	100	160	91	3,100
Rhode Island	100	100	60	91	2,300
South Carolina	100	100	120	93	2,300
South Dakota	99	96	120	91	2,200
Tennessee	100	100	150	92	3,200
Texas	100	100	240	93	7,100
Utah	100	100	120	90	2,500
/ermont	100	100	120	93	2,500
/irginia	100	100	110	92	2,200
Nashington	99	100	120	90	2,300
Nest Virginia	100	100	110	93	2,200
Visconsin	100	100	180	90	3,300
Wyoming	100	100	80	91	2,200
Other jurisdictions					
District of Columbia	100	100	70	89	1,900
DoDEA ¹	97	91	50	95	1,800
			50	95	1,800
Puerto Rico		-	_		_

[—] Not available

NOTE: The number of schools is rounded to the nearest ten. The number of students is rounded to the nearest hundred. The school participation rates are student-weighted percentages before substitution. Columns of percentages have different denominators. Detail may not sum to totals because of rounding.

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

 Table A-8.

 Public school and student participation rates for Trial Urban District Assessment (TUDA) in mathematics, by grade and urban district: 2019

		School participation			participation
Grade and urban district	Student-weighted percent	School-weighted percent	Number of schools participating	Student-weighted percent	Number of students assesse
Grade 4					
Albuquerque	96	94	50	91	1,10
Atlanta	99	98	50	94	1,10
Austin	100	100	60	93	1,10
Baltimore City	100	100	60	94	1,10
Boston	100	100	70	96	
					1,20
Charlotte	100	100	60	92	1,00
Chicago	100	100	100	95	1,70
Clark County (NV)	100	100	90	95	1,80
Cleveland	100	100	80	92	1,30
Dallas	100	100	60	95	1,20
Denver	100	100	60	93	1,10
Detroit	100	100	70	94	1,20
District of Columbia (DCPS)	100	100	80	94	1,50
Duval County (FL)	100	100	60	95	1,10
Fort Worth	100	100	60	95	1,10
Fresno	100	100	60	94	1,2
Guilford County (NC)	100	100	50	94	1,10
Hillsborough County (FL)	100	100	60	93	1,10
Houston	100	100	90	96	1,6
	100	100	60	94	
Jefferson County (KY)					1,10
Los Angeles	100	100	90	95	1,7
Miami-Dade	100	100	90	96	1,7
Milwaukee	100	100	70	92	1,2
New York City	100	100	90	91	1,7
Philadelphia	96	98	60	96	1,1
San Diego	100	100	60	94	1,1
Shelby County (TN)	100	100	60	93	1,1
Grade 8					
Albuquerque	100	100	40	90	1,1
Atlanta	100	100	20	93	1,4
Austin	100	100	20	89	1,1
Baltimore City	100	100	60	87	1,0
Boston	100	100	40	93	1,3
Charlotte	100	100	40	91	1,1
Chicago	100	100	90	93	1,7
Clark County (NV)	100	100	60	91	1,7
Cleveland	100	100	70	92	1,0
Dallas	100	100	40	92	1,1
Denver	96	96	40	91	1,0
Detroit	100	100	50	90	1,2
District of Columbia	100	100	30	88	9
(DCPS)					
Duval County (FL)	100	100	40	94	1,1
Fort Worth	100	100	30	93	1,2
Fresno	100	100	20	86	1,1
Guilford County (NC)	100	100	20	92	1,1
Hillsborough County (FL)	100	100	50	93	1,2
Houston	100	100	50	92	1,6
Jefferson County (KY)	100	100	20	91	1,1
Los Angeles	100	100	80	92	1,7
-			80	92	
Miami-Dade	100	100			1,7
Milwaukee	100	100	50	88	1,0
New York City	99	96	90	93	1,8
Philadelphia	89	97	50	94	1,0
San Diego	100	100	40	92	1,1
Shelby County (TN)	100	100	40	90	1,1

NOTE: Beginning with the 2017 assessment, NAEP mathematics results are from a digitally based assessment; prior to 2017, results were from a paper-and-pencil based assessment. DCPS = District of Columbia Public Schools. The number of schools is rounded to the nearest ten. The number of students is rounded to the nearest hundred. The school participation rates are student-weighted percentages before substitution.

Inclusion of Students With Disabilities and/or English Language Learners

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.

The National Assessment Governing Board, which sets policy for NAEP, explored ways to ensure that NAEP continues to appropriately include as many students as possible and to do so in a consistent manner for all jurisdictions assessed and reported. In March 2010, the Governing Board adopted a new policy, NAEP Testing and Reporting on Students with Disabilities and English Language Learners. This policy was the culmination of work with experts in testing and curriculum, and those who work with exceptional children and students learning to speak English. The policy aims to

- maximize participation of sampled students in NAEP,
- · reduce variation in exclusion rates for SD and ELL students across states and districts,
- · develop uniform national rules for including students in NAEP, and
- ensure that NAEP is fully representative of SD and ELL students.

The policy defines specific inclusion goals for NAEP samples. At the national, state, and district levels, the goal is to include 95 percent of all students selected for the NAEP samples, and 85 percent of those in the NAEP sample who are identified as SD or ELL.

Students are selected to participate in NAEP based on a sampling procedure designed to yield a sample of students that is representative of students in all schools nationwide and in public schools within each state. First, schools are selected, and then students are sampled from within those schools without regard to disability or English language proficiency. Once students are selected, those previously identified as SD or ELL may be offered accommodations or excluded.

States and jurisdictions vary in their proportions of special-needs students and in their policies on inclusion and the use of accommodations. While identification of rates SD and ELL students in some states, have leveled off in recent years, NAEP inclusion rates have generally remained steady or increased since 2003. This reflects efforts on the part of states and jurisdictions to include all students who can meaningfully participate in the NAEP assessments. The NAEP inclusion policy is an effort to ensure that this trend continues.

Determining whether each jurisdiction has met the NAEP inclusion goals involves looking at three different inclusion rates—an overall inclusion rate, an inclusion rate for SD students, and an inclusion rate for ELL students. Each inclusion rate is calculated as the percentage of sampled students who were included in the assessment (i.e., were not excluded).

Inclusion rate percentages are estimates because they are based on representative samples of students rather than on the entire population of students. As such, the inclusion rates are associated with a margin of error. The margin of error for each jurisdiction's inclusion rate was taken into account when comparing it to the corresponding inclusion goal. For example, if the point estimate of a state's overall inclusion rate was 93 percent and had a margin of error of plus or minus 3 percentage points, the state was considered to have met the 95 percent inclusion goal because the 95 percent goal falls within the margin of error, which ranges from 90 percent to 96 percent. Refer to the Technical Notes for more details about how the margin of error was used in these calculations.

Confidence intervals for state inclusion rates

NAEP endeavors to include as many sampled students as possible in the assessment, including students with disabilities (SD) and English language learners (ELL), and has established specific inclusion goals: 95 percent of all sampled students and 85 percent of sampled students identified as SD or ELL. Inclusion rates were computed for each state/jurisdiction participating in the 2019 assessment and compared to NAEP inclusion goals. Three inclusion percentages were computed for each state/jurisdiction. An overall inclusion percentage represents included students as a percentage of all students sampled within the state/jurisdiction. In addition, separate percentages were computed to report included students as a percentage of the state/jurisdiction sample that was identified as SD (not including students having a Section 504 plan) or ELL.

Inclusion percentages are estimates based on a sample, and each estimate has a measure of uncertainty or margin of error. Confidence intervals quantify this uncertainty due to sampling, resulting in interval estimates of the inclusion percentages. Therefore, confidence intervals for inclusion percentages were used to determine upper and lower confidence bounds around the inclusion point estimates.

When determining whether each state/jurisdiction met the NAEP inclusion goals, the confidence intervals were used, rather than just the point estimates. This means that if the inclusion goal of either 95 percent or 85 percent fell within the corresponding confidence interval, the state/jurisdiction was considered as having met the goal. States/jurisdictions for which the upper bound of the confidence interval was less than 95 percent (or 85 percent) did not meet the inclusion goal.

See the National Assessment Governing Board's policy on NAEP Testing and Reporting on Students with Disabilities and English Language Learners at https://www.nagb.org/content/nagb/assets/documents/policies/naep testandreport studentswithdisabilities.pdf.

All of the states/jurisdictions participating in the 2019 mathematics assessment met the 95 percent inclusion goal at both grades 4 and 8. See appendix table A-10 for the inclusion rates as a percentage of all students selected in each state/jurisdiction, and table A-11 for the rates as a percentage of the SD or ELL students.

All of the districts participating in the 2019 mathematics assessment met the 95 percent inclusion goal at both grades 4 and 8. See appendix table A-12 for the inclusion rates as a percentage of all students selected in each urban district/jurisdiction, and table A-13 for the rates as a percentage of the SD or ELL students.

Table A-9.

Percentage of fourth- and eighth-grade public and nonpublic school students identified as students with disabilities (SD) and/or English language learners (ELL) assessed in NAEP mathematics with accommodations, by SD/ELL category and type of accommodation: 2019

pual dictionary e ks during test ulator version of the test ng to stay on task etions only presented in Sign Language etions translated into Spanish nded time ing impaired version of test contrast for visually impaired mobility version of test infication equipment be tested in separate session r erential seating entation in Sign Language entation in Sign Language ion staff administers/Aide present ial equipment	Grade 4			Grade 8				
	SD and/or ELL	SD	ELL	SD and/or ELL	SD	ELL		
Bilingual booklet	0.5	0.1	0.5	0.4	0.1	0.4		
Bilingual dictionary	1.0	0.1	1.0	0.9	0.1	0.9		
Braille	#	#	#	#	#	#		
Breaks during test	4.2	3.7	0.9	2.7	2.6	0.3		
Calculator version of the test	1.2	1.2	0.2	2.9	2.9	0.4		
Cueing to stay on task	2.5	2.3	0.4	1.3	1.2	0.1		
Directions only presented in Sign Language	#	#	#	#	#	#		
Directions translated into Spanish	0.2	#	0.2	0.1	#	0.1		
Extended time	11.7	8.3	4.5	10.3	8.7	2.5		
Hearing impaired version of test	#	#	#	#	#	#		
High contrast for visually impaired	#	#	#	0.1	0.1	#		
Low mobility version of test	#	#	#	#	#	#		
Magnification equipment	0.1	0.1	#	0.1	0.1	#		
Must be tested in separate session	5.6	5.0	1.1	4.3	4.1	0.5		
Other	0.2	0.1	#	0.1	0.1	#		
Preferential seating	2.8	2.6	0.5	2.3	2.3	0.3		
Presentation in Sign Language	#	#	#	#	#	#		
Responds orally to scribe	0.3	0.3	#	0.1	0.1	#		
Response in Sign Language	#	#	#	#	#	#		
School staff administers/Aide present	1.2	1.1	0.3	0.5	0.5	0.1		
Special equipment	0.4	0.4	0.1	0.2	0.2	#		
Text to speech in Spanish	0.5	0.1	0.5	0.4	0.1	0.4		
Uses template	0.2	0.2	#	0.1	0.1	#		

Rounds to zero.

NOTE: Beginning with the 2017 assessment, NAEP mathematics results are from a digitally based assessment; prior to 2017, results were from a paper-and-pencil based assessment. 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. SD includes students identified as having either an Individualized Education Program or protection under Section 504 of the Rehabilitation Act of 1973.

Table A-10.
Inclusion rate and confidence interval in NAEP mathematics for fourth- and eighth-grade public school students, as a percentage of all students, by state/jurisdiction: 2019

			Grade 4		Grade 8						
			95% confidence in	nterval		95% confidence	nterval				
State/jurisdiction	Inclusion rate		Lower	Upper	Inclusion rate	Lower	Upp				
Nation (public)	98	1	97.9	98.2	98 1	98.3	98				
Alabama	98	1	97.8	98.9	99 1	98.1	99				
Alaska	99	1	98.9	99.6	99 1	98.2	99				
Arizona	99	1	98.4	99.4	98 1	97.2	99				
Arkansas	99	1	98.0	99.3	98 1	97.6	98				
California	97	1	96.3	97.8	98 1	97.8	98				
Colorado	99	1	98.2	99.1	99 1	98.2	99				
Connecticut	98	1	97.6	98.8	98 1	97.4	98				
Delaware	98	1	97.9	98.8	98 1	97.6	98				
Florida	98	1	96.7	98.2	98 1	97.3	98				
Georgia	98	1	97.9	98.9	98 1	97.7	98				
Hawaii	98	1	97.3	98.7	98 1	97.2	98				
		1									
Idaho	99	1	98.2	99.1	99 1	98.2	99				
Illinois	99	1	98.7	99.5	99	98.6	99				
Indiana	99		97.9	99.0	96	97.5	98				
lowa	99	1	97.9	99.0	99 1	98.3	99				
Kansas	99		97.9	99.1	99 1	98.1	99				
Kentucky	98	1	97.8	98.6	98 1	97.6	98				
Louisiana	98	1	97.3	98.7	98 1	96.9	98				
Maine	99	1	98.5	99.3	99 1	98.2	99				
Maryland	98	1	97.8	99.0	98 1	97.7	98				
Massachusetts	98	1	96.7	98.2	98 1	96.9	98				
Michigan	98	1	97.6	98.8	98 1	96.8	98				
Minnesota	98	1	97.7	98.8	98 1	97.4	98				
Mississippi	99	1	98.5	99.4	99 1	98.5	99				
Missouri	99	1	98.2	99.3	99 1	98.9	99				
Montana	99	1	98.2	99.1	99 1	98.6	99				
Nebraska	99	1	98.1	99.1	99 1	98.3	99				
Nevada	98	1	97.4	98.7	99 1	98.4	99				
New Hampshire	99	1	98.1	99.1	99 1	98.4	99				
New Jersey	98	1	97.4	98.9	98 1	97.5	98				
New Mexico	98	1	97.9	98.9	98 1	97.4	98				
New York	97	1	94.2	98.6	99 1	97.9	99				
North Carolina	99	1	98.0	99.0	99 1	98.1	99				
		1									
North Dakota	98	1	97.8	98.9	99 1	98.1	99				
Ohio	97	1	96.5	98.1	90	97.9	98				
Oklahoma	98	1	96.9	98.7	96	97.1	98				
Oregon	99		98.2	99.1	99	97.7	99				
Pennsylvania	98	1	96.7	98.1	99 1	98.0	98				
Rhode Island	98	1	97.6	98.7	99 1	98.1	99				
South Carolina	99	1	98.4	99.3	99 1	98.0	99				
South Dakota	99	1	98.4	99.3	99 1	98.2	99				
Tennessee	98	1	97.3	98.4	98 1	97.7	98				
Texas	97	1	96.8	98.0	98 1	97.9	98				
Utah	98	1	97.4	98.9	99 1	98.6	99				
Vermont	99	1	98.3	99.2	99 1	97.9	99				
Virginia	99	1	98.2	99.0	98 1	97.1	98				
Washington	97	1	96.4	98.0	98 1		98				
West Virginia	99	1	98.3	99.3	99 1	98.3	99				
Wisconsin	99	1	98.4	99.1	99 1	98.2	99				
Wyoming	99	1	98.6	99.4	98 1	97.7	98				
		I	1	33.4	JU		90				
Other jurisdictions	T	1	T 000T	20 0 T							
District of Columbia	98		98.0	98.8	98 1	97.8	98				
DoDEA ²	98	1	97.9	98.8	99 1	98.0	99				

Not available.

NOTE: Beginning with the 2017 assessment, NAEP mathematics results are from a digitally based assessment; prior to 2017, results were from a paper-and-pencil based assessment. SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2019 Mathematics Assessment.

¹ The state/jurisdiction's inclusion rate is higher than or not significantly different from the National Assessment Governing Board goal of 95 percent.

² Department of Defense Education Activity (overseas and domestic schools).

Table A-11. Inclusion rate and standard error (SE) in NAEP mathematics for fourth- and eighth-grade public school students with disabilities (SD) and English language learners (ELL), as a percentage of identified SD or ELL students, by state/jurisdiction: 2019

		Grade	Λ		of identifi	Grade 8							
	SD		Grade	ELL			SD			ELL			
State/jurisdiction			SE		I	C.E.			SE	Inclusion rate		S	
	Inclusion rate	1	0.5	Inclusion rate	1	SE	Inclusion rate	1	0.4	93	1	0	
Nation (public)	89	1			1	0.3		1					
Alabama	92	1	1.4	91	1	2.8	90	1	1.8	‡	1	١.,	
Alaska	98	1	0.7	98	1	0.8	93	1	1.4	96	1	1	
Arizona	93		1.8	99		0.9	89	1	2.9	92	'	2	
Arkansas	93	1	1.7	97	1	2.1	88	1	2.1	95	1	1	
California	84	1	2.1	94	1	1.0	91	1	1.7	94	1	1	
Colorado	94	1	1.5	95	1	0.9	92	1	1.8	95	1	'	
Connecticut	93	1	1.7	93	1	1.5	91	1	1.6	86	1	:	
Delaware	93	1	1.3	96	1	0.8	91	1	1.5	91	1	:	
Florida	90	1	1.8	93	1	1.5	90	1	1.7	91	1	2	
Georgia	89	1	1.8	96	1	1.3	88	1	2.0	96	1	2	
Hawaii	89	1	2.4	94	1	1.7	86	1	2.2	83	1	3	
Idaho	89	1	1.9	98	1	1.0	89	1	2.0	96	1	2	
Illinois	95	1	1.2	98	1	0.7	94	1	1.1	95	1	2	
Indiana	92	1	1.5	96	1	1.2	91	1	1.8	93	1	3	
lowa	92	1	1.8	93	1	2.3	92	1	1.7	97	1)	
Kansas	92	1	1.9	97	1	1.1	92	1	1.6	95	1		
Kentucky	92	1	1.3	91	1	2.1	88	1	2.2	87	1		
		1			1			1			1		
Louisiana	86	1	2.7	95	1	2.4	83	1	2.9	89		4	
Maine	95	1	1.1	96	1	1.5	94	1	1.3	‡	1		
Maryland	92		1.8	96	1	1.1	89		2.3	92	' 1	2	
Massachusetts	91	1	1.5	92		1.8	91	1	1.2	84	'	3	
Michigan	87		2.3	97	1	1.0	82	1	2.5	95	1	1	
Minnesota	90	1	1.8	98	1	0.8	88	1	1.8	93	1	2	
Mississippi	94	1	1.4	95	1	2.6	92	1	1.2	‡			
Missouri	93	1	1.5	95	1	2.2	95	1	1.2	‡			
Montana	92	1	1.4	96	1	2.3	93	1	1.4	‡			
Nebraska	94	1	1.4	96	1	1.4	93	1	1.4	94	1	2	
Nevada	88	1	2.3	97	1	0.8	93	1	1.4	95	1	1	
New Hampshire	93	1	1.4	95	1	2.3	94	1	1.2	‡			
New Jersey	92	1	2.0	94	1	1.9	95	1	1.4	81	1	3	
New Mexico	92	1	1.4	98	1	0.6	91	1	1.7	94	1	1	
New York	87	1	4.5	90	1	2.3	94	1	1.3	90	1	2	
North Carolina	89	1	1.9	97	1	1.0	92	1	1.8	90	1	2	
North Dakota	91	1	1.8	94	1	2.3	91	1	1.9	‡			
Ohio	85	1	2.3	88	1	4.1	89	1	1.5	95	1	2	
Oklahoma	89	1	2.0	96	1	1.7	88	1	2.0	91	1	2	
Oregon	93	1	1.3	96	1	1.6	91	1	2.0	93	1	2	
-	88	1		93	1			1	1.2	95	1	1	
Pennsylvania		1	1.8		1	1.4	92	1			1		
Rhode Island	93	1	1.5	93	1	1.3	95	1	1.1	91	1	2	
South Carolina	94		1.3	94	1	2.1	92	1	1.8	97	'	1	
South Dakota	95	1	1.1	96	1	1.9	90	1	1.6	‡	1		
Tennessee	89		1.5	92		2.6	88		1.6	86		3	
Texas	79		2.6	97	1	0.7	88	1	2.3	97	1	(
Utah	90	1	2.4	95	1	1.4	94	1	1.4	95	1	-	
Vermont	95	1	1.1	93	1	2.5	92	1	1.4	‡			
Virginia	92	1	1.5	96	1	1.2	86	1	1.9	88	1	1	
Washington	83	1	2.7	94	1	1.3	92	1	1.5	90	1	2	
West Virginia	95	1	1.2	‡		†	92	1	1.3	‡			
Wisconsin	92	1	1.3	98	1	0.9	92	1	1.7	92	1	2	
Wyoming	95	1	1.3	96	1	2.1	88	1	1.8	‡			
Other jurisdictions	.1	I			I	I		I	1		l	.1	
District of Columbia	93	1	1.1	95	1	1.1	94	1	1.2	89	1	1 2	
DoDEA ²	93	1	1.5	92	1	1.6	90	1	2.1	93	1		
	1 93		1.5	92		1.0	90		4.1	1 93		1 4	

NOTE: Beginning with the 2017 assessment, NAEP mathematics results are from a digitally based assessment; prior to 2017, results were from a paper-and-pencil based assessment. SD includes students identified as having an Individualized Education Program but excludes other students protected under Section 504 of the Rehabilitation Act of 1973. In Puerto Rico, the English language learner (ELL) category is for the Spanish language learner (SLL).

[†] Not applicable. Standard error estimate cannot be accurately determined.

[‡] Reporting standards not met. Sample size insufficient to permit a reliable estimate.

¹ The state/jurisdiction's inclusion rate is higher than or not significantly different from the National Assessment Governing Board goal of 85 percent.

² Department of Defense Education Activity (overseas and domestic schools).

Table A-12.
Inclusion rate and confidence interval in NAEP mathematics for fourth- and eighth-grade public school students, as a percentage of all students, by urban district/jurisdiction: 2019

			Grade 4				Grade 8	
			95% confide	nce interval			95% confide	nce interval
Urban district/jurisdiction	Inclusion rate		Lower	Upper	Inclusion rate		Lower	Upper
Nation (public)	98	2	97.9	98.2	98	2	98.3	98.5
Large city ¹ (public)	97	2	96.5	98.0	98	2	97.9	98.5
Albuquerque	98	2	97.3	99.0	98	2	96.6	98.6
Atlanta	99	2	98.0	99.3	99	2	98.0	99.2
Austin	97	2	96.2	98.3	98	2	97.5	99.1
Baltimore City	98	2	97.5	98.8	98	2	97.5	98.9
Boston	96	2	95.2	97.3	95	2	93.4	95.6
Charlotte	98	2	96.9	98.9	98	2	96.7	98.4
Chicago	98	2	97.3	99.0	99	2	97.5	99.2
Clark County (NV)	98	2	97.5	98.9	99	2	98.1	99.2
Cleveland	96	2	95.3	97.4	95	2	93.6	96.3
Dallas	97	2	94.9	97.8	98	2	96.6	98.3
Denver	98	2	97.2	98.9	99	2	97.9	99.1
Detroit	95	2	94.1	96.6	94		92.3	94.7
District of Columbia (DCPS)	98	2	96.9	98.2	98	2	96.7	98.4
Duval County (FL)	98	2	96.5	98.8	97	2	96.5	98.2
Fort Worth	98	2	96.8	98.5	99	2	97.7	99.1
Fresno	98	2	96.6	98.5	99	2	98.2	99.3
Guilford County (NC)	99	2	98.0	99.3	99	2	98.6	99.7
Hillsborough County (FL)	97	2	96.0	97.8	99	2	97.7	99.2
Houston	98	2	96.7	98.5	98	2	97.1	98.3
Jefferson County (KY)	97	2	95.8	98.2	98	2	97.1	98.7
Los Angeles	98	2	96.4	98.6	98	2	97.3	98.4
Miami-Dade	96	2	95.1	97.5	98	2	96.7	98.7
Milwaukee	98	2	96.7	98.4	97	2	95.8	97.9
New York City	96	2	85.9	98.8	99	2	98.5	99.3
Philadelphia	94	2	92.5	95.5	95	2	92.4	96.6
San Diego	98	2	96.6	98.4	98	2	97.1	98.7
Shelby County (TN)	98	2	96.5	98.8	98	2	97.1	98.7

¹ Large city includes students from all cities in the nation with populations of 250,000 or more including the participating districts.

NOTE: Beginning with the 2017 assessment, NAEP mathematics results are from a digitally based assessment; prior to 2017, results were from a paper-and-pencil based assessment. DCPS = District of Columbia Public Schools.

² The urban district/jurisdiction's inclusion rate is higher than or not significantly different from the National Assessment Governing Board goal of 95 percent.

Table A-13.
Inclusion rate and standard error (SE) in NAEP mathematics for fourth- and eighth-grade public school students with disabilities (SD) and English language learners (ELL), as a percentage of identified SD and ELL students, by urban district/jurisdiction: 2019

				Percenta	ige o	f identif	ied SD or ELL studen	ts				
			Gra	ide 4					G	rade 8		
	SD			ELL			SD			ELL		
Urban district/jurisdiction	Inclusion rate		SE	Inclusion rate		SE	Inclusion rate		SE	Inclusion rate		SE
Nation (public)	89	2	0.5	95	2	0.3	91	2	0.4	93	2	0.4
Large city ¹ (public)	86	2	1.7	94	2	0.7	90	2	0.9	94	2	0.6
Albuquerque	94	2	1.7	97	2	1.2	90	2	2.1	97	2	1.5
Atlanta	92	2	2.3	92	2	3.6	93	2	1.8	‡		t
Austin	87	2	2.6	97	2	1.0	93	2	1.7	96	2	1.3
Baltimore City	97	2	1.4	85	2	2.8	96	2	1.5	‡		t
Boston	89	2	1.7	93	2	1.2	85	2	2.3	86	2	1.8
Charlotte	83	2	4.3	96	2	1.3	90	2	3.2	84	2	3.5
Chicago	91	2	2.7	96	2	0.9	94	2	2.1	94	2	1.7
Clark County (NV)	90	2	2.3	97	2	1.0	92	2	2.0	95	2	1.4
Cleveland	84	2	2.2	95	2	1.7	81		2.4	92	2	2.3
Dallas	77	2	5.3	97	2	0.8	84	2	3.1	96	2	0.9
Denver	88	2	3.0	97	2	0.9	93	2	2.5	96	2	1.0
Detroit	73		3.6	94	2	1.8	68		3.0	96	2	1.5
District of Columbia (DCPS)	90	2	1.6	94	2	1.4	91	2	2.0	87	2	3.4
Duval County (FL)	92	2	2.3	92	2	4.4	85	2	2.7	‡		†
Fort Worth	84	2	3.2	99	2	0.5	84	2	3.5	99	2	0.4
Fresno	83	2	3.3	97	2	0.9	94	2	2.1	96	2	1.6
Guilford County (NC)	93	2	2.2	98	2	1.1	94	2	2.1	‡		†
Hillsborough County (FL)	88	2	1.9	92	2	2.5	94	2	2.3	96	2	2.0
Houston	78	2	4.6	98	2	0.6	83	2	3.4	96	2	0.8
Jefferson County (KY)	86	2	3.2	89	2	2.8	86	2	3.5	90	2	3.9
Los Angeles	89	2	2.6	94	2	1.4	90	2	2.0	90	2	1.7
Miami-Dade	85	2	3.3	92	2	1.4	86	2	3.5	93	2	1.6
Milwaukee	91	2	1.7	96	2	1.6	88	2	2.3	93	2	2.2
New York City	87	2	8.5	89	2	3.6	98	2	0.7	94	2	1.7
Philadelphia	75		3.4	85	2	2.4	80	2	3.6	83	2	3.3
San Diego	88	2	2.6	95	2	1.2	87	2	3.0	95	2	1.7
Shelby County (TN)	81	2	4.8	95	2	2.1	86	2	2.9	91	2	3.0

[†] Not applicable. Standard error estimate cannot be accurately determined.

NOTE: Beginning with the 2017 assessment, NAEP mathematics results are from a digitally based assessment; prior to 2017, results were from a paper-and-pencil based assessment. DCPS = District of Columbia Public Schools. SD includes students identified as having an Individualized Education Program but excludes other students protected under Section 504 of the Rehabilitation

[‡] Reporting standards not met. Sample size insufficient to permit a reliable estimate.

¹ Large city includes students from all cities in the nation with populations of 250,000 or more including the participating districts.

² The urban district/jurisdiction's inclusion rate is higher than or not significantly different from the National Assessment Governing Board goal of 85 percent.

Table A-14.

Percentage of fourth- and eighth-grade public and nonpublic school students identified as students with disabilities (SD) and/or English language learners (ELL) excluded and assessed in NAEP mathematics when accommodations were not permitted: 1992 and 1996

Grade and SD/ELL category	1992	1996
Grade 4	·	
SD and/or ELL		
Identified	9	14
Assessed	3	8
SD	_	_
Identified	7	11
Assessed	3	6
ELL	_	_
Identified	3	3
Assessed		2
Grade 8		
Excluded	6	4
	_	_
Excluded	4	4
	_	
Excluded	2	1
Assessed	1	2

NOTE: Beginning with the 2017 assessment, NAEP mathematics results are from a digitally based assessment; prior to 2017, results were from a paper-and-pencil based assessment. 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. SD includes students identified as having either an Individualized Education Program or protection under Section 504 of the Rehabilitation Act of 1973. 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), 1992 and 1996 Mathematics Assessments.

Accommodations

Prior to 1996, no testing accommodations were provided to students taking the NAEP mathematics assessment, resulting in the exclusion of students who could not be assessed without them. As the number of identified students with disabilities and English language learners increased over the years, the exclusion of those needing accommodations to participate in NAEP threatened the stability of trend lines (excluding more students in one assessment year than in another might lead to apparent rather than real differences), and threatened to compromise NAEP samples as optimally representative of target populations. Therefore, administration procedures allowing for many of the same testing accommodations provided on state and district assessments (e.g., extra testing time or individual rather than group administration) were introduced in 1996 for national NAEP mathematics assessments and in 2000 for NAEP state assessments.

The percentages of SD/ELL students assessed with the available accommodations in 2019 are presented in table A-15. Students assessed with accommodations typically received some combination of accommodations. In contrast to assessment years prior to 2009 in which students were only counted once in the category reflecting the primary accommodation provided, students are counted in the categories for each accommodation they received in 2019. For example, students assessed in small groups (as compared with standard NAEP sessions of about 30 students) were also usually given extended time and are included in counts for both groups in table A-15.

Since providing accommodations represented a change in testing conditions that could potentially affect the measurement of changes over time, split national samples of students were assessed in mathematics in 1996 and 2000, and split state samples were assessed in 2000. In each of these years, one sample permitted accommodations, and the other did not. This eased the transition to single samples in which accommodations were permitted beginning in 2003 while maintaining trends back to 1990.

Table A-15.

Percentage of fourth- and eighth-grade public and nonpublic school students identified as students with disabilities (SD) and/or English language learners (ELL) excluded and assessed in NAEP mathematics when accommodations were permitted: Various years, 1996–2019

Grade and SD/ELL category	1996	2000	2003	2005	2007	2009	2011	2013	2015	2017	2019
Grade 4											
SD and/or ELL											
Identified	15	18	21	21	21	21	22	22	23	24	25
Excluded	4	4	4	3	3	2	2	1	2	2	2
Assessed	11	14	17	18	19	19	20	20	22	22	24
Without accommodations	7	9	9	9	9	8	8	7	8	10	9
With accommodations	5	5	8	9	10	10	12	13	14	12	14
SD											
Identified	10	12	13	13	13	13	13	13	14	14	15
Excluded	3	3	3	2	2	2	2	1	1	1	1
Assessed	7	9	10	10	10	11	11	12	13	12	14
Without accommodations	4	5	4	3	3	3	2	2	2	3	3
With accommodations	4	4	6	7	7	8	8	10	10	9	10
ELL								-			
Identified	6	7	10	10	10	10	11	10	11	11	12
Excluded	1	1	1	1	1	1	#	#	1	1	1
Assessed	5	6	8	8	9	9	10	10	10	11	12
Without accommodations	3	4	6	6	6	6	6	5	6	6	7
With accommodations	2	1	2	2	3	3	4	5	5	4	5
Grade 8											
SD and/or ELL											
Identified	12	13	17	17	17	17	17	16	18	19	20
Excluded	3	4	3	3	4	3	2	1	2	2	1
Assessed	8	10	14	14	13	14	14	15	16	17	18
Without accommodations	6	7	7	6	6	5	4	3	4	5	6
With accommodations	3	3	6	8	7	9	10	12	12	12	13
SD											
Identified	9	10	13	12	12	12	12	12	13	13	14
Excluded	3	3	3	3	3	3	2	1	1	1	1
Assessed	6	7	10	10	8	9	10	11	12	12	13
Without accommodations	4	5	4	3	2	2	2	1	1	2	2
With accommodations	2	2	6	7	6	8	8	10	10	10	11
ELL											
Identified	3	4	6	6	6	5	6	5	6	7	7
Excluded	1	1	1	1	1	#	#	#	#	1	#
Assessed	2	3	5	5	5	5	5	5	6	6	7
Without accommodations	2	2	4	4	4	3	3	2	3	3	4
With accommodations	#	1	1	1	2	2	2	3	3	3	3

Rounds to zero

NOTE: Beginning with the 2017 assessment, NAEP mathematics results are from a digitally based assessment; prior to 2017, results were from a paper-and-pencil based assessment. 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. SD includes students identified as having either an Individualized Education Program or protection under Section 504 of the Rehabilitation Act of 1973. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 1996–2019 Mathematics Assessments.

Exclusion Rates

Even with the availability of accommodations, some students are excluded from the NAEP assessments by their schools. The decision to exclude any student is made by school staff, who, using NAEP guidelines and each student's Individualized Education Program (IEP), decide whether the student can meaningfully be assessed.

In 2013, the method used by school staff to determine whether or not a student should be excluded from the NAEP assessment was revised. Previously, a student who required an accommodation specified in their IEP that was not allowed by NAEP was excluded. Beginning in 2013, SD students could be excluded only if they took an alternate assessment with alternate achievement standards, and ELL students could be excluded only if they had been enrolled in U.S. schools for less than one year. All other students were encouraged to take the assessment, even if their accommodation was not allowed by NAEP. Schools, students, or parents could, however, refuse to allow such a student to be assessed. For weighting and reporting purposes, these refusals were counted as exclusions.

Jurisdictions vary in their proportions of SD and/or ELL students. These variations, as well as differences in policies and practices regarding the identification and inclusion of SD and/or ELL students, lead to differences in exclusion and accommodation rates. These differences should be considered when comparing student performance over time and across jurisdictions. While the effect of exclusion is not precisely known, the validity of comparisons of performance results could be affected if exclusion rates are comparatively high or vary widely over time.

National Exclusion Rates (public and nonpublic school students): The percentage of SD and/or ELL students excluded and assessed with and without accommodations as a percentage of students identified are provided in table A-16. (Note that the denominator for these percentages includes assessed students plus excluded students; it does not include sampled students who were absent or refused to participate).

State Exclusion Rates (public school students only): The states/jurisdictions that participated in the 1992, 1996, and 2000 mathematics assessments at grade 4 when accommodations were not permitted are provided in table A-17. The states/jurisdictions that participated in the 2000, 2003, 2005, 2007, 2009, 2011, 2013, 2015, 2017, and 2019 mathematics assessments at grade 4 when accommodations were permitted are provided in table A-18.

The states/jurisdictions that participated in the 1990, 1992, 1996, and 2000 mathematics assessments at grade 8 when accommodations were not permitted are provided in table A-19. The states/jurisdictions that participated in the 2000, 2003, 2005, 2007, 2009, 2011, 2013, 2015, 2017, and 2019 mathematics assessments at grade 8 when accommodations were permitted are provided in table A-20.

Rates by state are reported separately for SD and ELL students at each grade in tables A-21 through A-28. Rates are also reported as the percentage of SD and/or ELL students identified in each state in tables A-29 through A-30.

District Exclusion Rates (public school students only): District-level results in mathematics are only available based on administrations in which accommodations were permitted. Among the 27 urban districts that participated in the 2019 mathematics assessment, the percentage of fourth-graders identified as SD and/or ELL are provided in table A-31. The percentage of eighth-graders identified as SD and/or ELL are provided in table A-32.

Table A-16.

Percentage of fourth- and eighth-grade public and nonpublic school students identified as students with disabilities (SD) and/or English language learners (ELL) excluded and assessed in NAEP mathematics, as a percentage of identified SD and/or ELL students, by grade and SD/ELL category: 2019

Grade and SD/ELL category	Percentage of identified SD and/or ELL students						
	Excluded	Assessed	Assessed without accom-modations	Assessed with accom-modations			
Grade 4							
SD and/or ELL	7	93	37	56			
SD	10	90	21	69			
ELL	5	95	53	42			
Grade 8							
SD and/or ELL	7	93	29	64			
SD	8	92	15	77			
ELL	7	93	52	41			

NOTE: Beginning with the 2017 assessment, NAEP mathematics results are from a digitally based assessment; prior to 2017, results were from a paper-and-pencil based assessment. 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. SD includes students identified as having either an Individualized Education Program or protection under Section 504 of the Rehabilitation Act of 1973. 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), 2019 Mathematics Assessment.

Table A-17.

Percentage of fourth-grade public school students identified as students with disabilities and/or English language learners excluded and assessed in NAEP mathematics when accommodations were not permitted, by state/jurisdiction: 1992, 1996, and 2000

		1992			1996		2000			
State/jurisdiction	Identified	Excluded	Assessed	Identified	Excluded	Assessed	Identified	Excluded	Assessed	
Nation (public)	10	7	4	16	6	9	16	7	9	
Alabama	10	5	6	12	6	5	13	6	7	
Alaska		_	-	20	4	16	_	_	_	
Arizona	15	5	10	21	12	9	25	12	13	
Arkansas	12	5	6	10	7	3	14	7	7	
California	28	12	16	33	16	17	33	9	24	
Colorado	10	5	5	15	8	7	_	_	_	
Connecticut	14	7	7	16	8	8	15	10	5	
Delaware	12	5	6	14	7	7	_		_	
Florida	17	8	8	19	10	9	_	_	_	
Georgia	10	5	4	13	7	6	11	7	4	
Hawaii	13	6	8	14	6	9	19	10	9	
Idaho	9	3	6		_	_	16	6	10	
Illinois	_	_	_				17	10	6	
Indiana	7	3	4	11	5	6	11	7	5	
lowa	9	3	6	13	6	7	15	10	5	
	9	3	0	_	0	,	16	7	9	
Kansas	_	_	_		_	_				
Kentucky	8	3	5	10	6	4	12	8	3	
Louisiana	8	4	4	14	8	7	16	8	8	
Maine	14	6	8	15	8	7	16	10	6	
Maryland	11	4	7	14	8	7	12	9	4	
Massachusetts	18	7	11	18	9	9	19	10	9	
Michigan	7	5	2	11	6	5	11	8	3	
Minnesota	9	3	6	14	6	8	16	6	10	
Mississippi	7	5	2	8	6	2	6	4	2	
Missouri	12	4	7	14	5	9	15	10	6	
Montana	_	-	_	10	5	5	12	5	7	
Nebraska	13	4	8	15	5	10	18	8	10	
Nevada	-	-	-	16	9	8	20	10	9	
New Hampshire	12	4	8	_	-	-	_	_	_	
New Jersey	11	6	6	11	6	5	_	_	_	
New Mexico	15	7	8	22	12	10	31	12	19	
New York	12	5	6	15	8	7	16	12	4	
North Carolina	12	4	8	14	7	7	16	13	3	
North Dakota	9	2	7	11	4	7	12	6	6	
Ohio	10	6	4	_	_	_	12	10	2	
Oklahoma	13	7	6	_	_	_	20	10	10	
Oregon	_	_	_	19	9	10	18	8	11	
Pennsylvania	9	4	5	9	5	4	_	_	_	
Rhode Island	15	6	10	18	6	12	23	12	11	
South Carolina	10	5	5	12	6	7	17	7	10	
Tennessee	12	4	8	13	6	6	11	4	7	
Texas	17	8	9	24	10	14	25	15	10	
Utah	10	4	6	13	6	7	14	7	7	
Vermont	_			14	6	8	15	11	5	
Virginia	11	5	6	14	7	7	16	11	5	
Washington		_	_	13	5	8	10	11	_	
West Virginia	9	4	4	13	8	5	13	10	3	
		5	5	12			19			
Wisconsin	11				8	4		12	8	
Wyoming	10	4	7	13	4	9	15	6	9	
Other jurisdictions							·····			
District of Columbia	11	9	2	14	11	3	19	9	10	
DoDEA ¹	_	_	-	9	4	5	11	5	6	

[—] Not available.

NOTE: Beginning with the 2017 assessment, NAEP mathematics results are from a digitally based assessment; prior to 2017, results were from a paper-and-pencil based assessment. South Dakota did not participate in NAEP mathematics assessments from 1992 to 2000. Detail may not sum to totals because of rounding.

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

Table A-18.

Percentage of fourth-grade public school students identified as students with disabilities and/or English language learners excluded and assessed in NAEP mathematics when accommodations were permitted, by state/jurisdiction: Various years, 2000–19

				2000				2003		
State/jurisdiction	Identified	Excluded	Assessed	Assessed without	Assessed with	Identified	Excluded	Assessed	Assessed without	Assessed with
				accom-modations	accom-modations				accom-	accom-
									modations	modations
Nation (public)	19	4	15	10	5	22	4	18	10	8
Alabama	13	3	10	7	3	12	2	10	8	2
Alaska	_	_	_	_	_	31	1	30	20	10
Arizona	25	4	21	12	9	27	5	23	18	5
Arkansas	14	4	10	6	4	17	2	14	7	8
California	33	6	27	19	8	38	3	35	31	4
		0		19	0					
Colorado	_	_		_		20	2	17	7	11
Connecticut	14	5	10	5	4	16	4	12	5	8
Delaware	_	_		_	_	18	7	11	4	7
Florida	_	_		_	_	26	3	23	8	15
Georgia	11	3	8	4	4	16	2	14	6	7
Hawaii	19	9	11	8	3	17	3	14	5	8
Idaho	16	2	13	7	7	18	2	16	9	7
Illinois	17	3	14	5	9	23	4	18	7	11
Indiana	11	2	9	3	6	17	2	14	8	7
lowa	15	2	12	5	7	18	3	15	4	11
Kansas	16	3	13	9	4	16	2	14	3	11
Kentucky	12	3	9	4	5	14	3	11	5	7
		3	13	2	11	22	3	19	3	16
Louisiana	16									
Maine	16	5	12	5	7	18	3	15	4	11
Maryland	12	2	10	4	6	16	4	12	6	6
Massachusetts	19	3	17	7	10	22	3	19	4	15
Michigan	11	3	8	3	4	15	4	11	5	6
Minnesota	16	2	14	7	7	18	3	16	8	7
Mississippi	6	3	3	1	2	10	5	5	4	1
Missouri	15	3	13	5	8	17	4	13	4	10
Montana	12	2	11	5	6	16	2	14	7	7
Nebraska	18	3	15	10	4	20	3	17	9	9
Nevada	20	7	13	8	5	26	4	22	14	8
New Hampshire	_	_			_	20	3	17	5	12
New Jersey	_	_	_	_	_	18	2	16	1	14
New Mexico	31	6	26	16	10	40	4	36	22	15
New York	16	5	11	2	9	19	5	14	2	11
North Carolina	16	5	11	3	8	21	4	17	5	12
North Dakota	12	1	11	7	4	18	2	16	8	7
Ohio	12	5	7	2	5	13	4	9	2	7
Oklahoma	20	5	15	11	5	22	4	18	10	8
Oregon	18	3	16	8	8	27	4	23	11	11
Pennsylvania	-	_		-	_	15	3	12	3	9
Rhode Island	23	3	20	10	10	27	3	24	9	15
South Carolina	17	5	12	7	5	18	6	12	7	4
South Dakota	_	_		_	_	18	1	16	9	7
Tennessee	11	3	9	7	1	14	3	11	7	5
Texas	25	7	18	12	6	27	7	20	14	6
Utah	14	3	11	7	4	21	3	19	11	7
Vermont	15	3	13	4	9	18	4	14	4	10
Virginia	16	4	12	5	7	19	6	13	5	8
Washington	_	_		-	_	19	3	16	8	8
West Virginia	13	3	11	3	8	15	3	12	3	9
Wisconsin	19	5	14	7	8	20	4	16	4	12
Wyoming	15	2	13	8	6	18	1	17	6	11
Other										
jurisdictions										
District of	19	5	14	7	7	18	4	14	4	10
Columbia	19	3	14	1	1	10	4	14	4	10
DoDEA ¹	11	3	8	4	A	1.4	4	12	6	7
	11	3		4	4	14	1	13	6	7
Puerto Rico	_	_		-	_	_	_	_	_	_

Table A-18.

Percentage of fourth-grade public school students identified as students with disabilities and/or English language learners excluded and assessed in NAEP mathematics when accommodations were permitted, by state/jurisdiction: Various years, 2000–19—Continued

				2005					2007	
State/jurisdiction	Identified	Excluded	Assessed	Assessed without	Assessed with	Identified	Excluded	Assessed	Assessed without	Assessed with
				accom-modations	accom-modations				accom-	accom-
									modations	modations
Nation (public)	23	3	20	10	10	23	3	20	10	10
Alabama	13	1	12	9	3	13	2	12	8	4
Alaska	32	2	30	15	15	30	2	28	13	15
Arizona	29	4	25	17	8	25	3	22	14	7
Arkansas	16	3	13	5	8	18	3	15	4	11
California	39	4	35	31	5	40	2	38	33	5
Colorado	22	3	19	5	14	25	2	24	9	15
Connecticut	16	2	14	4	10	18	1	17	4	13
Delaware	20	8	12	5	7	20	5	15	5	10
Florida	25	3	21	5	17	22	3	18	2	16
Georgia	16	2	14	6	8	15	2	13	4	9
Hawaii	18	3	16	6	9	19	1	18	7	11
Idaho	18	1	17	9	8	18	2	16	8	8
Illinois	22	3	20	9	10	23	5	18	8 7	10
Indiana	18	2	16	5	11	22	3	19		12
lowa	18	2	16	4	12	17	1	16	4	12
Kansas	19	3	16	6	10	20	3	17	7	10
Kentucky	15	3	13	3	9	17	3	14	6	8
Louisiana	24	4	20	3	18	19	2	16	3	13
Maine	20	4	16	5	12	19	3	16	4	12
Maryland	17	4	13	5	9	16	4	12	4	9
Massachusetts	24	4	19	6	13	23	5	18	6	12
Michigan	17	4	13	4	9	15	3	12	5	7
Minnesota	19	2	17	9	9	21	2	18	8	10
Mississippi	11	2	9	5	4	11	1	10	5	6
Missouri	18	2	16	6	10	16	4	13	5	8
Montana	14	2	12	4	8	16	2	14	5	9
Nebraska	23	2	21	9	12	23	3	20	10	10
Nevada	26	3	23	13	10	32	3	29	16	13
	22	2	20	5	14	21	2	18	4	14
New Hampshire										
New Jersey	18	3	15	4	11	18	2	16	2	14
New Mexico	36	3	33	15	18	32	4	29	14	15
New York	20	4	17	2	14	22	2	20	2	17
North Carolina	21	2	18	4	14	21	2	19	5	14
North Dakota	17	3	14	6	8	17	4	13	5	9
Ohio	13	3	9	2	8	17	5	12	3	9
Oklahoma	21	4	17	7	10	19	5	14	7	7
Oregon	27	4	23	11	11	26	3	23	9	14
Pennsylvania	18	3	15	4	11	18	2	16	5	11
Rhode Island	26	3	23	8	15	25	2	23	7	16
South Carolina	16	4	12	7	5	17	2	15	7	8
South Dakota	19	2	17	9	8	19	1	17	9	8
Tennessee	13	3	10	4	6	16	6	10	5	5
Texas	27	6	21	13	8	26	5	21	12	9
Utah	23	2	20	11	9	22	2	20	11	9
Vermont	18	3	15	5	10	19	2	16	4	12
Virginia	22	5	17	5	12	22	5	17	7	10
Washington	21	3	18	8	10	22	3	19	8	11
West Virginia	20	2	17	9	8	18	1	17	8	8
Wisconsin	19	2	17	5	12	21	3	18	5	13
Wyoming	19	2	17	6	11	18	2	16	6	10
Other										
jurisdictions										
District of	20	6	14	4	10	20	6	14	2	13
Columbia										
DoDEA ¹	17	2	15	6	8	17	2	15	6	9
		_	_	•	· ·		_		"	ū

Table A-18.

Percentage of fourth-grade public school students identified as students with disabilities and/or English language learners excluded and assessed in NAEP mathematics when accommodations were permitted, by state/jurisdiction: Various years, 2000–19—Continued

				2009					2011	
State/jurisdiction	Identified	Excluded	Assessed	Assessed without	Assessed with	Identified	Excluded	Assessed	Assessed without	Assessed with
				accom-modations	accom-modations				accom-	accom-
									modations	modations
Nation (public)	23	2	20	9	11	23	2	21	9	12
Alabama	12	1	11	8	4	12	1	11	6	4
Alaska	25	1	24	6	17	27	3	25	7	18
Arizona	26	1	24	11	14	22	1	21	5	15
Arkansas	17	1	16	4	12	20	1	19	5	14
California	36	2	34	28	5	38	2	36	29	7
Colorado	21	2	19	6	13	25	1	24	9	14
Connecticut	18	2	16	2	14	19	1	17	2	16
Delaware	18	3	15	2	13	19	4	15	3	12
Florida	23	2	21	4	18	23	2	22	3	19
Georgia	14	1	13	4	9	16	2	15	4	10
Hawaii	20	1	18	5	13	20	2	18	7	11
Idaho	15	1	14	5	8	15	1	13	5	9
Illinois	22	3	19	6	13	21	2	18	6	13
Indiana	19	2	17	6	11	22	2	20	6	14
lowa	18	2	16	3	13	19	1	18	3	15
Kansas	22	3	19	7	12	24	2	23	10	13
Kentucky	17	3	14	5	8	16	3	13	5	9
Louisiana	22	2	20	4	16	22	2	20	3	18
Maine	20	2	18	3	15	20	2	19	4	15
Maryland	19	5	14	3	12	19	6	13	2	11
Massachusetts	24	5	19	7	13	25	3	21	6	15
Michigan	17	3	14	6	8	16	2	14	6	9
Minnesota	21	2	19	8	11	23	1	22	9	13
Mississippi	10	1	9	3	6	11	1	10	5	6
Missouri	16	3	14	5	9	16	2	15	5	10
Montana	14	2	13	4	9	14	2	12	4	8
Nebraska	24	3	21	10	11	23	2	22	8	14
	30	3	27	11	17	35	2	33	11	22
Nevada										
New Hampshire	21	2	18	3	15	19	2	17	2	15
New Jersey	19	3	16	2	14	20	3	16	2	14
New Mexico	26	2	24	8	15	27	3	24	9	15
New York	22	1	21	1	20	23	1	22	1	21
North Carolina	19	2	17	4	13	21	2	19	7	12
North Dakota	17	4	14	4	9	17	4	13	4	9
Ohio	16	3	13	2	11	17	2	15	2	13
Oklahoma	19	4	15	6	8	21	8	12	6	7
Oregon	26	3	23	8	15	28	3	25	10	15
Pennsylvania	18	3	15	4	11	18	1	16	4	13
Rhode Island	22	2	20	5	15	19	1	18	5	13
South Carolina	19	2	17	7	10	18	1	17	7	10
South Dakota	16	2	14	6	8	19	2	18	9	9
Tennessee	16	3	12	3	9	17	3	13	3	10
Texas	29	3	26	18	8	30	4	26	18	8
Utah	19	2	17	6	11	19	2	17	6	10
		_					_		_	
Vermont	21	2	18	4	14	19	2	18	3	15
Virginia	20	2	18	5	13	19	2	17	5	12
Washington	21	2	19	8	12	22	2	20	7	14
West Virginia	17	2	16	7	9	18	2	16	8	9
Wisconsin	20	2	18	4	15	21	2	19	4	16
Wyoming	18	1	17	5	12	19	2	17	5	12
Other										
jurisdictions										
District of	20	4	16	3	13	21	5	16	2	14
Columbia				ŭ	.0			. •	_	
DoDEA ¹	18	2	16	6	10	19	3	16	5	10
	10			٥	10		#		1	
Puerto Rico	table.	_		-		25	#	24	1	23

Table A-18.

Percentage of fourth-grade public school students identified as students with disabilities and/or English language learners excluded and assessed in NAEP mathematics when accommodations were permitted, by state/jurisdiction: Various years, 2000–19—Continued

				2013					2015	
State/jurisdiction	Identified	Excluded	Assessed	Assessed without	Assessed with	Identified	Excluded	Assessed	Assessed without	Assessed with
				accom-modations	accom-modations				accom-	accom-
									modations	modations
Nation (public)	23	2	21	7	14	24	2	23	8	14
Alabama	12	1	11	6	5	14	1	13	7	6
Alaska	27	1	26	4	22	27	1	26	7	18
Arizona	17	1	15	2	13	21	1	20	4	16
Arkansas	21	1	20	5	15	21	1	20	4	16
California	32	2	30	22	9	35	2	33	26	7
Colorado	23	1	21	9	12	24	2	22	11	11
Connecticut	19	1	17	2	16	19	1	18	4	14
Delaware	18	2	16	2	14	20	2	19	5	14
Florida	25	2	23	2	20	26	2	24	2	21
Georgia	16	1	15	3	11	19	2	18	4	14
Hawaii	17	1	16	5	11	16	2	14	6	8
Idaho	15	1	13	4	10	15	2	14	4	10
Illinois	20	1	19	4		22	1	21		14
					15				6	
Indiana	22	2	20	3	17	23	1	22	5	17
lowa	18	1	17	3	14	20	1	19	3	16
Kansas	26	2	25	10	15	28	1	26	14	13
Kentucky	15	1	14	3	11	19	2	17	5	12
Louisiana	22	1	21	3	18	24	2	22	3	19
Maine	22	2	20	2	17	22	2	20	3	17
Maryland	21	1	20	2	17	21	1	19	4	15
Massachusetts	27	2	25	8	17	27	2	25	8	18
Michigan	20	2	18	7	11	19	3	16	6	10
Minnesota	22	1	20	10	11	23	2	21	11	9
Mississippi	12	1	11	4	7	14	1	13	5	8
Missouri	16	1	14	3	11	16	1	15	6	10
Montana	15	2	13	5	9	14	1	13	5	8
Nebraska	22	2	21	6	14	23	1	22	6	16
Nevada	31	1	30	7	23	33	2	31	11	20
New Hampshire	18	1	17	2	15	21	1	20	3	16
New Jersey	19	1	18	1	17	21	2	19	2	17
New Mexico	28	1	27	10	17	29	2	26	9	17
	22			10		25		23	1	22
New York		1	21		20		1			
North Carolina	20	1	19	5	14	19	1	18	5	13
North Dakota	16	3	13	3	10	15	2	13	4	9
Ohio	17	1	16	3	14	19	2	17	2	16
Oklahoma	22	2	20	6	14	24	2	21	8	14
Oregon	27	2	24	9	15	25	2	23	9	14
Pennsylvania	18	2	17	4	13	21	2	20	5	14
Rhode Island	19	1	18	3	15	20	2	18	5	13
South Carolina	20	1	19	7	12	21	1	20	8	12
South Dakota	19	1	17	7	11	19	1	18	7	11
Tennessee	18	1	16	3	14	20	2	18	4	14
Texas	33	2	31	13	18	34	3	32	12	19
Utah	18	1	16	4	13	16	1	15	7	8
Vermont	19	1	18	2	16	20	2	19	3	16
Virginia	19	2	18	5	13	18	2	17	4	13
Washington	22	2	20	6	14	24	1	23	9	14
West Virginia	19	2	17	7	10	21	1	20	8	11
Wisconsin	21	2	20	3	16	19	1	18	5	13
Wyoming	18	1	17	4	13	18	1	17	4	13
	18	l	1	4	13	18	l	17	4	13
Other										
jurisdictions	т	T	T			T	T		тт	
District of	20	1	19	1	18	19	2	17	2	15
Columbia										
DoDEA ¹	19	2	17	5	12	22	1	21	7	13
Puerto Rico	29	#	29	1	27	31	#	31	1	29

Table A-18.

Percentage of fourth-grade public school students identified as students with disabilities and/or English language learners excluded and assessed in NAEP mathematics when accommodations were permitted, by state/jurisdiction: Various years, 2000–19—Continued

				2017					2019	
State/jurisdiction	Identified	Excluded	Assessed	Assessed without accom-modations	Assessed with accom-modations	Identified	Excluded	Assessed	Assessed without accom-	Assessed with accom-
	0.5			40				0.5	modations	modations
Nation (public)	25	2	23	10	13	27	2	25	10	15
Alabama	15	1	14	8	6	19	2	18	9	9
Alaska	27	1	26	13	13	30	1	29	12	17
Arizona	21	2	19	5	14	20	1	19	7	12
Arkansas	24	2	23	7	16	24	1	23	5	18
California	34	3	31	25	6	34	3	31	23	8
Colorado	24	1	23	13	10	25	1	24	13	11
Connecticut	22	2	20	5	15	24	2	23	6	16
Delaware	26	2	24	9	15	31	2	30	12	18
Florida	25	3	22	2	20	30	2	27	3	24
Georgia	18	2	16	4	12	24	2	23	7	16
Hawaii	15	3	13	7	6	24	2	22	14	8
Idaho	16	1	15	6	9	20	1	18	9	9
Illinois	24	2	23	7	16	28	1	27	12	16
Indiana	22	1	20	6	15	27	1	25	5	20
lowa	20	2	18	4	14	20	1	19	3	15
Kansas	26	1	25	16	9	25	1	23	13	11
Kentucky	19	2	17	6	11	22	2	20	5	15
Louisiana	23	2	21	3	17	22	2	20	2	18
Maine	23	1	22	8	14	25	1	24	5	19
Maryland	22	1	21	5	16	27	2	25	6	19
Massachusetts	28	2	25	8	17	31	2	29	10	19
Michigan	20	3	17	11	6	22	2	21	10	11
Minnesota	22	2	20	14	6	25	2	24	15	9
Mississippi	16	1	15	6	9	17	1	16	5	11
Missouri	18	1	17	7	10	21	1	19	7	12
Montana	16	1	15	7	8	19	1	17	8	9
Nebraska	24	2	23	8	15	23	1	22	7	15
Nevada	27	1	25	18	7	30	2	28	19	9
New Hampshire	21	1	20	5	14	22	1	21	6	15
New Jersey	21	2	19	4	15	25	2	23	2	21
New Mexico	29	2	27	11	16	34	2	32	14	18
New York	24	2	22	3	19	25	3	23	3	19
North Carolina	20	2	18	6	12	23	1	22	8	14
North Dakota	15	1	14	6	8	18	2	17	6	11
Ohio	19	2	17	3	14	20	3	17	2	15
Oklahoma	25	2	23	9	14	28	2	26	10	16
Oregon	28	2	26	16	10	24	1	23	13	9
Pennsylvania	20	2	18	6	13	23	2	20	6	14
Rhode Island	21	2	19	4	15	27	2	25	7	19
South Carolina	22	1	21	13	8	20	1	19	8	11
South Dakota	18	1	17	10	6	22	1	21	11	10
Tennessee	18	2	16	6	10	22	2	20	6	14
Texas	37	3	34	15	19	35	3	33	12	21
Utah	21	2	19	12	8	23	2	21	13	8
Vermont	20	1	19	5	13	23	1	22	6	16
Virginia	21	2	19	8	11	25	1	24	9	15
Washington	25	2	23	15	8	26	3	24	13	11
							1			
West Virginia	22	1	21	11	10	22		21	10	11
Wisconsin	21	2	20	8	12	21	1	20	7	12
Wyoming	17	1	15	5	10	20	1	19	5	14
Other										
jurisdictions										
District of	22	2	20	4	16	28	2	26	3	24
Columbia	0:		00			0.1		00	_	
DoDEA ¹	21	1 4	20	8	12	24	2	22	7	15
Puerto Rico — Not available.	31	#	31	2	30	_	_	_	_	

[—] Not available.

NOTE: Beginning with the 2017 assessment, NAEP mathematics results are from a digitally based assessment; prior to 2017, results were from a paper-and-pencil based assessment. Detail may not sum to totals because of rounding. In Puerto Rico, the English language learner (ELL) category is for the Spanish language learner (SLL).

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 2000–19 Mathematics Assessments.

[#] Rounds to zero.

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

Table A-19.

Percentage of eighth-grade public school students identified as students with disabilities and/or English language learners excluded and assessed in NAEP mathematics when accommodations were not permitted, by state/jurisdiction: Various years, 1990–2000

		1990			1992			1996			2000	
State/jurisdiction	Identified	Excluded	Assessed	Identified	Excluded	Assessed	Identified	Excluded	Assessed	Identified	Excluded	Assessed
Nation (public)		_	_	10	6	4	11	5	7	15	7	8
Alabama	9	5	4	10	5	5	13	7	6	14	5	9
Alaska	_	_	_	_	_	_	15	5	10	_	-	_
Arizona	12	5	7	12	6	7	17	9	8	19	9	10
Arkansas	11	7	3	11	6	5	11	7	4	14	8	5
California	15	7	8	20	8	12	20	10	10	27	9	18
Colorado	10	4	5	10	4	5	12	4	8	_	_	_
Connecticut	11	6	5	14	7	8	15	8	7	16	10	6
Delaware	9	4	5	10	4	6	13	9	4	_		_
Florida	11	6	5	13	6	7	16	10	6	_	_	_
Georgia	7	3	3	8	5	3	10	7	3	11	7	3
Hawaii	10	4	5	13	5	8	12	5	7	20	7	13
Idaho	6	2	4	7	3	4		_		14	5	9
Illinois	9	5	4		_	_	_	_	_	15	8	7
Indiana	7	5	2	9	5	4	12	6	7	12	7	5
lowa	10	4	6	11	4	6	13	5	7	12		_
Kansas		4	0	""	4	0	13	, , , , , , , , , , , , , , , , , , ,	,	14	6	8
Kentucky	7	5	3	9	5	4	9	5	5	14	9	4
		4	2	7	4	3	10	6	4	13	6	7
Louisiana	6	4	2									
Maine		_	_	11	4	6	12	5	7	15	9	6
Maryland	11	4	6	11	5	6	12	7	5	13	11	3
Massachusetts	_	_	_	18	8	9	17	8	9	19	12	7
Michigan	8	4	4	9	6	3	9	5	4	11	7	4
Minnesota	9	3	6	7	3	4	11	3	8	15	5	10
Mississippi	_	-	_	10	7	3	11	7	4	11	7	3
Missouri	_	_	_	11	4	6	12	7	5	15	9	6
Montana	6	2	4	_	_	_	9	3	6	12	5	6
Nebraska	9	3	6	10	4	6	12	4	8	13	3	10
Nevada	_	_	_	_	_	_	16	8	8	16	10	6
New Hampshire	12	4	8	12	5	7	15	4	11	-	-	_
New Jersey	12	7	5	14	7	7	13	7	6	-	-	_
New Mexico	9	6	3	12	5	7	18	8	10	25	12	14
New York	12	6	6	13	8	4	14	8	6	16	13	3
North Carolina	9	3	6	12	3	9	9	4	5	16	14	2
North Dakota	8	3	5	8	2	5	10	3	6	11	4	7
Ohio	8	5	3	10	6	4	_	_	_	11	9	3
Oklahoma	8	5	3	10	6	4	_	_	_	15	9	6
Oregon	8	3	5	_	_	_	12	4	8	17	6	11
Pennsylvania	10	5	5	9	4	5	_	_	_	_	_	_
Rhode Island	14	6	8	14	5	8	17	7	10	20	12	8
South Carolina	_	_	_	10	6	4	10	6	4	13	7	6
Tennessee	_	_	_	10	5	5	11	4	7	13	5	8
Texas	12	6	6	14	7	7	17	9	8	20	10	11
Utah		_	_	9	4	5	11	6	5	14	6	8
Vermont	_	_	_	_		_	12	4	8	17	10	7
Virginia	9	5	4	12	5	7	13	7	6	15	10	5
Washington	_	_	_	_	_	_	13	6	7	_		_
West Virginia	9	5	4	10	6	4	13	8	4	15	11	3
Wisconsin	8	4	4	10	4	6	12	7	5	17	10	7
Wyoming	8	3	5	9	4	5	10	2	8	17	4	9
	1	3	5	9	4	5	10			13	4	9
Other jurisdictions	Ţ								т	т	г	
District of Columbia	6	5	1	11	10	2	13	10	4	15	9	6
DoDEA ¹		_	_	_	_	_	8	3	5	9	5	3

⁻ Not available

NOTE: Beginning with the 2017 assessment, NAEP mathematics results are from a digitally based assessment; prior to 2017, results were from a paper-and-pencil based assessment. South Dakota did not participate in NAEP mathematics assessments from 1990 to 2000. 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, 1990–2000 Mathematics Assessments.

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

Table A-20. Percentage of eighth-grade public school students identified as students with disabilities and/or English language learners excluded and assessed in NAEP mathematics when accommodations were permitted, by state/jurisdiction: Various years, 2000–19

				2000					2003	
State/jurisdiction	Identified	Excluded	Assessed	Assessed without accom-modations	Assessed with accom-modations	Identified	Excluded	Assessed	Assessed without accom-	Assessed with accom-
N. C. (12.)	4.4	4	40	-		40	4	45	modations	modations
Nation (public)	14	4	10	7	3	19	4	15	8	7
Alabama	14	6	8	7	1	14	2	11	9	3
Alaska	_	_	_	_	_	23	1	22	14	8
Arizona	19	3	16	11	4	24	4	20	15	6
Arkansas	14	2	11	8	4	17	2	15	7	8
California	27	4	22	17	5	27	3	25	22	3
Colorado	_	_	_	_	_	15	2	14	5	8
Connecticut	16	6	10	6	4	17	4	13	5	8
Delaware	_	_	_	_	_	18	9	9	3	6
Florida	_	_	_	-	_	19	3	16	5	11
Georgia	11	5	6	3	3	13	2	11	5	6
Hawaii	20	5	15	13	2	20	4	17	8	9
Idaho	14	2	12	8	4	15	1	14	9	5
Illinois	15	5	11	7	3	18	4	14	4	9
Indiana	12	3	9	6	3	15	2	13	6	7
lowa	_	_	_	_	_	17	2	15	6	9
Kansas	14	3	10	8	3	16	3	13	4	9
Kentucky	14	4	9	5	4	14	4	9	4	5
Louisiana	13	3	10	4	6	16	5	12	2	10
Maine	15	3	12	7	5	17	4	13	5	8
Maryland	13	3	11	7	4	16	4	12	7	5
Massachusetts	19	3	17	8	9	18	3	15	4	11
Michigan	11	4	7	5	2	15	5	10	4	6
Minnesota	15	2	13	11	3	16	2	14	8	6
Mississippi	11	5	5	4	1	9	5	4	3	2
Missouri	15	3	12	5	7	16	4	12	3	9
Montana	12	2	9	6	3	14	2	12	5	6
Nebraska	13	4	10	7	2	16	4	13	7	5
Nevada	16	4	12	8	5	18	2	16	9	6
New Hampshire	10	7	12	ŭ	0	20	3	16	6	10
New Jersey	_			_	_	18	2	16	2	14
New Mexico	25	7	18	14	4	32	2	30	16	14
New York	16	4	12	5	7	20	5	15	3	12
North Carolina	16	5	11	4	7	18	4	15	3	12
	11	2	9	8		16	1	14	7	7
North Dakota	11		7		2 3				3	
Ohio		4	11	4 8		13 19	5	8 17	10	5 7
Oklahoma	15	4			3		2			
Oregon	17	3	14	8	6	20	3	16	11	6
Pennsylvania	_	_	_	_	_	15	2	14	3	11
Rhode Island	20	3	16	12	4	23	4	20	7	13
South Carolina	13	4	9	7	2	15	7	8	5	4
South Dakota		_		-		13	2	11	6	6
Tennessee	13	2	10	9	1	16	3	13	12	1
Texas	20	8	12	10	2	20	7	13	11	2
Utah	14	3	11	8	3	16	3	14	9	5
Vermont	17	3	14	10	4	18	3	15	7	7
Virginia	15	6	9	5	4	17	7	10	4	6
Washington	_	_	_	_	_	16	2	14	10	5
West Virginia	15	3	12	4	8	16	3	14	5	9
Wisconsin	17	4	13	6	6	17	3	14	3	11
Wyoming	13	1	12	9	3	17	1	15	6	10
Other										
jurisdictions										
District of	15	6	9	3	6	20	6	14	5	9
Columbia					· ·					Ů
DoDEA ¹	9	1	8	6	2	11	1	10	4	6
Puerto Rico		· .		Ĭ	_	''	· .		7	· ·
See notes at end of				_						_

Table A-20.

Percentage of eighth-grade public school students identified as students with disabilities and/or English language learners excluded and assessed in NAEP mathematics when accommodations were permitted, by state/jurisdiction: Various years, 2000–19—Continued

				2005					2007	
State/jurisdiction	Identified	Excluded	Assessed	Assessed without	Assessed with	Identified	Excluded	Assessed	Assessed without	Assessed with
				accom-modations	accom-modations				accom-	accom-
									modations	modations
Nation (public)	19	4	15	7	8	18	4	14	6	8
Alabama	14	1	13	10	3	14	3	11	9	2
Alaska	27	2	25	14	11	26	4	22	13	9
Arizona	23	5	18	12	6	19	3	15	9	6
Arkansas	15	3	12	5	7	15	2	13	3	10
California	28	2	25	21	4	28	2	26	21	5
Colorado	17	3	14	5	9	16	2	14	4	10
Connecticut	16	3	13	5	9	16	2	15	4	11
Delaware	18	11	7	4	3	16	7	10	3	7
Florida	21	3	18	4	13	19	3	15	2	13
Georgia	14	2	11	4	7	11	5	7	3	4
Hawaii	20	3	17	8	9	19	2	18	8	10
	17	2	15	8	7	15	2	13	7	7
Idaho										
Illinois	18	3	14	4	11	18	6	12	3	9
Indiana	17	4	13	3	10	18	6	13	3	9
lowa	17	3	15	4	10	18	2	15	3	12
Kansas	17	4	13	4	9	16	4	12	5	8
Kentucky	12	3	9	2	6	14	7	8	2	6
Louisiana	15	4	11	1	10	13	3	10	1	9
Maine	19	5	14	5	9	18	5	13	4	9
Maryland	13	4	9	4	4	13	7	6	2	4
Massachusetts	20	6	13	4	10	20	9	11	3	7
Michigan	16	4	12	4	8	15	5	11	3	8
Minnesota	18	2	15	8	7	16	2	14	6	8
Mississippi	10	3	7	3	3	11	2	9	2	7
Missouri	15	4	11	3	8	15	5	10	3	7
Montana	16	2	14	5	9	17	3	14	4	9
Nebraska	16	1	14	6	9	15	3	13	5	8
	19	2	17	10	7	20	4	17	9	8
Nevada										
New Hampshire	19	2	17	6	11	21	3	17	6	12
New Jersey	18	4	15	2	12	18	3	15	2	12
New Mexico	30	3	26	13	13	26	3	23	14	9
New York	19	4	15	2	13	18	3	14	1	14
North Carolina	17	3	15	3	12	17	2	15	3	12
North Dakota	17	4	13	4	8	16	6	10	3	7
Ohio	14	6	9	2	7	16	7	9	2	7
Oklahoma	20	4	15	7	8	18	8	9	5	5
Oregon	19	3	16	9	8	19	3	16	8	8
Pennsylvania	16	3	13	3	10	17	4	13	3	10
Rhode Island	21	3	18	7	11	20	3	17	5	12
South Carolina	15	6	9	5	4	15	5	10	4	5
South Dakota	14	2	11	4	7	12	2	9	3	6
Tennessee	15	5	11	5	5	13	6	7	4	3
Texas	19	6	13	9	4	17	6	12	7	5
Utah	17	2	14	6	8	18	3	15	8	7
				0 7	_				_	
Vermont	19	4	15	7	9	21	4	16	5	11
Virginia	18	5	13	5	8	17	7	11	4	7
Washington	16	2	13	5	8	16	4	13	5	8
West Virginia	17	3	14	6	8	17	2	15	6	10
Wisconsin	18	4	13	3	10	18	5	13	2	11
Wyoming	17	2	15	5	10	15	2	13	4	9
Other										
jurisdictions										
District of	19	6	14	2	11	21	10	11	3	8
Columbia				2	''		.0		١	0
DoDEA ¹	13	2	11	4	7	12	2	10	3	7
	13			4	1			10		/
Puerto Rico	_		_	-		_	_	_	_	

Table A-20.

Percentage of eighth-grade public school students identified as students with disabilities and/or English language learners excluded and assessed in NAEP mathematics when accommodations were permitted, by state/jurisdiction: Various years, 2000–19—Continued

				2009				:	2011	
State/jurisdiction	Identified	Excluded	Assessed	Assessed without accom-modations	Assessed with accom-modations	Identified	Excluded	Assessed	Assessed without accom-	Assessed with accom-
									modations	modations
Nation (public)	18	3	15	5	10	18	3	15	5	10
Alabama	11	2	10	7	3	12	1	11	7	4
Alaska	21	3	18	5	13	21	3	18	4	14
Arizona	16	2	14	5	9	12	1	11	2	9
Arkansas	16	1	15	3	11	16	1	14	3	12
California	25	2	24	18	6	23	1	22	15	7
Colorado	17	2	15	5	10	16	1	15	5	10
Connecticut	16	2	14	3	11	16	1	15	2	12
Delaware	17	3	14	1	13	16	3	13	2	11
Florida	19		17					17	1	16
		2		1	16	19	2			
Georgia	13	3	10	2	9	12	3	9	2	7
Hawaii	18	2	16	6	10	20	2	18	7	11
Idaho	12	1	11	5	6	12	1	10	3	7
Illinois	16	3	13	3	11	17	2	15	3	12
Indiana	16	4	12	3	9	17	3	14	2	12
lowa	16	3	14	2	11	17	1	16	2	14
Kansas	17	3	14	4	9	18	1	16	7	9
Kentucky	13	5	8	2	7	13	3	10	2	8
Louisiana	16	2	14	2	12	15	1	14	1	13
Maine	19	2	16	4	13	20	2	18	4	14
Maryland	14	7	7	1	6	14	6	8	1	7
•										
Massachusetts	21	6	15	4	11	22	4	18	3	15
Michigan	15	3	12	3	8	14	4	11	3	8
Minnesota	17	3	15	6	9	17	2	15	6	9
Mississippi	10	2	8	2	7	8	1	7	1	6
Missouri	14	3	10	3	8	14	1	12	2	10
Montana	14	3	11	3	8	13	2	12	2	9
Nebraska	17	3	13	4	9	16	4	13	4	9
Nevada	17	2	15	6	9	18	3	15	6	9
New Hampshire	21	3	18	6	13	20	2	18	4	14
New Jersey	18	2	16	2	14	19	4	15	1	14
New Mexico	21	3	18	7	11	22	2	20	10	10
New York	20	3	17	1	16	20	1	19	#	18
North Carolina	17	2	15	3	13	18	2	16	3	12
										9
North Dakota	16	5	11	4	7	16	4	11	3	
Ohio	15	5	10	1	9	16	5	11	1	10
Oklahoma	18	6	11	4	8	18	10	8	4	4
Oregon	18	3	16	7	8	18	1	16	6	11
Pennsylvania	19	3	16	3	13	17	2	15	2	13
Rhode Island	21	2	18	4	14	19	1	18	4	13
South Carolina	16	4	12	5	7	15	4	11	4	8
South Dakota	12	2	10	3	7	13	2	11	4	7
Tennessee	12	4	8	1	7	13	4	9	1	8
Texas	17	5	13	6	6	18	5	13	8	5
Utah	14	3	11	4	7	14	3	11	3	8
		_		_						
Vermont	21	2	19	5	13	20	1	18	4	15
Virginia	17	4	13	4	9	18	3	15	6	9
Washington	14	2	12	4	8	16	2	14	4	10
West Virginia	15	2	14	4	10	14	2	12	3	9
Wisconsin	18	3	15	3	12	18	2	16	2	14
Wyoming	15	2	13	3	10	14	1	13	2	11
Other										
jurisdictions										
District of	20	6	14	2	12	21	4	17	2	15
Columbia	20		14	2	12	21	4	17	2	13
DoDEA ¹	40	_	44	A	7	4.4	2	44		0
	13	2	11	4	7	14	3	11	3	8
Puerto Rico	_	_				19	1	18	#	17

Table A-20.

Percentage of eighth-grade public school students identified as students with disabilities and/or English language learners excluded and assessed in NAEP mathematics when accommodations were permitted, by state/jurisdiction: Various years, 2000–19—Continued

				2013					2015	
State/jurisdiction	Identified	Excluded	Assessed	Assessed without	Assessed with	Identified	Excluded	Assessed	Assessed without	Assessed with
				accom-modations	accom-modations				accom-	accom-
									modations	modations
Nation (public)	17	2	16	3	12	19	2	17	5	13
Alabama	11	1	10	5	5	11	1	10	4	6
Alaska	23	1	22	3	19	23	2	21	4	17
Arizona	13	1	12	1	11	14	1	13	3	11
Arkansas	19	2	17	3	14	19	2	17	4	13
California	19	1	18	10	8	22	1	21	13	8
Colorado	18	1	17	5	11	21	1	19	9	11
Connecticut	18	2	16	2	14	19	1	17	3	15
Delaware	17	1	16	1	15	19	2	17	3	15
Florida	18	2	16	1	15	20	2	18	1	17
	13	2	12	2	10	15	1	13	2	11
Georgia										
Hawaii	21	2	19	7	12	17	2	16	6	9
Idaho	12	1	11	2	8	13	2	11	2	9
Illinois	17	1	16	2	14	17	1	16	3	13
Indiana	18	2	16	2	14	19	1	18	3	15
Iowa	15	1	14	1	13	16	1	15	3	12
Kansas	19	2	18	7	11	22	1	21	11	10
Kentucky	13	2	11	1	10	14	1	12	1	11
Louisiana	16	1	15	1	14	19	2	17	1	16
Maine	20	1	18	2	16	21	1	19	4	16
Maryland	16	2	14	1	13	18	2	16	2	14
Massachusetts	22	2	20	4	16	24	2	22	4	18
Michigan	16	2	13	3	11	16	2	14	4	10
Minnesota	18	2	16	7	9	19	2	17	8	9
Mississippi	9	1	8	2	7	11	1	10	2	8
Missouri	13		12	2	11		2		2	11
		1				15		13		
Montana	13	1	12	2	9	13	1	12	4	8
Nebraska	16	2	14	2	12	17	2	15	3	11
Nevada	16	1	15	3	12	23	1	21	12	10
New Hampshire	20	1	19	3	16	19	1	17	3	15
New Jersey	18	2	17	#	16	20	1	19	1	18
New Mexico	24	2	22	10	12	24	2	22	10	12
New York	22	2	20	#	19	22	1	21	1	20
North Carolina	18	1	17	3	14	18	1	17	3	14
North Dakota	16	3	13	1	11	16	2	14	2	11
Ohio	16	2	14	1	14	19	2	17	1	16
Oklahoma	19	2	17	3	14	20	2	19	4	15
Oregon	16	1	15	4	11	17	2	14	4	11
Pennsylvania	19	2	17	2	15	19	2	17	2	14
Rhode Island	19	1	18	2	16	20	2	18	4	14
South Carolina	15	1	14	4	10	17	1	15	5	10
South Dakota	13	1	12	3	9	14	1	12	5	8
Tennessee	12	2	10	1	10	16	2	14	1	13
						21	2			
Texas	18	2	16	4	12			19	6	13
Utah	14	2	12	2	10	13	1	12	3	9
Vermont	18	1	17	2	15	20	1	19	2	17
Virginia	17	1	16	4	12	18	2	16	3	12
Washington	16	2	14	3	11	18	1	17	5	12
West Virginia	13	2	12	3	9	15	2	13	2	11
Wisconsin	18	2	17	2	15	17	1	16	3	12
Wyoming	16	2	14	2	13	16	1	15	2	13
Other	4	4				4	4		4	
jurisdictions										
District of	23	1	22	1	21	25	3	21	2	20
Columbia	23	'			21	25	3		2	20
DoDEA ¹	4.4		40	2	^	45	4	4.4	4	40
	14	1 1	12	3	9	15	1	14	4	10
Puerto Rico	23	#	23	#	23	25	#	25	1	24

Table A-20.

Percentage of eighth-grade public school students identified as students with disabilities and/or English language learners excluded and assessed in NAEP mathematics when accommodations were permitted, by state/jurisdiction: Various years, 2000–19—Continued

				2017					2019	
State/jurisdiction	Identified	Excluded	Assessed	Assessed without accom-modations	Assessed with accom-modations	Identified	Excluded	Assessed	Assessed without accom-	Assessed with accom-
		_		_			_		modations	modations
Nation (public)	20	2	18	6	12	21	2	19	6	13
Alabama	13	2	11	7	4	13	1	12	5	6
Alaska	23	2	22	8	14	24	1	23	7	15
Arizona	14	1	13	3	9	19	2	17	5	12
Arkansas	21	2	19	7	13	21	2	19	3	16
California	23	2	21	13	7	24	2	22	13	10
Colorado	20	2	18	9	9	18	1	17	7	10
Connecticut	20	2	17	4	13	21	2	19	5	14
Delaware	19	2	17	4	13	21	2	19	5	14
Florida	21	3	19	2	17	24	2	22	2	20
Georgia	15	2	13	2	11	17	2	16	2	14
Hawaii	16	2	14	8	6	16	2	14	9	5
							1			
Idaho	13	1	12	4	8	15		14	4	10
Illinois	18	1	16	3	14	19	1	18	3	15
Indiana	19	2	18	4	14	21	2	19	3	16
Iowa	16	1	15	2	12	18	1	17	3	15
Kansas	23	1	22	14	8	21	1	20	10	10
Kentucky	15	1	13	2	12	16	2	15	1	13
Louisiana	21	3	18	1	17	20	2	18	1	17
Maine	21	2	19	4	15	22	1	21	4	17
Maryland	17	2	16	1	14	19	2	17	1	16
Massachusetts	24	2	22	6	16	24	2	22	6	16
Michigan	19	3	16	6	10	19	2	16	5	11
Minnesota	19	2	17	11	6	20	2	18	9	9
		1	11	3	8		1	12	3	9
Mississippi	12					13				
Missouri	15	2	14	4	10	15	1	15	4	11
Montana	15	1	14	6	8	16	1	15	4	11
Nebraska	18	2	16	4	12	18	1	17	4	13
Nevada	22	2	21	13	7	22	1	21	13	8
New Hampshire	19	1	17	5	12	21	1	20	6	14
New Jersey	20	2	19	1	17	21	2	20	2	18
New Mexico	24	2	22	8	14	25	2	24	9	14
New York	23	2	21	2	19	24	1	22	1	21
North Carolina	17	2	15	5	10	17	1	16	4	12
North Dakota	16	2	15	5	9	15	1	14	3	11
Ohio	18	2	16	1	14	19	2	17	1	16
Oklahoma	20	2	19	5	14	20	2	18	5	12
		1		7	9		1	18		
Oregon	18		16			20			8	10
Pennsylvania	19	2	17	4	13	22	1	20	5	15
Rhode Island	21	2	19	4	15	22	1	20	5	15
South Carolina	20	1	19	12	6	20	1	18	9	9
South Dakota	15	3	13	9	4	15	1	14	7	7
Tennessee	17	2	14	3	11	15	2	13	3	11
Texas	23	2	21	8	13	27	2	25	12	13
Utah	15	1	13	4	9	18	1	17	6	11
Vermont	21	1	20	4	16	21	1	19	4	15
Virginia	17	2	15	5	10	19	2	17	4	12
Washington	18	2	17	6	11	20	2	19	8	10
West Virginia	16	2	14	5	8	17	1	16	5	11
Wisconsin										
	17	2	16	4	12	17	1	16	3	12
Wyoming	15	1	14	3	11	16	2	15	3	12
Other jurisdictions										
District of	24	2	22	2	19	25	2	24	2	22
Columbia DoDEA ¹	15	1	14	4	10	17	1	15	4	11
Puerto Rico	29	#	29	2	27	_		_		
Not available.		#	29	2	21	_	_		_	

[—] Not available.

NOTE: Beginning with the 2017 assessment, NAEP mathematics results are from a digitally based assessment; prior to 2017, results were from a paper-and-pencil based assessment. Detail may not sum to totals because of rounding. In Puerto Rico, the English language learner (ELL) category is for the Spanish language learner (SLL).

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 2000–19 Mathematics Assessments.

[#] Rounds to zero.

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

Table A-21.

Percentage of fourth-grade public school students identified as students with disabilities excluded and assessed in NAEP mathematics when accommodations were not permitted, by state/jurisdiction: 1992, 1996, and 2000

		1992			1996			2000	
State/jurisdiction	Identified	Excluded	Assessed	Identified	Excluded	Assessed	Identified	Excluded	Assessed
Nation (public)	7	5	3	12	5	7	12	6	6
Alabama	10	4	6	11	6	5	12	6	7
Alaska		_	_	13	4	10	-	_	_
Arizona	7	3	4	10	7	3	11	6	4
Arkansas	11	5	6	9	6	3	13	7	6
California	7	3	4	8	5	3	8	3	5
Colorado	8	4	4	12	7	5			_
Connecticut	10	4	6	14	7	7	11	8	3
Delaware	11	5	6	12	6	6		_	_
Florida	13	7	6	14	7	7		_	_
Georgia	9	5	4	11	6	5	9	6	4
Hawaii	10	5	5	10	4	5	13	8	5
	8		5		4			5	
Idaho	8	3	5	-	-	-	12		6
Illinois	_	_	_	_	_	_	11	7	4
Indiana	6	3	3	11	5	6	11	6	4
lowa	8	3	5	11	5	6	14	10	4
Kansas	_	-	-	-	-	-	12	6	6
Kentucky	8	3	5	10	6	4	11	8	3
Louisiana	7	4	3	13	7	6	15	7	8
Maine	14	6	8	14	7	7	16	10	6
Maryland	10	3	7	13	7	6	11	8	3
Massachusetts	15	6	9	15	7	8	14	8	6
Michigan	7	5	2	10	6	4	9	7	2
Minnesota	7	3	4	11	5	6	12	4	7
Mississippi	7	5	2	8	6	2	6	4	2
Missouri	12	4	7	14	5	9	15	9	5
Montana	_	_	_	10	5	5	11	5	5
Nebraska	12	4	8	14	4	10	16	6	9
Nevada			_	9	5	4	10	6	4
New Hampshire	12	4	8	_	_		_	_	
New Jersey	8	3	5	9	5	4		_	
New Mexico	12	6	6	14	8	6	15	9	6
New York	7	3	3	10	5	5	11	9	2
	11	3	8	13	6	6	14	12	
North Carolina									2
North Dakota	8	2	7	10	3	7	12	6	6
Ohio	10	6	4	_	_	_	12	10	2
Oklahoma	11	7	4	_	-	_	16	10	6
Oregon	_	-	-	13	6	7	14	6	7
Pennsylvania	8	3	5	8	4	4	-	-	_
Rhode Island	10	4	7	13	5	8	16	9	7
South Carolina	10	5	5	12	5	7	17	7	9
Tennessee	11	4	8	12	6	6	10	4	7
Texas	9	5	5	12	7	5	15	10	5
Utah	9	4	5	11	5	6	9	5	4
Vermont		_	_	14	6	8	14	10	4
Virginia	10	5	5	12	6	6	13	10	3
Washington	_	_	_	10	5	6	_	_	_
West Virginia	9	4	4	13	8	5	13	10	3
Wisconsin	9	5	5	10	7	3	15	10	5
Wyoming	9	3	6	12	4	8	13	5	8
Other jurisdictions									
			т	т	т	т		т	
District of Columbia	8	7	1	9	7	1	14	7	7
DoDEA ¹		-	-	8	4	4	8	4	4

⁻ Not available

NOTE: Beginning with the 2017 assessment, NAEP mathematics results are from a digitally based assessment; prior to 2017, results were from a paper-and-pencil based assessment. South Dakota did not participate in NAEP mathematics assessments from 1992 to 2000. 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), 1992, 1996, and 2000 Mathematics Assessments.

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

Table A-22.

Percentage of fourth-grade public school students identified as students with disabilities excluded and assessed in NAEP mathematics when accommodations were permitted, by state/jurisdiction: Various years, 2000–19

				2000					2003	
State/jurisdiction	Identified	Excluded	Assessed	Assessed without accom-modations	Assessed with accom-modations	Identified	Excluded	Assessed	Assessed without accom-	Assessed with accom-
NI-4: /	40	2		-	4	4.4	2	44	modations	modations
Nation (public)	13	3	9	5	4	14	3	11	4	7
Alabama	13	3	9	7	3	11	2	10	7	2
Alaska		_			_	16	1	15	6	9
Arizona	11	3	8	4	4	12	3	9	5	3
Arkansas	12	4	8	5	4	14	1	12	5	8
California	8	3	5	4	1	10	2	8	6	2
Colorado	_	_	-	-	_	12	2	11	3	7
Connecticut	11	3	8	4	4	13	3	10	3	6
Delaware	_	_	-	_	_	16	6	10	3	7
Florida	_	l –	-	-	_	18	2	16	4	12
Georgia	9	3	7	3	4	12	2	11	4	7
Hawaii	13	6	7	5	2	11	2	10	3	6
Idaho	12	1	11	5	6	12	1	11	4	7
Illinois	11	2	9	3	6	15	3	13	4	9
Indiana	10	2	8	3	5	14	2	12	6	6
lowa	13	1	11	4	7	15	2	13	3	10
Kansas	12	3	9	5	4	14	1	12	2	10
Kentucky	11	3	8	3	5	13	3	11	4	7
Louisiana	15	3	13	2	11	21	3	18	3	16
Maine	15	4	11	4	7	18	3	14	4	10
Maryland	11	2	9	4	5	13	3	10	4	6
Massachusetts	14	1	14	5	9	18	2	16	2	14
Michigan	10	3	7	3	4	11	3	7	2	5
Minnesota	12	2	10	5	5	14	2	11	5	6
Mississippi	6	3	3	1	2	10	5	5	3	1
Missouri	14	2	12	5	7	15	3	12	3	9
Montana	12	2	10	5	6	14	2	12	5	7
Nebraska	15	2	13	9	4	16	2	14	6	8
Nevada	10	3	7	3	4	13	3	10	5	5
New Hampshire	_	_		_	_	18	3	16	4	11
New Jersey	_	_	_	_	_	14	2	13	1	12
New Mexico	15	5	10	5	5	17	2	15	7	9
New York	11	2	8	#	8	13	3	10	1	10
North Carolina	14	4	10	3	7	17	4	14	3	10
	11	1	9			15	2	14		7
North Dakota				5	4				6	
Ohio	12	4	7	2	5	12	4	8	2	7
Oklahoma	16	4	12	7	4	17	3	14	6	8
Oregon	14	2	12	6	5	17	4	14	7	7
Pennsylvania	_	_		_	_	13	2	11	2	9
Rhode Island	16	2	14	6	8	20	2	18	5	13
South Carolina	17	5	12	7	5	17	6	11	6	4
South Dakota	_	_	-	-	_	15	1	13	7	6
Tennessee	10	2	8	7	1	13	2	11	6	5
Texas	15	6	9	6	3	15	7	8	5	3
Utah	9	3	6	4	2	12	2	10	5	5
Vermont	15	3	12	4	8	17	4	13	4	10
Virginia	13	3	10	4	6	13	4	9	3	6
Washington	_	_			_	14	2	12	5	7
West Virginia	13	3	11	3	8	15	3	12	3	9
Wisconsin	15	4	10	5	6	15	3	12	2	10
Wyoming	14	2	12	6	6	15	1	14	3	11
	l14	l	12	ol	0	15	l	14	3	
Other										
jurisdictions	r	r	r						Тт	
District of	13	3	10	5	5	13	4	10	2	7
Columbia										
DoDEA ¹	8	2	6	3	4	10	1	9	2	6
Puerto Rico		_	_	_	_	_	_	_	_	_

Table A-22.

Percentage of fourth-grade public school students identified as students with disabilities excluded and assessed in NAEP mathematics when accommodations were permitted, by state/jurisdiction: Various years, 2000–19—Continued

				2005					2007	
State/jurisdiction	Identified	Excluded	Assessed	Assessed without accom-modations	Assessed with accom-modations	Identified	Excluded	Assessed	Assessed without accom-	Assessed with accom-
				accom-modations	accom-modations				modations	modations
Nation (public)	14	3	11	4	8	14	3	11	3	8
Alabama	11	1	10	7	3	11	1	10	6	4
Alaska	15	1	14	4	10	16	1	15	4	10
Arizona	11	3	9	3	5	11	2	9	4	5
Arkansas	13	2	11	3	8	12	2	9	2	7
California	10	2	8	4	3	10	2	8	4	4
Colorado	12	2	10	2	8	12	2	11	2	9
Connecticut	13	2	11	3	8	13	1	11	2	9
Delaware	16	7	9	2	7	17	5	12	3	9
Florida	18	2	16	3	12	15	2	13	1	12
Georgia	14	2	12	5	7	12	2	10	3	7
Hawaii	11	2	10	3	7	11	1	10	2	. 8
Idaho	11	1	10	3	7	11	1	9	3	6
Illinois	14	2	12	4	8	15	3	11	4	8
Indiana	15	1	14	4	10	17	3	14	6	9
lowa	14	2	13	2	11	13	1	12	2	10
Kansas	14	2	11	3	8	13	3	10	3	7
Kentucky	14	2	12	3	9	15	2	13	5	7
Louisiana	24	4	20	3	17	18	2	15	3	13
Maine	19	3	16	4	12	18	3	15	3	11
Maryland	13	3	10	3	7	12	4	9	3	6
Massachusetts	18	3	15	3	12	18	5	13	3	11
	14	4	11	3	7	13	3	10	4	7
Michigan						13	2			7
Minnesota	13	2	11	5	6			12	4	
Mississippi	11	2	8	5	4	10	1	9	4	6
Missouri	16	2	14	5	9	15	3	11	4	7
Montana	12	2	10	2	7	13	2	10	2	8
Nebraska	18	2	16	6	10	17	2	14	5	9
Nevada	12	3	10	3	6	13	2	11	5	6
New Hampshire	20	2	18	4	14	19	2	16	3	13
New Jersey	15	2	13	3	10	14	2	12	1	11
New Mexico	14	2	13	3	10	13	3	10	3	7
New York	15	3	12	1	11	15	1	13	1	12
North Carolina	15	2	13	3	10	15	2	13	3	10
North Dakota	16	2	13	5	8	15	4	11	3	8
Ohio	12	3	9	2	7	15	4	11	2	8
Oklahoma	16	4	12	4	9	14	5	10	3	6
Oregon	15	3	11	5	7	15	2	13	5	8
Pennsylvania	16	2	13	3	10	17	2	14	4	10
Rhode Island	20	2	18	6	12	19	2	17	5	12
South Carolina	14	4	10	6	5	13	2	12	5	6
South Dakota	16	1	14	7	7	15	1	14	7	7
Tennessee	11	3	8	3	6	14	6	8	4	4
Texas	14	5	8	4	4	13	5	8	3	5
Utah	12	2	11	4	6	12	2	10	4	6
Vermont	16	3	13	4	9	17	2	14	3	11
Virginia	16	4	11	3	8	15	4	11	4	7
Washington	13	2	11	4	7	15	2	13	5	8
West Virginia	19	2	17	9	8	17	1	16	8	8
Wisconsin	14	2	12	2	10	15	2	12	3	9
Wyoming	15	1	14	3	11	15	2	13	4	9
Other										
jurisdictions										
District of	16	5	11	2	8	14	5	9	1	8
Columbia										
DoDEA ¹	10	1	9	2	7	11	1	10	3	7
			_	-			· ·			•

Table A-22.

Percentage of fourth-grade public school students identified as students with disabilities excluded and assessed in NAEP mathematics when accommodations were permitted, by state/jurisdiction: Various years, 2000–19—Continued

				2009					2011	
State/jurisdiction	Identified	Excluded	Assessed	Assessed without	Assessed with	Identified	Excluded	Assessed	Assessed without	Assessed with
				accom-modations	accom-modations				accom-	accom-
	- 10					- 10			modations	modations
Nation (public)	13	2	11	3	8	13	2	11	3	9
Alabama	10	1	9	6	4	10	1	9	5	4
Alaska	17	1	16	4	12	16	2	14	3	11
Arizona	13	1	12	4	8	12	1	11	2	8
Arkansas	12	1	11	2	8	13	1	12	2	10
California	10	2	7	3	5	10	1	8	2	6
Colorado	11	1	10	1	9	11	1	10	1	9
Connecticut	13	2	12	2	10	14	1	13	1	11
Delaware	15	3	12	2	11	16	3	13	3	10
Florida	17	2	15	3	12	16	1	14	3	12
Georgia	11	1	9	3	7	12	1	10	3	8
Hawaii	10	1	9	1	8	10	2	8	1	7
Idaho	10	1	9	3	7	11	1	9	2	7
Illinois	15	2	13	4	9	14	2	12	4	8
Indiana	16	2	13	5	8	16	2	14	4	9
lowa	14	2	12	2	10	15	1	14	2	12
Kansas	14	3	11	3	9	14	2	13	4	9
Kentucky	15	3	12	5	7	15	3	12	4	8
	20	2	18	3	15	20	2	18	2	16
Louisiana	18		17	3	15	17	2		2 2	14
Maine		1						16		
Maryland	14	4	9	2	7	14	5	8	2	7
Massachusetts	19	5	14	2	12	18	3	15	1	14
Michigan	14	2	11	4	8	13	2	11	3	8
Minnesota	14	2	13	5	8	15	1	13	4	9
Mississippi	10	1	9	3	6	9	1	9	4	5
Missouri	14	3	12	4	8	13	2	11	3	8
Montana	12	2	10	2	8	12	1	10	3	7
Nebraska	18	2	16	7	9	17	1	15	5	10
Nevada	12	2	10	3	6	11	2	9	3	6
New Hampshire	18	2	16	3	14	17	2	15	1	14
New Jersey	16	2	13	2	12	17	3	14	2	12
New Mexico	13	2	11	2	8	13	2	11	2	9
New York	16	1	15	1	14	16	1	15	1	14
North Carolina	15	2	13	3	10	15	2	13	3	10
North Dakota	16	4	12	4	8	15	3	11	3	8
Ohio	14	3	11	2	9	14	2	12	2	10
Oklahoma	15	4	11	4	7	15	8	8	3	5
Oregon	16	2	13	5	9	15	2	13	4	9
Pennsylvania	15	2	13	3	10	15	1	14	3	11
Rhode Island	17	2	16	3	13	14	1	13	1	12
South Carolina	14	2	13	5	8	14	1	12	4	8
South Dakota	15	2	13	5	8	16	2	14	7	7
Tennessee	14	3	10	3	7	14	3	10	3	7
Texas	10	3	7	2	5	10	4	7	2	5
		2		3	7		2	11		7
Utah	12	_	10	_		13			4	
Vermont	19	2	16	3	13	17	1	16	2	14
Virginia	14	2	12	3	9	13	2	11	3	8
Washington	12	2	11	3	7	14	2	12	3	9
West Virginia	17	2	16	7	9	18	1	16	7	9
Wisconsin	15	2	13	2	11	14	2	13	2	10
Wyoming	16	1	15	4	11	16	2	14	4	11
Other										
jurisdictions										
District of	14	4	10	2	8	15	5	11	#	10
Columbia										
DoDEA ¹	12	1	11	3	8	13	2	11	3	8
Puerto Rico	_		_			24	#	24	1	23

Table A-22.

Percentage of fourth-grade public school students identified as students with disabilities excluded and assessed in NAEP mathematics when accommodations were permitted, by state/jurisdiction: Various years, 2000–19—Continued

				2013					2015	
State/jurisdiction	Identified	Excluded	Assessed	Assessed without	Assessed with	Identified	Excluded	Assessed	Assessed without	Assessed with
				accom-modations	accom-modations				accom-	accom-
									modations	modations
Nation (public)	14	1	12	2	10	14	1	13	3	11
Alabama	10	1	9	4	5	12	1	11	5	6
Alaska	16	1	15	2	13	15	1	14	2	12
Arizona	10	1	10	2	8	13	1	12	2	10
Arkansas	14	1	13	2	11	14	1	13	2	11
California	10	2	8	2	7	10	1	9	2	6
Colorado	10	1	9	2	8	11	1	10	2	8
Connecticut	14	1	13	1	12	13	1	12	2	10
Delaware	16	2	14	2	12	17	1	16	3	13
Florida	16	1	15	2	12	17	1	16	2	14
Georgia	12	1	11	2	9	14	1	13	2	10
Hawaii	10	1	9	1	8	10	1	9	2	7
Idaho	11	1	10	2	8	11	2	10	2	7
Illinois	14	1	13	2	11	13	1	13	3	9
Indiana	17	1	15	2	13	17	1	16	3	13
lowa	13	1	13	2	11	13	1	13	1	11
Kansas	15	1	14	3	11	15	1	14	4	10
Kentucky	13	1	12	2	9	16	2	14	4	10
Louisiana	20	1	19	2	17	21	2	19	2	17
Maine	20	2	18	2	16	19	1	18	2	16
Maryland	14	1	13	1	12	13	1	12	1	11
Massachusetts	19	2	17	1	16	20	2	18	2	16
Michigan	13	2	11	3	9	14	2	12	3	9
Minnesota	14	1	13	5	8	14	2	13	5	8
Mississippi	10	1	10	3	6	12	1	12	4	7
Missouri	14	1	13	3	9	14	1	13	4	9
Montana	12	2	10	2	8	12	1	11	3	8
Nebraska	17	1	15	4	11	17	1	16	4	11
Nevada	13	1	12	3	9	12	2	9	2	7
New Hampshire	16	1	15	1	14	18	1	17	1	16
New Jersey	16	1	15	1	14	18	1	17	2	15
New Mexico	14	1	13	2	10	15	2	13	2	11
New York	17	1	16	1	15	18	1	17	1	17
North Carolina	15	1	14	2	12	13	1	12	2	11
North Dakota	14	2	12	3	9	13	2	12	3	9
Ohio	15	1	14	2	11	16	2	14	1	13
Oklahoma	17	2	16	3	12	18	2	16	4	12
Oregon	16	2	14	4	10	14	2	12	3	9
Pennsylvania	16	1	15	3	12	19	1	17	4	13
Rhode Island	14	1	13	1	12	14	1	13	1	11
	14	1						13		10
South Carolina			13	3	10	14	1		4	
South Dakota	16	1	15	6	9	16	1	15	6	10
Tennessee	14	1	13	2	11	15	1	14	3	11
Texas	12	1	10	1	9	14	2	12	2	10
Utah	13	1	12	3	9	12	1	11	4	7
Vermont	17	1	16	1	15	18	1	16	2	15
Virginia	14	1	13	3	10	13	1	12	2	10
Washington	14	2	12	3	9	13	1	12	3	9
West Virginia	18	2	17	7	10	20	1	19	8	11
Wisconsin	15	2	13	2	11	13	1	12	3	9
Wyoming	15	1	15	3	11	15	1	15	3	12
Other										
jurisdictions										
District of	15	1	14	1	14	14	1	13	1	12
Columbia										
DoDEA ¹	14	1	13	3	10	14	1	14	3	11
Puerto Rico	28	#	28	1	27	30	#	30	1	29
See notes at end of		#			21] 30	#	30		29

Table A-22.

Percentage of fourth-grade public school students identified as students with disabilities excluded and assessed in NAEP mathematics when accommodations were permitted, by state/jurisdiction: Various years, 2000–19—Continued

				2017					2019	
State/jurisdiction	Identified	Excluded	Assessed	Assessed without	Assessed with	Identified	Excluded	Assessed	Assessed without	Assessed with
				accom-modations	accom-modations				accom-	accom-
									modations	modations
Nation (public)	15	2	13	4	9	16	2	14	3	11
Alabama	12	1	11	6	6	15	1	14	6	8
Alaska	15	1	14	5	9	16	#	16	4	12
Arizona	11	1	10	2	8	13	1	13	4	9
Arkansas	16	1	14	4	10	18	1	17	3	14
California	11	2	9	4	5	13	2	11	5	6
Colorado	12	1	11	3	8	13	1	12	4	8
Connecticut	15	1	14	3	10	15	1	14	3	12
Delaware	18	1	17	5	12	18	1	17	3	14
Florida	17	2	15	2	13	21	2	19	2	17
Georgia	14	1	12	3	10	15	1	13	2	11
Hawaii	10	1	8	3	5	11	1	10	4	6
Idaho	11	1	10	3	7	12	1	11	3	8
Illinois	15	1	14	2	12	15	1	14	3	11
Indiana	17	1	15	3	12	18	1	16	3	13
Iowa	15	1	14	2	12	14	1	13	1	11
Kansas	15	1	13	6	8	15	1	14	4	10
Kentucky	16	1	14	5	10	17	1	15	4	11
Louisiana	18	2	17	2	14	19	2	17	2	15
Maine	20	1	19	5	14	21	1	20	2	18
Maryland	13	1	12	2	10	14	1	13	2	12
•										
Massachusetts	20	2	18	3	15	21	2	19	2	17
Michigan	12	2	10	5	5	13	2	11	3	8
Minnesota	14	1	12	7	5	15	1	13	6	7
Mississippi	14	1	13	5	8	14	1	13	4	10
Missouri	15	1	14	6	9	15	1	14	4	10
Montana	13	1	12	5	7	15	1	14	5	9
Nebraska	17	1	16	6	10	17	1	16	5	12
Nevada	12	1	11	6	5	12	1	11	5	5
New Hampshire	18	1	17	4	13	19	1	18	3	14
New Jersey	17	1	16	3	13	17	1	16	1	15
New Mexico	16	1	14	4	10	17	1	15	4	11
New York	17	1	16	2	14	18	2	16	2	14
North Carolina	15	1	14	4	10	14	1	13	2	10
	14									
North Dakota		1	13	5	7	15	1	13	4	10
Ohio	16	2	14	2	12	18	2	15	2	13
Oklahoma	18	2	16	5	12	19	2	17	5	12
Oregon	14	1	13	6	7	16	1	14	7	7
Pennsylvania	17	2	15	4	11	19	2	16	4	12
Rhode Island	14	1	13	1	12	16	1	15	1	14
South Carolina	15	1	14	8	6	15	1	14	5	10
South Dakota	17	1	15	10	5	17	1	16	8	8
Tennessee	13	2	12	4	7	15	1	13	5	9
Texas	15	2	12	3	10	15	2	13	2	12
Utah	14	1	12	6	6	14	1	13	6	7
		4					4			
Vermont	18		17	4	13	20		19	5	15
Virginia	13	1	12	3	8	15	1	14	3	11
Washington	13	2	11	5	7	14	2	12	4	8
West Virginia	21	1	20	11	9	21	1	20	9	11
Wisconsin	15	1	13	4	9	14	1	13	4	9
Wyoming	15	1	14	4	10	17	1	16	3	13
Other										
jurisdictions										
District of	16	1	15	2	13	17	1	16	1	16
Columbia		'	'3	2	13	.,	· '	10	'	10
DoDEA ¹	12	4	12	4	9	14	1	10	3	10
	13	1 1	I I					13		
Puerto Rico	31	#	31	2	30	_	_	_	_	

[—] Not available.

NOTE: Beginning with the 2017 assessment, NAEP mathematics results are from a digitally based assessment; prior to 2017, results were from a paper-and-pencil based assessment. 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, 2000–19 Mathematics Assessments.

[#] Rounds to zero.

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

Table A-23.

Percentage of eighth-grade public school students identified as students with disabilities excluded and assessed in NAEP mathematics when accommodations were not permitted, by state/jurisdiction: Various years, 1990–2000

		1990			1992			1996			2000	
State/jurisdiction	Identified	Excluded	Assessed									
Nation (public)		_	_	8	5	3	9	4	5	12	6	6
Alabama	9	5	4	10	5	5	13	7	6	14	5	9
Alaska	_	_	_	_	_	_	10	5	6	_	_	_
Arizona	7	3	3	6	4	2	9	5	4	11	7	4
Arkansas	10	7	3	11	6	5	11	7	4	12	8	4
California	7	3	4	8	4	4	8	5	4	10	6	5
Colorado	8	4	5	8	4	5	11	4	7	_	_	_
Connecticut	9	5	4	12	5	6	13	7	6	14	9	5
Delaware	9	4	5	9	4	5	12	8	4		_	_
Florida	8	5	4	9	5	4	12	7	5	_	_	_
Georgia	6	3	3	7	4	3	9	6	3	10	7	3
Hawaii	7	3	3	9	3	5	9	4	5	15	6	9
Idaho	6	2	4	7	3	4			_	10	5	6
Illinois	8	4	4	,	3	7				11	6	5
Indiana	7	5	2	8	4	4	12	5	6	11	7	4
	9	4	6	10	4	6	12	5	7	!!	,	4
lowa	9	4		10	4	0	12	5	′	10	5	5
Kansas		_	_	_	_		_		_			
Kentucky	7	5	3	9	5	4	9	4	5	13	9	4
Louisiana	6	4	2	7	4	3	9	6	3	13	6	7
Maine	_	_	_	11	4	6	11	5	6	14	9	5
Maryland	9	4	5	9	4	5	11	6	5	12	10	3
Massachusetts	_	_	_	14	6	8	15	7	9	16	10	6
Michigan	8	4	4	9	6	3	8	5	3	10	6	4
Minnesota	8	3	6	7	3	4	10	3	7	13	4	8
Mississippi	_	_	_	10	7	3	11	7	4	10	7	3
Missouri	_	_	_	11	4	6	11	6	4	14	8	6
Montana	6	2	4		_	_	9	3	6	11	5	5
Nebraska	8	3	5	9	4	6	11	4	7	11	3	8
Nevada	-	_	_	_	_	_	9	5	4	12	8	3
New Hampshire	12	4	7	12	5	7	14	4	11	_	-	_
New Jersey	10	5	4	12	6	6	10	5	5	-	_	_
New Mexico	8	6	3	10	4	6	13	5	9	17	10	7
New York	8	4	4	10	6	4	10	5	4	12	10	1
North Carolina	9	3	6	12	3	9	8	4	5	14	13	2
North Dakota	7	2	5	7	2	5	9	3	6	11	4	7
Ohio	8	5	3	9	6	4	_	_	_	11	9	3
Oklahoma	7	5	2	9	6	3	_	_	_	13	8	5
Oregon	7	2	5	_	_	_	10	3	7	13	4	9
Pennsylvania	10	5	5	8	4	4	_	_	_	_	_	_
Rhode Island	11	5	6	10	4	7	13	5	7	16	9	7
South Carolina	_	_	_	10	6	4	10	6	4	13	7	6
Tennessee	_	_	_	10	5	5	11	4	7	12	4	8
Texas	8	4	3	9	5	4	11	6	5	14	8	6
Utah		_	_	9	4	5	10	5	5	10	5	6
Vermont	_	_	_	9	4	3	12	4	8	16	9	7
Virginia	8	4	4	10	5	5	12	7	5	14	10	4
Washington	0	4	4	_	- -	_	11	5	6	14	_	4
•	9	5	4	10	6			8		14	11	_
West Virginia						4	13		4			3
Wisconsin	7	4	3	9	4	5	11	7	4	16	10	6
Wyoming	8	3	4	9	4	5	10	2	8	12	4	8
Other jurisdictions				······								
District of Columbia	5	4	1	9	8	1	10	8	2	11	7	4
DoDEA ¹	-	_	_	_	_	_	7	2	5	6	4	3

⁻ Not available

NOTE: Beginning with the 2017 assessment, NAEP mathematics results are from a digitally based assessment; prior to 2017, results were from a paper-and-pencil based assessment. South Dakota did not participate in NAEP mathematics assessments from 1990 to 2000. 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, 1990–2000 Mathematics Assessments.

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

Table A-24.

Percentage of eighth-grade public school students identified as students with disabilities excluded and assessed in NAEP mathematics when accommodations were permitted, by state/jurisdiction: Various years, 2000–19

				2000					2003	
State/jurisdiction	Identified	Excluded	Assessed	Assessed without accom-modations	Assessed with accom-modations	Identified	Excluded	Assessed	Assessed without accom-	Assessed with accom-
									modations	modations
Nation (public)	11	3	7	5	2	14	3	11	5	6
Alabama	14	6	7	7	1	13	2	11	8	3
Alaska	_	_	_	-	_	15	1	14	6	8
Arizona	11	2	9	6	2	11	3	9	4	4
Arkansas	13	2	11	7	4	15	1	13	6	7
California	10	3	7	5	3	11	1	9	7	2
Colorado	_	_		-	_	12	1	10	4	7
Connecticut	14	5	9	6	3	14	3	11	4	7
Delaware	_	_	_	_	_	16	8	8	3	5
Florida	_	_	_	_	_	14	2	12	3	9
Georgia	9	4	6	3	3	11	2	10	4	6
Hawaii	15	4	11	10	2	16	3	13	5	8
Idaho	11	2	9	6	3	10	1	10	6	4
Illinois	11	3	8	5	3	15	4	12	3	8
Indiana	11	3	8	5	3	14	2	11	5	6
lowa	_	_	_	-	_	16	2	14	5	9
Kansas	12	3	9	6	3	13	2	11	3	8
Kentucky	12	4	8	4	4	13	4	9	4	5
Louisiana	12	2	10	4	6	16	4	11	2	9
Maine	14	3	12	7	4	16	4	12	5	7
Maryland	12	2	10	7	4	14	3	10	6	5
Massachusetts	16	2	15	7	8	16	2	14	4	10
Michigan	10	4	7	5	2	13	4	8	3	5
Minnesota	12	1	11	9	2	13	2	11	6	5
Mississippi	10	5	5	4	1	9	5	4	2	2
Missouri	14	3	12	5	7	15	4	12	3	9
Montana	12	2	9	6	3	12	2	10	5	6
Nebraska	11	3	8	6	2	14	3	11	6	5
	12	3	9	5	4	12	2	10	5	5
Nevada	12	3	9	5	4					
New Hampshire	_	_	_	-	_	19	3	15	6	9
New Jersey		_		-1	_	15	1	14	2	12
New Mexico	17	7	10	8	3	20	2	18	8	10
New York	12	3	9	2	6	16	4	12	2	10
North Carolina	14	4	10	3	7	16	3	12	2	10
North Dakota	11	2	9	7	2	14	1	13	6	7
Ohio	11	4	7	4	3	13	5	8	3	5
Oklahoma	13	4	9	7	3	16	2	14	8	6
Oregon	13	2	11	6	5	14	3	12	7	4
Pennsylvania	_	_		_	_	14	1	13	2	10
Rhode Island	16	3	14	10	4	20	3	17	5	12
South Carolina	13	4	9	7	2	15	7	8	4	4
South Dakota	_	_	_	_	_	11	2	9	4	5
Tennessee	11	2	9	9	1	14	3	12	11	1
Texas	14	7	7	5	1	15	6	9	8	2
		2		6	2		2	9	5	4
Utah	10		8	_		11	_		_	4
Vermont	16	3	13	9	4	17	3	15	7	/
Virginia	13	5	7	4	4	15	6	9	3	6
Washington	_	_	_	-	_	13	2	11	7	4
West Virginia	14	3	12	4	8	16	3	13	5	9
Wisconsin	15	4	12	6	6	15	3	13	2	10
Wyoming	12	1	11	8	3	15	1	14	4	g
Other										
jurisdictions										
District of	11	5	7	2	4	16	5	11	3	8
Columbia	''		/	2	4	10		' '	3	6
DoDEA ¹	_	4	_	A	0		4	7	4	-
	6	1	5	4	2	8	1	7	1	5
Puerto Rico	_	_	-	-	_	-			_	_

Table A-24.

Percentage of eighth-grade public school students identified as students with disabilities excluded and assessed in NAEP mathematics when accommodations were permitted, by state/jurisdiction: Various years, 2000–19—Continued

				2005					2007	
State/jurisdiction	Identified	Excluded	Assessed	Assessed without accom-modations	Assessed with accom-modations	Identified	Excluded	Assessed	Assessed without accom-	Assessed with accom-
				accom-modations	accom-modations				modations	modations
Nation (public)	13	3	10	3	7	13	4	9	2	6
Alabama	13	1	12	9	3	12	3	9	7	2
Alaska	14	2	12	3	10	12	4	8	3	6
Arizona	10	3	7	3	4	11	3	8	3	5
Arkansas	14	3	11	5	7	12	2	10	2	8
California	9	2	8	4	3	9	2	7	4	3
	10	2	9	2	6	10	2	9	1	7
Colorado										
Connecticut	13	2	11	4	7	13	1	12	3	9
Delaware	15	10	5	2	3	14	6	8	2	6
Florida	16	2	14	3	11	13	2	11	1	10
Georgia	12	2	9	3	6	9	5	5	2	3
Hawaii	14	2	12	5	7	13	1	12	4	7
Idaho	12	2	10	4	6	10	1	8	3	5
Illinois	15	3	13	2	10	14	5	9	2	8
Indiana	15	4	11	2	9	15	5	10	2	8
Iowa	15	2	13	3	10	15	2	13	2	11
Kansas	14	3	10	2	8	12	4	9	2	7
Kentucky	11	3	8	2	6	13	6	7	2	5
Louisiana	14	4	10	1	9	12	3	9	1	8
	18		14	5	8	17	5	12	3	9
Maine		4								
Maryland	11	4	7	3	4	11	7	4	1	3
Massachusetts	17	6	12	2	9	17	9	8	2	6
Michigan	14	4	10	2	7	14	4	9	2	8
Minnesota	12	2	10	4	6	12	2	10	3	7
Mississippi	9	3	6	3	3	11	2	8	2	6
Missouri	14	4	10	2	8	13	5	9	2	6
Montana	13	2	11	3	8	13	3	10	2	8
Nebraska	13	1	12	4	8	13	2	11	3	7
Nevada	11	2	9	4	5	12	3	9	4	5
New Hampshire	18	2	16	6	10	19	3	16	5	12
New Jersey	16	3	14	2	12	14	3	12	1	11
New Mexico	16	2	14	4	9	12	2	10	4	7
New York	15	3	12	1	11	14	3	11	1	11
North Carolina	14	2	12	2	11	13	2	11	1	10
North Dakota	16	4	12	4	8	14	6	8	2	6
Ohio	14	5	8	2	7	15	7	8	1	7
Oklahoma	16	4	12	5	7	14	8	6	2	4
Oregon	13	2	10	4	6	12	3	9	4	5
Pennsylvania	15	3	12	3	10	15	4	12	3	9
Rhode Island	17	3	15	6	9	17	2	15	3	12
South Carolina	14	6	8	4	4	13	5	8	3	5
South Dakota	12	2	10	3	6	11	2	9	2	6
Tennessee	14	5	10	5	5	12	6	5	3	3
Texas	13	5	8	5	3	11	5	6	3	3
Utah	11	2	9	3	6	10	2	8	2	6
		4		6	_		4		5	
Vermont Virginia	18	4	14	3	8	19	6	15	2	10
Washington	11	2	9	3	7	11	3	8	2	6
West Virginia	17	3	14	6	8	17	2	15	5	10
Wisconsin	14	3	11	2	9	14	4	10	2	9
Wyoming	14	2	13	3	10	13	2	11	3	9
Other										
jurisdictions										
District of	17	5	12	2	10	17	9	8	2	6
Columbia	.,			-	10	.,			-	Ü
DoDEA ¹	9	1	8	2	5	7	1	7	1	6
	9	'		2	5		· '	/	'	0
Puerto Rico	_		_	-		_	_	_	_	

Table A-24.

Percentage of eighth-grade public school students identified as students with disabilities excluded and assessed in NAEP mathematics when accommodations were permitted, by state/jurisdiction: Various years, 2000–19—Continued

				2009					2011	
State/jurisdiction	Identified	Excluded	Assessed	Assessed without accom-modations	Assessed with accom-modations	Identified	Excluded	Assessed	Assessed without accom-	Assessed with accom-
									modations	modations
Nation (public)	13	3	10	2	8	13	2	10	2	9
Alabama	10	1	9	6	3	10	1	9	6	3
Alaska	13	3	10	1	9	13	3	10	1	9
Arizona	12	2	10	2	7	11	1	9	1	8
Arkansas	12	1	11	2	9	11	1	10	1	9
California	9	1	8	2	5	10	1	9	3	6
Colorado	11	2	9	1	7	10	1	9	1	8
Connecticut	13	2	11	2	9	12	1	11	1	10
Delaware	15	2	13	1	12	14	3	12	2	10
Florida	15	2	13	1	12	14	2	13	1	12
Georgia	11	3	9	1	8	10	3	8	1	6
Hawaii	12	1	11	3	8	11	1	10	2	8
Idaho	9	1	8	3	5	8	1	7	1	6
Illinois	14	3	11	2	9	14	2	12	1	10
Indiana	14	4	10	2	8	14	2	12	1	11
lowa	14	2	12	2	10	15	1	13	1	12
Kansas	12	3	9	1	8	12	1	10	2	8
Kentucky	12	4	7	1	6	12	3	8	1	7
Louisiana	15	2	13	2	12	14	1	13	1	12
Maine	17	2	15	3	12	18	1	17	3	14
Maryland	12	7	5	1	4	11	6	5	1	5
Massachusetts	19	5	13	3	10	19	3	15	1	14
	13	3	10	2	8	12	3	9	2	7
Michigan										
Minnesota	12	2	10	3	7	13	2	11	3	8
Mississippi	9	2	8	1	6	8	1	7	1	6
Missouri	13	3	10	2	7	13	1	12	2	10
Montana	12	3	9	2	8	12	2	11	2	9
Nebraska	14	3	11	3	8	14	3	11	2	8
Nevada	11	2	8	2	6	10	3	7	2	5
New Hampshire	20	3	17	5	12	18	2	16	3	13
New Jersey	16	2	14	1	13	17	4	13	1	12
New Mexico	13	3	10	3	8	12	2	11	3	8
New York	16	2	14	1	13	16	1	15	#	14
North Carolina	12	1	11	1	10	14	2	12	1	10
North Dakota	15	5	10	4	6	14	4	10	2	8
Ohio	15	5	10	1	9	15	5	10	1	9
Oklahoma	15	6	9	2	7	16	9	6	3	3
Oregon	13	3	10	4	6	13	1	12	3	9
Pennsylvania	17	3	14	2	12	16	2	13	2	11
Rhode Island	18	2	16	3	13	16		15	3	
							1			12
South Carolina	14	4	9	4	5	11	4	7	2	6
South Dakota	10	2	9	2	6	11	1	9	3	7
Tennessee	11	4	7	1	6	12	4	8	1	7
Texas	12	5	7	2	5	11	5	6	2	4
Utah	10	3	7	2	6	10	3	8	1	7
Vermont	20	2	18	5	13	18	1	17	3	14
Virginia	14	3	10	3	7	13	2	11	3	8
Washington	11	2	9	2	7	12	1	10	2	9
West Virginia	15	2	13	4	10	13	2	12	3	9
Wisconsin	14	2	12	2	10	14	2	12	1	11
Wyoming	14	2	12	2	10	13	1	12	1	10
Other	l					l	l	12		
jurisdictions				. т					Т	
District of	17	6	11	1	10	17	4	13	1	12
Columbia										
DoDEA ¹	8	1	7	2	5	10	2	8	1	7
Puerto Rico	_	_	_	-1	_	19	1	18	#	17

Table A-24.

Percentage of eighth-grade public school students identified as students with disabilities excluded and assessed in NAEP mathematics when accommodations were permitted, by state/jurisdiction: Various years, 2000–19—Continued

				2013					2015	
State/jurisdiction	Identified	Excluded	Assessed	Assessed without accom-modations	Assessed with accom-modations	Identified	Excluded	Assessed	Assessed without accom-	Assessed with accom-
									modations	modations
Nation (public)	13	1	12	1	10	13	1	12	1	11
Alabama	10	1	9	4	5	10	1	9	4	6
Alaska	14	1	13	1	12	14	2	13	1	12
Arizona	12	1	11	1	10	11	1	10	1	9
Arkansas	13	2	11	1	11	12	2	11	1	9
California	10	1	8	2	7	11	1	10	3	7
Colorado	11	1	10	1	9	11	1	10	1	9
Connecticut	15	2	13	1	12	16	1	15	2	13
Delaware	15	1	14	1	14	17	1	16	2	14
Florida	13	1	12	1	11	14	1	13	1	12
Georgia	12	1	10	2	9	12	1	11	1	10
Hawaii	12	1	11	2	8	11	1	10	3	7
Idaho	9	1	8	1	7	11	1	10	1	9
Illinois	13	1	13	1	12	13	#	13	1	11
Indiana	15	2	13	1	12	14	1	13	1	12
lowa	13	1	12	1	12	13	1	12	1	11
Kansas	13	2	11	1	10	12	1	11	2	9
Kentucky	11	2	10	#	9	13	1	11	1	11
Louisiana	15	1	14	#	13	18	1	17	1	16
Maine	18	1	17	2	15	18	1	17	2	16
Maryland	13	1	12	#	11	15	1	13	1	12
Massachusetts	17	1	16	1	15	19	2	18	2	16
Michigan	13	2	11	2	9	13	2	11	1	10
Minnesota	13	1	11	4	8	13	2	11	4	8
Mississippi	8	1	8	1	6	10	1	10	1	8
Missouri	12	1	11	1	10	13	1	12	1	10
Montana	12	1	10	1	9	12	1	11	3	8
Nebraska	14	2	12	2	11	14	2	13	2	11
Nevada	11	1	10	1	9	10	1	9	2	8
New Hampshire	18	1	17	2	15	18	1	16	2	14
New Jersey	17	1	15	#	15	18	1	17	1	16
New Mexico	13	2	12	3	9	14	1	12	3	9
New York	16	2	15	#	15	17	1	17	1	16
North Carolina	14	1	13	1	12	15	1	14	1	12
North Dakota	14	3	11	1	10	14	2	12	2	11
Ohio	15	1	13	1	13	16	2	14	#	13
Oklahoma	16	1	14	2	13	16	1	15	2	14
Oregon	14	1	13	3	10	15	2	13	3	10
Pennsylvania	16	1	15	2	13	17	2	15	1	14
Rhode Island	15	1	14	1	13	16	1	14	2	13
South Carolina	12	1	11	2	9	12	1	11	2	10
South Dakota	11	1	10	2	8	12	1	10	3	7
Tennessee	11	2	10	1	9	14	2	13	1	12
Texas	11	1	10	1	9	12	2	10	1	9
	11	1		1	9			10	1	8
Utah		1	10			11	1			
Vermont	17	1	17	2	15	19	1	18	1	16
Virginia	13	1	12	2	10	14	2	12	2	10
Washington	12	2	10	1	9	12	1	12	1	10
West Virginia	13	2	11	2	9	14	2	13	2	11
Wisconsin	14	1	13	1	12	14	1	13	1	11
Wyoming	14	1	13	1	11	14	1	13	1	12
Other										
jurisdictions										
District of	18	#	17	#	17	19	1	18	#	18
Columbia										
DoDEA ¹	11	1	10	1	8	10	1	10	1	8
Puerto Rico	23	#	23	#	23	24	#	24	1	23

Table A-24.

Percentage of eighth-grade public school students identified as students with disabilities excluded and assessed in NAEP mathematics when accommodations were permitted, by state/jurisdiction: Various years, 2000–19—Continued

				2017					2019	
State/jurisdiction	Identified	Excluded	Assessed	Assessed without	Assessed with	Identified	Excluded	Assessed	Assessed without	Assessed with
				accom-modations	accom-modations				accom-	accom
									modations	modations
Nation (public)	14	1	13	3	10	15	1	13	2	11
Alabama	11	1	10	5	4	12	1	11	5	6
Alaska	14	1	12	2	10	14	1	13	2	11
Arizona	10	1	9	2	7	13	1	12	3	9
Arkansas	14	2	12	2	10	15	2	14	2	12
California	12	1	11	4	6	12	1	11	3	9
Colorado	12	1	10	3	8	12	1	11	2	9
Connecticut	16	1	14	3	12	18	1	16	4	12
Delaware	17	2	15	3	12	17	1	16	3	12
Florida	15	2	13	1	12	17	1	16	1	14
Georgia	13	1	11	2	10	15	2	13	1	12
-		2	9	5				9		
Hawaii	11				4	11	1		5	5
Idaho	10	1	9	2	7	12	1	11	2	9
Illinois	14	1	13	1	12	14	1	14	1	12
Indiana	15	1	13	2	12	16	1	15	1	14
lowa	13	1	12	1	11	14	1	13	1	12
Kansas	13	1	12	5	7	13	1	12	3	9
Kentucky	13	1	12	1	10	14	1	12	1	12
Louisiana	19	2	16	1	15	17	2	15	1	15
Maine	19	1	18	3	14	19	1	18	2	16
Maryland	13	1	12	1	11	13	1	12	#	12
Massachusetts	19	2	17	3	14	19	1	17	3	14
Michigan	13	2	11	2	9	13	2	11	2	9
-	13	2	11	6	5		2	13	6	7
Minnesota						15				
Mississippi	10	1	10	2	8	12	1	11	2	9
Missouri	14	1	12	3	9	13	1	13	3	10
Montana	13	1	12	4	8	14	1	13	3	10
Nebraska	15	1	14	2	11	15	1	14	3	11
Nevada	11	1	9	4	5	12	1	11	5	6
New Hampshire	17	1	16	5	11	19	1	18	5	13
New Jersey	17	1	16	1	15	16	1	16	1	14
New Mexico	15	2	14	3	11	17	1	16	4	12
New York	17	1	17	1	15	19	1	18	1	17
North Carolina	14	2	13	4	9	14	1	13	2	10
North Dakota	14	1	13	4	8	13	1	12	3	10
Ohio	16	2	14	1	13	17	2	16	1	15
Oklahoma	17	1	15	3	13	15	2	13	3	10
							2			
Oregon	14	1	13	5	8	15	1	14	4	9
Pennsylvania	17	2	15	3	11	19	1	17	4	14
Rhode Island	16	2	15	3	12	15	1	14	2	12
South Carolina	13	1	12	7	6	14	1	13	4	9
South Dakota	13	2	11	7	4	13	1	12	6	6
Tennessee	14	2	12	2	10	12	1	11	2	Ş
Texas	14	2	12	1	10	14	1	13	2	11
Utah	11	1	10	2	8	14	1	13	3	10
Vermont	20	1	19	4	15	20	1	19	4	15
Virginia	13	1	12	4	8	15	2	13	2	10
Washington	14	1	12	3	9	13	1	12	3	9
West Virginia	15	2	13	5	8	17	1	15	5	11
0										
Wisconsin	13	1	12	2	9	12	1	11	1	10
Wyoming	14	1	13	2	11	15	2	13	1	12
Other										
jurisdictions	······		r						r	
District of	18	1	17	2	15	20	1	19	1	17
Columbia										
DoDEA ¹	11	1	11	2	8	12	1	11	1	10
		#	28	2	27			1		

[—] Not available.

NOTE: Beginning with the 2017 assessment, NAEP mathematics results are from a digitally based assessment; prior to 2017, results were from a paper-and-pencil based assessment. 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, 2000–19 Mathematics Assessments.

[#] Rounds to zero.

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

Table A-25.

Percentage of fourth-grade public school students identified as English language learners excluded and assessed in NAEP mathematics when accommodations were not permitted, by state/jurisdiction: 1992, 1996, and 2000

		1992			1996			2000	
State/jurisdiction	Identified	Excluded	Assessed	Identified	Excluded	Assessed	Identified	Excluded	Assessed
Nation (public)	3	2	1	4	2	2	6	2	3
Alabama	#	#	#	#	#	#	1	#	#
Alaska	_	-	-	8	1	6	-	-	_
Arizona	8	2	6	12	7	6	16	7	9
Arkansas	1	#	#	#	#	#	1	#	1
California	22	10	12	26	12	14	27	7	20
Colorado	2	1	1	4	2	2	_	_	_
Connecticut	4	2	1	3	2	1	4	2	1
Delaware	1	1	#	2	1	1	_	_	_
Florida	4	2	2	6	3	3	_	_	_
Georgia	1	1	#	2	2	1	2	1	1
Hawaii	4	2	3	5	1	4	7	3	4
Idaho	2	1	1	-	_	-	5	2	4
Illinois	_	_	_	_	_	_	7	4	2
Indiana	#	#	#	#	#	#	1	1	#
lowa	1	#	1	2	1	1	1	1	#
Kansas	_	_	_	_	_	_	5	2	3
Kentucky	#	#	#	#	#	#	#	#	#
Louisiana	1	#	1	1	1	#	1	1	1
Maine	#	#	#	#	#	#	1	#	#
Maryland	1	1	1	1	1	#	2	2	#
Massachusetts	3	1	2	4	2	1	6	3	3
Michigan	1	1	#	2	1	1	2	2	1
Minnesota	2	#	2	3	1	2	5	2	3
Mississippi	#	#	#	#	#	#	#	#	#
Missouri	#	#	#	1	#	#	1	#	#
Montana	_	_	_	#	#	#	2	#	2
Nebraska	1	#	1	2	1	1	4	3	1
Nevada	_	_	_	8	4	4	11	5	6
New Hampshire	#	#	#	_	_	_	_	_	_
New Jersey	4	2	1	2	1	1	_	_	_
New Mexico	4	1	2	10	5	5	20	6	14
New York	5	2	3	6	3	3	6	4	3
North Carolina	1	#	#	2	1	1	3	2	1
North Dakota	1	#	#	#	#	#	1	#	#
Ohio	1	#	1	_	_	_	1	#	#
Oklahoma	2	#	1	-	_	-	5	2	4
Oregon	_	_	_	6	3	3	6	2	3
Pennsylvania	1	1	#	1	1	#	_	_	_
Rhode Island	6	3	3	5	2	4	7	3	4
South Carolina	#	#	#	#	#	#	1	1	#
Tennessee	#	#	#	1	1	#	1	#	#
Texas	9	4	5	13	5	9	13	7	5
Utah	1	1	#	2	1	1	6	3	3
Vermont	_	_	_	1	#	#	2	1	1
Virginia	1	1	1	2	1	1	4	2	2
Washington	_	_	_	3	1	2	_	_	_
West Virginia	#	#	#	#	#	#	#	#	#
Wisconsin	1	1	1	2	1	1	5	3	3
Wyoming	1	#	1	1	#	#	2	1	2
Other jurisdictions	1						. .1.		
District of Columbia	4	2	1 [6	4	1	6	3	4
DoDEA ¹		_	_'	2	1	1	3	1	2
— Not available.				2	!	1	3	1	

Not available.

NOTE: Beginning with the 2017 assessment, NAEP mathematics results are from a digitally based assessment; prior to 2017, results were from a paper-and-pencil based assessment. South Dakota did not participate in NAEP mathematics assessments from 1992 to 2000. 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), 1992, 1996, and 2000 Mathematics Assessments.

[#] Rounds to zero

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

Table A-26.

Percentage of fourth-grade public school students identified as English language learners excluded and assessed in NAEP mathematics when accommodations were permitted, by state/jurisdiction: Various years, 2000–19

				2000					2003	
State/jurisdiction	Identified	Excluded	Assessed	Assessed without accom-modations	Assessed with accom-modations	Identified	Excluded	Assessed	Assessed without accom-	Assessed with accom-
									modations	modations
Nation (public)	7	1	6	5	1	11	1	9	7	2
Alabama	#	#	#	#	#	1	#	1	1	#
Alaska	_	_	_	_	_	18	#	18	15	3
Arizona	16	3	13	8	5	19	2	17	15	2
Arkansas	1	#	1	1	#	4	1	3	2	#
California	27	3	24	16	7	33	2	30	27	3
Colorado						9	1	9	4	4
Connecticut	3	1	2	1	1	4	1	3	1	2
Delaware	_					3	1	2	1	1
Florida	_	_	_	_	_	11	2	9	5	4
Georgia	2	1	1	1	#	4	1	4	3	1
-	7				#			5		
Hawaii		3	4	4		7	2		3	2
Idaho	5	2	4	3	1	7	1	6	5	2
Illinois	7	2	5	2	3	9	2	7	4	3
Indiana	1	1	1	#	1	3	#	2	2	1
Iowa	2	1	1	1	#	4	1	3	2	1
Kansas	5	#	5	4	1	3	#	3	1	1
Kentucky	1	#	#	#	#	2	1	1	1	#
Louisiana	1	#	#	#	#	2	#	2	#	1
Maine	1	#	1	1	#	1	1	1	1	#
Maryland	2	1	1	1	#	4	2	2	2	1
Massachusetts	6	2	4	2	2	5	1	4	2	2
Michigan	1	1	#	#	#	5	1	4	3	1
Minnesota	5	1	4	2	3	6	1	5	3	2
Mississippi	#	#	#	#	#	1	1	#	#	#
Missouri	1			1	#	2		2	#	1
		1 4	1				1 4			1
Montana	#	#	#	#	#	4	#	4	3	
Nebraska	3	1	2	2	#	5	1	4	3	1
Nevada	11	4	7	6	1	17	2	14	11	4
New Hampshire	_	_		_	_	3	1	2	1	1
New Jersey	_	_	-	-	_	4	1	3	1	3
New Mexico	20	2	18	12	6	29	2	27	18	9
New York	6	3	3	1	2	8	3	4	2	3
North Carolina	3	1	2	1	1	5	1	4	2	2
North Dakota	1	#	1	1	#	4	#	4	3	1
Ohio	#	#	#	#	#	2	1	1	#	1
Oklahoma	5	1	5	3	1	7	1	6	5	1
Oregon	6	1	4	2	2	12	1	11	6	5
Pennsylvania		_	_	_	_	3	1	2	1	1
Rhode Island	7	1	6	4	2	10	2	7	4	3
South Carolina	1	1	#	#	#	2	#	2	1	#
South Dakota			"	#	π	4	#	4	2	2
Tennessee	1	1	1	_ 1	#	1		1	1	
							#	·		#
Texas	13	2	11	8	3	16	2	14	10	4
Utah	6	1	5	3	2	12	1	10	8	3
Vermont	#	#	#	#	#	2	#	2	1	1
Virginia	4	2	2	1	1	8	2	6	2	3
Washington	_	_	-	-	_	7	1	6	4	2
West Virginia	#	#	#	#	#	#	#	#	#	#
Wisconsin	5	1	4	2	3	7	1	6	2	3
Wyoming	2	#	2	2	#	4	#	4	3	1
Other	l	l				l	l	l	1h	
jurisdictions										
District of	6	2	4	2	2	7	1	5	2	3
	0	2	4	2	2	· /	'	5	2	3
Columbia	_	_				_	_	-		_
DoDEA ¹	3	1	2	2	#	6	1	5	4	2
Puerto Rico	_	_	-	_					_	_

Table A-26.

Percentage of fourth-grade public school students identified as English language learners excluded and assessed in NAEP mathematics when accommodations were permitted, by state/jurisdiction: Various years, 2000–19—Continued

				2005					2007	
State/jurisdiction	Identified	Excluded	Assessed	Assessed without	Assessed with	Identified	Excluded	Assessed	Assessed without	Assessed with
				accom-modations	accom-modations				accom-	accom-
				_					modations	modations
Nation (public)	10	1	9	7	3	11	1	10	7	3
Alabama	2	#	2	1	#	2	#	2	2	#
Alaska	19	1	19	11	7	16	1	15	9	6
Arizona	20	2	18	14	5	16	2	14	11	3
Arkansas	4	2	3	2	1	7	1	6	2	5
California	33	3	30	28	2	34	1	33	30	3
Colorado	11	1	11	4	7	15	#	14	7	7
Connecticut	5	1	4	2	2	7	#	7	2	5
Delaware	5	1	3	2	1	5	1	4	2	2
Florida	8	1	6	1	5	8	2	7	1	5
Georgia	3	1	2	1	1	3	#	3	1	2
Hawaii	8	1	7	4	3	10	1	9	5	4
Idaho	8	1	8	6	2	8	#	8	5	2
Illinois	9	1	9	6	3	9	1	8	4	3
Indiana	4	1	3	1	2	5	#	5	2	3
lowa	4	#	4	2	2	5	#	5	2	3
Kansas	6	1	5	3	3	8	#	8	4	4
Kentucky	1	#	1	#	1	2	#	2	1	1
Louisiana	1	#	1	#	#	1	#	1	1	1
Maine	1	#	1	1	#	2	#	2	1	1
Maryland	4	1	3	1	2	4	1	4	1	3
Massachusetts	7	1	6	3	2	6	1	5	4	2
Michigan	3	1	3	1	1	2	#	2	1	1
Minnesota	7	1	7	4	3	8	1	7	4	3
Mississippi	1	#	#	#	#	1	#	1	1	#
Missouri	3	#	2	1	1	2	#	2	1	1
Montana	3	#	3	2	1	4	#	4	2	2
Nebraska	7	1	7	4	3	8	1	7	5	2
Nevada	17	1	15	10	5	22	2	21	11	9
New Hampshire	3	#	2	2	1	3	#	2	1	1
New Jersey	3	1	3	1	1	4	#	3	#	3
New Mexico	25	1	24	13	11	23	2	21	12	9
New York	6	1	5	1	4	9	1	8	1	7
North Carolina	6	1	6	2	4	7	1	7	2	4
North Dakota	2	#	1	1	#	3	1	2	1	1
Ohio	1	#	1	#	#	3	1	2	1	1
Oklahoma	6	1	5	3	2	5	#	5	4	1
Oregon	14	1	12	7	5	13	1	12	5	7
Pennsylvania	2	#	2	1	1	2	#	2	1	1
Rhode Island	7	1	6	2	4	7	1	6	3	4
South Carolina	2	#	2	1	#	4	#	4	2	1
South Dakota	4	#	3	2	2	4	#	4	3	1
Tennessee	2	1	2	1	#	2	#	2	1	1
Texas	15	2	13	9	4	16	2	14	9	5
Utah	12	1	11	7	4	12	1	11	8	4
Vermont	2	#	2	1	1	3	#	2	1	1
Virginia	8	1	7	2	5	8	1	7	3	4
Washington	9	1	8	5	3	9	1	8	4	4
West Virginia	#	#	#	#	#	1	#	1	1	#
Wisconsin	6	1	6	2	3	7	1	6	2	4
Wyoming	5	#	4	3	1	4	#	4	2	1
Other										
jurisdictions										
District of	5	1	4	1	2	8	2	6	1	5
Columbia										
DoDEA ¹	8	1	7	4	2	7	1	5	3	2
Puerto Rico	_			-						

Table A-26.

Percentage of fourth-grade public school students identified as English language learners excluded and assessed in NAEP mathematics when accommodations were permitted, by state/jurisdiction: Various years, 2000–19—Continued

				2009					2011	
State/jurisdiction	Identified	Excluded	Assessed	Assessed without	Assessed with	Identified	Excluded	Assessed	Assessed without	Assessed with
				accom-modations	accom-modations				accom-	accom-
									modations	modations
Nation (public)	10	1	10	6	4	11	#	11	6	4
Alabama	2	#	2	2	#	2	#	2	2	1
Alaska	10	#	10	3	7	14	1	13	4	9
Arizona	15	#	14	7	8	12	#	12	3	9
Arkansas	6	#	5	1	4	8	#	8	2	5
California	30	1	28	26	2	32	1	31	27	4
Colorado	11	#	10	5	6	16	#	16	8	7
Connecticut	6	1	5	1	5	6	#	6	1	5
Delaware	4	#	3	#	3	4	#	3	1	2
Florida	8	#	7	#	7	9	#	9	#	8
Georgia	4	#	4	1	3	5	#	5	2	3
Hawaii	10	#	10	4	6	11	#	11	6	5
Idaho	5	#	5	3	2	5	#	4	2	2
Illinois	8	1	7	2	5	8	1	7	2	6
Indiana	4	#	4	1	3	7	#	7	2	5
lowa	5	#	4	1	3	6	#	5	1	4
Kansas	9	#	9	5	4	11	#	11	6	5
Kentucky	2	#	2	1	1	2	1	1	#	1
Louisiana	2	#	2	1	2	2	#	2	1	1
Maine	2	#	1	1	1	3	#	3	2	2
Maryland	6	1	5	1	4	6	1	5	1	5
Massachusetts	7	1	6	5	2	8	1	7	5	2
Michigan	3	#	3	2	1	4	#	3	3	1
Minnesota	8	1	8	4	4	10	#	9	5	4
Mississippi	1	#	1	#	1	2	#	2	1	1
Missouri	2	#	2	1	1	3	#	3	1	2
Montana	3	#	3	1	1	2	#	2	2	#
Nebraska	7	#	6	4	3	8	#	8	3	5
Nevada	20	1	20	8	12	27	#	26	8	18
New Hampshire	3	#	2	1	2	3	#	2	1	2
New Jersey	4	1	3	#	3	3	#	3	#	3
New Mexico	17	1	16	7	9	17	1	16	8	8
New York	8	1	7	#	7	9	1	9	#	8
North Carolina	6	#	5	2	4	7	#	7	4	3
North Dakota	2	#	1	1	1	3	#	3	1	1
Ohio	2	#	2	1	2	3	#	3	#	3
Oklahoma	4	#	4	2	2	6	1	5	3	3
					7					
Oregon	12	1 "	11	4		14	1 "	13	6	7
Pennsylvania	3	#	3	1	2	3	#	3	1	2
Rhode Island	6	1	6	2	3	6	#	6	4	2
South Carolina	5	#	5	2	2	6	#	6	3	2
South Dakota	2	#	2	1	1	5	#	4	2	2
Tennessee	2	#	2	#	2	4	#	3	#	3
Texas	21	1	20	16	4	22	1	21	16	4
Utah	9	1	8	3	5	7	#	6	3	4
Vermont	2	#	2	1	1	2	#	2	1	1
Virginia	7	#	6	2	5	7	#	7	2	5
Washington	10	#	10	4	5	11	#	11	4	7
West Virginia	#	#	#	#	#	1	#	1	#	#
Wisconsin	7	1	6	1	4	8	#	8	1	6
Wyoming	2	#	2	1	1	4	#	3	2	2
Other	1	1	I			I	4		1 	- -
jurisdictions										
District of	8	1	6	1	5	7	T 1	^	1	
	8	1	0	1	5	/	1	6	1	5
Columbia	_			-	_	_		_		_
DoDEA ¹	7	1	6	3	3	7	1	5	3	2
Puerto Rico	_		_			#	#	#	#	#

Table A-26.

Percentage of fourth-grade public school students identified as English language learners excluded and assessed in NAEP mathematics when accommodations were permitted, by state/jurisdiction: Various years, 2000–19—Continued

				2013					2015	
State/jurisdiction	Identified	Excluded	Assessed	Assessed without	Assessed with	Identified	Excluded	Assessed	Assessed without	Assessed with
				accom-modations	accom-modations				accom- modations	accom- modations
Nation (public)	11	#	11	5	5	12	1	11	6	filodations
Alabama	2	#	2	2	1	2	#	2	2	1
Alaska	14	#	14	2	11	15	#	15	5	g
										5
Arizona	7	#	7	1	6	10	#	10	2	/
Arkansas	8	#	8	3	6	8	#	8	2	6
California	26	1	25	20	4	28	1	28	24	4
Colorado	14	#	14	8	6	14	#	14	10	4
Connecticut	6	#	6	#	5	7	1	7	2	5
Delaware	3	#	3	1	2	5	#	5	2	3
Florida	10	1	10	#	10	10	1	9	#	g
Georgia	5	#	5	1	3	6	#	5	2	4
Hawaii	8	1	7	4	4	8	1	7	4	3
Idaho	5	#	4	2	2	5	#	5	2	3
Illinois	9	#	8	1	7	10	1	10	3	6
Indiana	6	#	6	1	5	7	#	7	2	5
lowa	6	#	5	1	5	8	1	7	1	6
Kansas	13	#	13	6	6	14	#	13	10	2
Kentucky	3	#	3	#	2	4	#	4	1	3
Louisiana	3	#	3	1	2	3	#	3	1	2
Maine	2	#	2	1	2	3	#	3	2	2
Maryland	8	#	8	1	7	9	#	8	2	6
Massachusetts	11	#	10	7	3	10	#	9	6	3
			8				#			2
Michigan	8	#		5	3	5		4	3	
Minnesota	8	#	8	5	4	10	#	9	6	3
Mississippi	2	#	1	1	1	2	#	2	1	1
Missouri	2	#	2	#	2	3	#	3	1	1
Montana	4	#	3	3	1	3	#	3	2	1
Nebraska	7	#	7	2	5	7	#	7	2	5
Nevada	23	#	22	4	18	24	1	24	9	15
New Hampshire	2	#	2	1	1	3	#	3	2	1
New Jersey	3	#	3	#	3	3	1	3	#	2
New Mexico	18	#	18	8	10	17	1	16	7	g
New York	8	1	7	#	7	8	1	8	#	7
North Carolina	7	#	6	3	4	7	#	6	3	3
North Dakota	2	#	2	1	1	2	#	2	1	1
Ohio	3	#	3	#	3	4	#	4	1	4
Oklahoma	7	#	6	3	3	7	#	6	4	3
Oregon	14	1	13	5	8	13	1	13	7	6
Pennsylvania	3	#	3	#	2	3	#	3	1	2
Rhode Island	7	#	6	2	4	8	1	7	4	3
South Carolina	7	#	7	4	3	8	#	7	5	3
South Dakota	4	#	4	1	3	3	#	3	1	2
				#	3		#			
Tennessee	4	#	4			5		5	1	3
Texas	23	1 "	23	12	11	23	1	22	11	11
Utah	6	#	6	1	5	5	1	4	3	1
Vermont	2	#	2	1	1	3	#	3	2	1
Virginia	7	#	7	2	5	7	1	6	1	5
Washington	9	#	9	2	7	13	#	13	6	7
West Virginia	1	#	1	#	#	1	#	1	1	#
Wisconsin	8	#	8	1	7	7	#	7	2	5
Wyoming	3	#	3	1	2	4	#	4	2	2
Other	l	l				l	l	l	4	
jurisdictions										
District of	7	1	6	1	6	7	1	6	2	4
	/	'	0	1	б	· /	1	0	2	4
Columbia	_				_	_		_		
DoDEA ¹	6	1	6	2	3	9	#	8	4	4
Puerto Rico	1	#	1	#	1	1	#	1	#	#

Table A-26.

Percentage of fourth-grade public school students identified as English language learners excluded and assessed in NAEP mathematics when accommodations were permitted, by state/jurisdiction: Various years, 2000–19—Continued

				2017					2019	
State/jurisdiction	Identified	Excluded	Assessed	Assessed without accom-modations	Assessed with accom-modations	Identified	Excluded	Assessed	Assessed without accom-modations	Assessed with accom modations
Nation (public)	12	1	11	7	5	13	1	12	7	- modulion
	4	#	3	2	1	5	#	5	3	
Alabama				9		15		15	9	-
Alaska	14	#	14		5		#			1
Arizona	11	1	10	4	7	8	#	8	4	4
Arkansas	10	#	10	3	7	8	#	8	2	5
California	27	1	25	22	4	25	1	24	19	4
Colorado	15	1	14	10	4	15	1	14	10	4
Connecticut	9	1	8	2	6	11	1	10	4	6
Delaware	10	1	9	5	4	16	1	15	10	6
Florida	9	1	8	#	7	11	1	10	1	9
Georgia	5	1	5	2	3	11	#	11	5	6
Hawaii	7	2	5	4	1	14	1	13	11	2
Idaho	6	#	6	4	2	9	#	8	6	2
Illinois	12	1	11	5	6	16	#	16	9	7
Indiana	6	#	6	3	3	10	#	10	2	8
Iowa	6	1	5	2	4	7	1	6	2	5
Kansas	13	1	12	10	2	12	#	12	9	2
Kentucky	3	#	3	1	2	5	#	5	1	4
Louisiana	5	#	5	1	4	4	#	4	#	3
Maine	4	#	3	2	1	5	#	4	2	2
Maryland	11	1	10	3	8	14	1	13	4	9
Massachusetts	10	1	9	6	4	14	1	13	7	5
	8	1	8	6	1	11	#	10	6	4
Michigan			9							
Minnesota	9	1 "		8	1	13	#	12	10	2
Mississippi	3	#	3	1	2	3	#	3	2	2
Missouri	4	#	4	1	2	6	#	6	4	2
Montana	3	#	3	2	1	4	#	4	3	1
Nebraska	9	1	8	3	6	7	#	7	3	4
Nevada	18	1	18	13	4	21	1	20	15	5
New Hampshire	4	#	3	2	2	5	#	4	3	1
New Jersey	5	1	4	1	3	8	1	8	1	7
New Mexico	17	1	17	8	9	21	1	21	11	10
New York	10	1	9	2	7	10	1	9	2	7
North Carolina	5	1	5	2	3	11	#	11	6	4
North Dakota	2	#	2	1	1	4	#	4	2	2
Ohio	4	#	4	2	2	2	#	2	1	1
Oklahoma	9	#	8	4	4	11	1	11	6	5
Oregon	16	1	15	11	5	11	#	11	7	4
Pennsylvania	4	1	4	2	2	5	#	5	2	3
Rhode Island	9	1	7	3	4	13	1	12	5	7
South Carolina	8	#	8	6	2	6	#	6	4	2
South Dakota	2	#	2	1	1	5	#	5	3	2
Tennessee	5	1	5	2	3	9	1	8	1	7
Texas		1	24							
	25			13	11	23	1	22	11	11
Utah	9	1 4	8	6	2	11	1 4	10	8	2
Vermont	3	#	2	1	1	3	#	3	2	2
Virginia	10	1	9	5	4	12	#	11	6	5
Washington	14	1	13	11	2	15	1	14	9	5
West Virginia	1	#	1	1	#	1	#	1	1	#
Wisconsin	8	#	8	4	4	8	#	8	4	4
Wyoming	3	#	2	1	1	4	#	4	2	2
Other										
jurisdictions										
District of	8	1	8	2	5	13	1	13	2	11
Columbia		· ·		-	· ·		· ·			
DoDEA ¹	9	1	9	5	4	11	1	10	5	6
			#	#		''		10	3	0
Puerto Rico	#	#	#	#	#	_	_	_	_	

[—] Not available.

NOTE: Beginning with the 2017 assessment, NAEP mathematics results are from a digitally based assessment; prior to 2017, results were from a paper-and-pencil based assessment. Detail may not sum to totals because of rounding. In Puerto Rico, the English language learner (ELL) category is for the Spanish language learner (SLL).

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 2000–19 Mathematics Assessments.

[#] Rounds to zero.

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

Table A-27.

Percentage of eighth-grade public school students identified as English language learners excluded and assessed in NAEP mathematics when accommodations were not permitted, by state/jurisdiction: Various years, 1990–2000

		1990			1992			1996			2000	
State/jurisdiction	Identified	Excluded	Assessed									
Nation (public)	_	_	_	2	2	1	3	1	2	4	2	3
Alabama	#	#	#	#	#	#	#	#	#	1	#	#
Alaska	_	_	_	_	_	_	5	1	4	_	-	_
Arizona	5	1	4	6	2	4	9	4	5	10	4	6
Arkansas	#	#	#	#	#	#	1	#	#	2	1	1
California	8	4	4	13	5	8	13	6	7	19	4	15
Colorado	1	1	#	1	1	1	2	1	1	_	_	_
Connecticut	2	1	1	3	1	1	2	2	1	2	1	1
Delaware	1	#	#	1	#	1	1	#	#	_	_	_
Florida	2	2	1	4	2	2	4	3	1	_	_	_
Georgia	#	#	#	1	#	#	2	1	#	1	1	#
Hawaii	3	1	2	5	2	3	4	1	2	6	2	4
Idaho	1	#	#	1	#	#				4	1	3
Illinois	1	1	#		#	#		_		5	2	3
	#	#	#	1	#	#	1	#	1	2	1	1
Indiana	#				#		#			2	'	ı
lowa	#	#	#	1	#	1	#	#	#	_	2	
Kansas										5		
Kentucky	#	#	#	#	#	#	#	#	#	1	#	#
Louisiana	#	#	#	#	#	#	1	#	1	#	#	#
Maine	_	_	_	#	#	#	1	#	1	1	#	1
Maryland	1	1	1	1	1	1	1	1	#	2	1	#
Massachusetts	_	_	_	4	2	1	2	1	#	4	3	1
Michigan	#	#	#	1	#	#	1	1	1	1	1	#
Minnesota	1	#	1	#	#	#	1	#	1	2	1	1
Mississippi	_	_	_	#	#	#	#	#	#	#	#	#
Missouri	_	_	_	1	#	#	1	1	#	1	#	#
Montana	#	#	#		_	_	#	#	#	1	#	1
Nebraska	#	#	#	1	#	#	1	1	#	2	1	1
Nevada	_	_	_	_	_	_	7	3	4	5	3	2
New Hampshire	#	#	#	#	#	#	#	#	#	_	_	_
New Jersey	2	2	1	3	1	1	3	2	1	_	_	_
New Mexico	1	1	1	3	1	2	6	4	2	11	4	8
New York	4	2	2	3	3	1	5	3	2	6	4	2
North Carolina	#	#	#	#	#	#	1	1	#	3	3	#
North Dakota	1	#	1	1	#	1	#	#	#	1	#	#
Ohio	#	#	#	#	#	#	"	#	"	1	1	#
Oklahoma	1	#	#	1	#	1	_	_	_	2	1	
	1		1	'	#	ı		1	1			1
Oregon		#	-	_		_	2			5	3	2
Pennsylvania	#	#	#	1	#	1	_	_	_	_	_	
Rhode Island	4	2	2	4	2	2	4	2	2	4	3	1
South Carolina	_	-	_	#	#	#	#	#	#	#	#	#
Tennessee	_	_	_	#	#	#	#	#	#	1	1	#
Texas	5	2	3	6	2	4	7	3	4	8	3	5
Utah	_	_	_	1	1	#	2	1	#	4	2	2
Vermont	-	-	_		_	_	1	#	1	1	1	#
Virginia	1	1	#	2	1	2	1	1	1	2	1	1
Washington	-	_	_	_	_	_	2	1	1	_	-	_
West Virginia	#	#	#	#	#	#	#	#	#	#	#	#
Wisconsin	1	#	#	1	#	1	1	1	#	1	1	#
Wyoming	1	#	#	#	#	#	1	#	1	2	#	1
Other jurisdictions												
District of Columbia	1	1	#	3	2	1	4	3	2	4	3	2
DoDEA ¹	1	'	#	3	_	1	1	1	#	3	2	1
— Not available.		_	_	_	_		1	1	#	3	2	1

Not available.

NOTE: Beginning with the 2017 assessment, NAEP mathematics results are from a digitally based assessment; prior to 2017, results were from a paper-and-pencil based assessment. South Dakota did not participate in NAEP mathematics assessments from 1990 to 2000. 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, 1990–2000 Mathematics Assessments.

[#] Rounds to zero

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

Table A-28. Percentage of eighth-grade public school students identified as English language learners excluded and assessed in NAEP mathematics when accommodations were permitted, by state/jurisdiction: Various years, 2000–19

				2000				:	2003	
State/jurisdiction	Identified	Excluded	Assessed	Assessed without accom-modations	Assessed with accom-modations	Identified	Excluded	Assessed	Assessed without accom- modations	Assessed with accom- modations
Nation (public)	4	1	3	3	1	6	1	5	4	1
Alabama	1	#	#	#	#	1	#	1	1	#
Alaska		"		"	π	11	#	11	10	1
Arizona	10	1	8	6			2	14		2
					2	16			12	2
Arkansas	1	#	#	#	#	3	1	2	1	1
California	19	2	17	13	4	20	2	19	17	1
Colorado	_	_	_		_	5	1	4	2	2
Connecticut	2	2	1	#	1	4	1	3	1	1
Delaware	_	_	_	-	_	2	1	1	1	1
Florida	_	_		_	_	7	1	5	3	3
Georgia	2	1	#	#	#	2	1	2	1	1
Hawaii	6	1	4	4	#	6	1	5	3	2
Idaho	4	1	4	3	1	6	#	5	4	1
Illinois	5	2	3	3	#	4	1	3	1	2
Indiana	1	#	1	1	#	3	#	2	1	1
lowa	_	_	_	_	_	2	#	2	1	1
Kansas	1	#	1	1	#	4	1	3	1	2
Kentucky	1	1	1	1	#	1	1	1	1	#
Louisiana	1	#	1	#	#	1	1	1	#	#
Maine	#	#	#	#	#	1	#	1	#	#
Maryland	2	1	1	1	#	3	1	2	2	#
Massachusetts	4	2	2	1	1	3	1	2	1	1
Michigan	#	#	#	#	#	3	1	2	1	1
Minnesota	3	1	3	2	#	4	1	3	2	1
Mississippi	#	#	#	#	#	1	#	#	#	
	#			#	#				#	#
Missouri		#	#			1	#	1		1
Montana	#	#	#	#	#	3	#	2	1	1
Nebraska	2	1	1	1	#	3	1	2	1	#
Nevada	5	1	4	3	#	7	1	6	5	2
New Hampshire	_	_	_	_	_	1	#	1	#	1
New Jersey	_	_	_	-	_	3	1	2	#	2
New Mexico	11	2	9	7	2	20	1	19	11	7
New York	6	2	4	3	1	6	2	4	1	3
North Carolina	2	1	1	1	#	4	1	3	1	2
North Dakota	1	#	1	1	#	2	#	2	1	1
Ohio	2	1	1	#	#	1	#	1	#	#
Oklahoma	2	#	1	1	#	5	1	5	3	1
Oregon	5	1	4	3	1	7	1	6	4	2
Pennsylvania	_	_	_	-	_	2	#	2	1	1
Rhode Island	4	1	3	2	1	5	2	4	2	2
South Carolina	1	#	#	#	#	1	#	1	1	#
South Dakota	_	_	_	_	_	3	#	3	2	1
Tennessee	1	1	1	1	#	3	1	2	2	#
Texas	8	2	6	5	1	8	2	6	5	1
Utah	4	#	3	3	1	7	1	6	5	2
Vermont	1	1	1	#	#	1	#	1	1	#
Virginia	3	1	2	1	1	4	2	2	1	1
Washington	3	'	2	1		5	1	4	3	1
	.0	#								1 "
West Virginia	#		#	#	#	1	#	#	#	#
Wisconsin	2	1 "	1	1	1	3	1 "	2	1	1
Wyoming	2	#	2	2	#	3	#	3	2	1
Other										
jurisdictions	·	r	· · · · · · · · · · · · · · · · · · ·				·			
District of	4	2	2	1	2	5	1	4	2	2
Columbia										
DoDEA ¹	3	1	2	2	#	5	1	4	2	1
Puerto Rico	_	_		_	_	_	_	_	_	_
See notes at end of	L	1								

Table A-28.

Percentage of eighth-grade public school students identified as English language learners excluded and assessed in NAEP mathematics when accommodations were permitted, by state/jurisdiction: Various years, 2000–19—Continued

A				2005					2007	
State/jurisdiction	Identified	Excluded	Assessed	Assessed without	Assessed with	Identified	Excluded	Assessed	Assessed without	Assessed with
				accom-modations	accom-modations				accom-	accom
									modations	modations
Nation (public)	6	1	5	4	1	7	1	6	4	:
Alabama	1	#	1	1	#	2	#	2	2	1
Alaska	15	#	15	11	4	17	1	16	11	
Arizona	14	2	12	10	2	10	1	9	7	2
Arkansas	1	1	1	#	#	3	#	3	1	-
California	21	1	20	18	2	22	1	21	19	-
	7	1	6	3	3	7	#	6	3	3
Colorado										
Connecticut	3	#	3	1	2	4	#	4	1	2
Delaware	4	1	2	2	1	3	1	2	1	•
Florida	6	1	4	1	3	6	1	5	1	4
Georgia	2	#	2	1	1	2	#	2	1	1
Hawaii	7	1	6	4	2	7	1	6	4	3
Idaho	6	1	6	4	2	6	#	5	4	2
Illinois	3	1	2	1	1	4	1	3	2	1
Indiana	2	#	2	1	1	4	#	3	2	1
Iowa	2	#	2	1	1	3	#	3	1	2
Kansas	4	1	3	2	1	4	#	4	3	1
Kentucky	1	#	1	#	1	2	#	1	#	
•	1	#	1	#	1	1	#	1	1	- 1
Louisiana	1									,
Maine		#	1	#	1	2	#	1	1	Ŧ
Maryland	2	#	2	1	#	2	#	2	1	1
Massachusetts	3	1	2	1	1	3	1	3	1	1
Michigan	3	#	2	2	1	2	#	2	1	#
Minnesota	7	1	6	5	1	5	#	4	4	1
Mississippi	1	#	1	#	#	#	#	#	#	#
Missouri	1	#	1	#	1	2	#	2	1	1
Montana	5	#	4	2	2	5	#	4	3	2
Nebraska	3	#	3	2	1	3	1	2	1	1
Nevada	9	1	9	6	2	11	1	9	6	4
New Hampshire	1	#	1	#	1	2	#	2	1	1
	2	1	1	#	1	4	1	3	1	2
New Jersey										2
New Mexico	17	2	15	9	6	17	2	15	11	4
New York	5	1	4	1	3	5	1	4	#	4
North Carolina	4	1	3	1	2	4	#	4	2	2
North Dakota	1	#	1	1	#	3	#	2	1	1
Ohio	1	#	1	#	#	1	#	1	#	#
Oklahoma	4	1	4	2	1	4	1	3	2	1
Oregon	8	1	7	5	3	9	1	8	5	3
Pennsylvania	1	#	1	#	#	2	1	1	#	1
Rhode Island	5	1	4	2	2	4	1	3	2	1
South Carolina	1	#	1	1	#	2	#	2	1	4
South Dakota	2	#	2	1	1	1	#	1	#	4
Tennessee	1	#	1	1	#	2	#	2	1	<i>†</i>
Texas	8	2	6	5	1	8	2	6	4	2
Utah	7	1	6	4	2	9	1	8	6	2
Vermont	1	#	1	#	#	2	#	1	1	•
Virginia	4	1	3	2	1	4	1	3	2	
Washington	5	1	4	3	2	6	1	5	3	2
West Virginia	#	#	#	#	#	1	#	1	1	7
Wisconsin	4	1	3	1	1	5	1	3	1	2
Wyoming	4	#	4	3	1	3	#	3	1	
Other	1	l				I	1	I	4il	
jurisdictions										
								T	Т	
District of	4	1	3	1	2	4	1	3	1	2
Columbia										
DoDEA ¹	4	1	4	2	1	5	1	3	2	•
Puerto Rico	_	_			_	_	_			

Table A-28. Percentage of eighth-grade public school students identified as English language learners excluded and assessed in NAEP mathematics when accommodations were permitted, by state/jurisdiction: Various years, 2000–19—Continued

				2009					2011	
State/jurisdiction	Identified	Excluded	Assessed	Assessed without accom-modations	Assessed with accom-modations	Identified	Excluded	Assessed	Assessed without accom- modations	Assessed with accom- modations
Nation (public)	6	#	5	3	2	6	#	6	3	2
Alabama	1	#	1	1	#	2	#	2	1	#
Alaska	11	1	10	4	6	11	1	10	3	7
Arizona	6	1	6	2	3	2	#	2	1	1
Arkansas	4	#	4	1	2	5	#	5	2	3
	20		19		3	17		17	13	
California		1		16			1 4			4
Colorado	7	#	7	3	4	7	#	7	4	3
Connecticut	3	#	3	1	2	4	#	4	1	3
Delaware	2	1 "	2	#	1	2	#	2	1	1
Florida	5	#	5	#	4	5	#	5	#	4
Georgia	2	#	2	#	1	2	#	2	#	1
Hawaii	7	1	6	3	3	9	1	9	5	3
Idaho	4	#	3	2	1	4	#	4	2	2
Illinois	3	1	3	1	2	4	#	3	2	2
Indiana	3	#	3	1	1	3	#	3	1	2
Iowa	2	#	2	1	1	3	#	3	1	2
Kansas	6	#	5	3	2	7	#	7	5	2
Kentucky	1	#	1	#	1	1	#	1	#	1
Louisiana	1	#	1	#	1	1	#	1	#	1
Maine	2	#	1	1	1	3	#	3	2	1
Maryland	3	#	2	#	2	3	1	2	#	2
Massachusetts	3	1	2	1	1	4	1	3	2	2
Michigan	2	#	2	1	1	2	#	2	1	1
Minnesota	5	1	5	3	2	5	#	5	3	2
Mississippi	1	#	1	#	#	1	#	1	#	#
Missouri	1	#	1	#	#	1	#	1	#	1
Montana	3	#	3	1	1	2	#	2	1	1
Nebraska	3		3	2		3	#	2		1
		#			1				1	1
Nevada	8	#	8	4	4	10	1 1	9	5	4
New Hampshire	1	#	1	1	#	2	#	2	1	1
New Jersey	2	#	2	#	2	2	#	2	#	2
New Mexico	11	1	10	5	5	12	1	11	7	4
New York	5	1	4	#	4	6	#	5	#	5
North Carolina	5	#	5	2	3	5	#	5	2	3
North Dakota	2	1	1	1	#	2	#	2	1	1
Ohio	1	1	1	#	#	1	#	1	#	1
Oklahoma	3	#	3	2	1	3	1	3	1	1
Oregon	6	#	6	4	2	6	#	6	3	3
Pennsylvania	2	#	2	1	1	2	#	2	#	2
Rhode Island	3	1	3	1	2	3	#	3	1	2
South Carolina	3	#	3	1	1	4	#	4	2	3
South Dakota	2	#	1	1	#	2	#	2	1	1
Tennessee	1	#	1	#	1	2	#	1	#	1
Texas	7	1	6	4	1	9	1	8	6	1
Utah	5	#	4	3	2	5	1	4	2	2
Vermont	2	#	1	1	1	1	#	1	1	1
Virginia	4	#	3	1	2	6	1	5	3	2
Washington	4	#	3	2	2	5	#	5	3	2
West Virginia	#	#	#	#	#	1	#	1	#	#
Wisconsin	4	1	3	1	2	5	#	5	1	4
Wyoming	2	#	2	1	1	2	#	2	1	1
	2	#		1	1	2	#	2	1	1
Other										
jurisdictions			r				r		T	
District of	4	1	3	1	2	6	1	5	1	4
Columbia										
DoDEA ¹	5	1	4	2	2	5	1	4	2	1
DODER									#	#

Table A-28. Percentage of eighth-grade public school students identified as English language learners excluded and assessed in NAEP mathematics when accommodations were permitted, by state/jurisdiction: Various years, 2000–19—Continued

				2013					2015	
State/jurisdiction	Identified	Excluded	Assessed	Assessed without accom-modations	Assessed with accom-modations	Identified	Excluded	Assessed	Assessed without accom- modations	Assessed with accom- modations
Nation (public)	6	#	5	2	3	7	#	6	3	3
Alabama	1	#	1	1	#	1	#	1	1	1
Alaska	11	#	11	2	9	12	1	11	4	7
Arizona	2	#	1	#	1	4	#	4	1	2
Arkansas	7	#	6	2	4	7	#	7	3	4
		1				15			10	4
California	13		12	9	3		#	14		
Colorado	8	#	8	4	4	12	#	11	8	4
Connecticut	4	#	4	#	3	4	#	3	1	2
Delaware	2	#	2	#	1	3	#	2	1 1	1
Florida	5	1	4	#	4	7	1	6	#	5
Georgia	2	#	2	#	2	3	#	3	1	2
Hawaii	10	1	10	5	5	7	1	6	4	3
Idaho	3	#	3	1	2	3	#	3	1	2
Illinois	5	#	4	1	3	5	#	5	2	3
Indiana	4	#	3	1	3	6	#	5	2	3
Iowa	3	#	3	#	2	4	#	4	2	2
Kansas	8	#	8	5	2	11	#	10	9	2
Kentucky	2	#	2	#	1	1	#	1	#	1
Louisiana	1	#	1	#	1	1	#	1	#	1
Maine	2	#	2	#	1	3	#	3	2	#
Maryland	3	1	3	#	2	4	1	3	1	2
Massachusetts	6	1	5	3	2	6	#	5	3	3
Michigan	4	1	3	1	2	4	#	3	2	1
Minnesota	6	#	5	3	2	7	#	6	5	2
	1	#	1	1	#	1	#	1	1	#
Mississippi Missouri	1	#	1	#		2	#	2	1	1
					1	2	#		1	#
Montana	2	#	2	1	1			2		
Nebraska	3	#	2	1	2	3	1	2	1	1
Nevada	7	#	7	2	5	15	#	15	10	4
New Hampshire	2	#	2	#	2	2	#	2	#	1
New Jersey	2	#	1	#	1	2	1	2	#	2
New Mexico	14	#	13	7	6	14	1	13	8	5
New York	7	#	6	#	6	6	#	6	#	6
North Carolina	5	#	4	2	3	5	#	5	2	3
North Dakota	2	#	2	1	1	2	#	2	1	1
Ohio	2	#	2	#	1	3	1	3	1	2
Oklahoma	4	#	4	2	2	5	#	5	3	2
Oregon	4	#	3	1	2	3	1	3	1	1
Pennsylvania	3	#	3	#	2	3	1	2	1	1
Rhode Island	5	#	5	1	4	5	1	5	2	3
South Carolina	4	#	3	2	1	5	#	4	3	1
South Dakota	3	#	2	1	1	3	#	2	2	1
Tennessee	1	#	1	#	1	2	#	2	#	1
Texas	8	1	7	3	4	11	1	10	5	5
Utah	4	#	4	1	3	4	1	3	1	2
					3	_		_		2
Vermont Virginia	5	#	5	#	1	6	1	5	2	1
				1	4					3
Washington	5	#	5	2	3	7	#	7	4	3
West Virginia	1	#	1	#	#	1	#	1	#	#
Wisconsin	5	#	5	1	4	4	#	4	2	2
Wyoming	2	#	2	#	2	3	#	3	1	1
Other										
jurisdictions										
District of	6	1	6	1	5	7	2	5	1	3
Columbia										
DoDEA ¹	4	#	3	2	2	5	#	5	3	2
Puerto Rico	#	#	#	#	#	1	#	#	#	#
See notes at end of		I #	π	#	#			#	#	#

Table A-28.

Percentage of eighth-grade public school students identified as English language learners excluded and assessed in NAEP mathematics when accommodations were permitted, by state/jurisdiction: Various years, 2000–19—Continued

				2017					2019	
State/jurisdiction	Identified	Excluded	Assessed	Assessed without accom-modations	Assessed with accom-modations	Identified	Excluded	Assessed	Assessed without accom- modations	Assessed with accom modations
Mation (nublic)	7	1	6	3	3	0	1	7	4	
Nation (public)						8				3
Alabama	2	#	2	1	#	1	#	1	1	#
Alaska	12	1	11	6	6	12	#	12	5	6
Arizona	4	#	4	1	3	6	#	6	3	3
Arkansas	9	1	8	4	4	6	#	6	2	2
California	15	1	13	10	3	15	1	14	11	2
Colorado	10	1	9	7	3	8	#	8	5	3
Connecticut	5	1	4	1	2	5	1	4	2	2
Delaware	3	1	3	1	2	5	#	4	2	2
Florida	7	1	6	1	5	7	1	7	#	6
Georgia	3	#	2	#	2	3	#	3	1	2
Hawaii	6	1	5	3	2	6	1	5	4	
Idaho	4	1	3	2	1	4	#	4	2	2
Illinois	5	1	5	2	3	7	#	6	2	4
Indiana	5	#	5	2	3	5	#	5	2	3
lowa	4	#	3	1	2	5	#	5	1	2
Kansas	12	#	11	10	1	9	#	8	7	2
Kentucky	2	#	2	#	1	3	#	2	#	2
	2	#	2	#		3	#	3	1	2
Louisiana	2		2		2	3	#	3		4
Maine		1		1	1				2	1
Maryland	5	1	4	1	4	6	1	6	1	5
Massachusetts	7	1	6	3	4	7	1	6	3	3
Michigan	7	1	6	4	1	6	#	6	3	3
Minnesota	7	1	6	5	1	6	#	6	4	2
Mississippi	2	#	1	1	1	2	#	2	1	1
Missouri	2	#	2	1	1	2	#	2	1	1
Montana	2	#	2	1	1	2	#	2	1	1
Nebraska	3	1	3	1	1	4	#	3	1	2
Nevada	14	1	13	10	3	14	1	13	10	3
New Hampshire	2	#	2	1	1	3	#	3	1	2
New Jersey	3	1	2	#	2	5	1	4	#	4
New Mexico	12	1	12	5	7	12	1	12	6	6
New York	7	1	6	1	5	7	1	6	1	5
North Carolina	4	1	3	2	2	4	#	4	2	2
North Dakota	3	#	2	1	1	2	#	2	1	
Ohio	3	#	2	1	2	2	#	2	#	2
			5				1			
Oklahoma	5	#		3	2	6		6	3	3
Oregon	5	#	5	2	3	7	#	6	4	2
Pennsylvania	3	#	3	1	2	4	#	4	1	2
Rhode Island	6	1	5	1	4	8	1	7	3	4
South Carolina	7	#	7	6	1	7	#	7	6	1
South Dakota	3	1	2	2	#	3	#	3	2	1
Tennessee	3	#	2	1	2	3	#	3	1	2
Texas	12	#	11	7	4	15	#	15	11	4
Utah	5	#	5	2	3	6	#	5	3	2
Vermont	1	#	1	1	1	1	#	1	#	1
Virginia	6	1	5	2	3	5	1	5	2	3
Washington	6	#	6	3	2	9	1	8	6	3
West Virginia	1	#	1	1	#	#	#	#	#	7
Wisconsin	5	#	5	2	3	5	#	5	2	
Wyoming	2	#	2	1	1	2	#	2	1	
	2	#		1	1	2	#	2	1	
Other jurisdictions										
District of	8	1	6	1	5	7	1	6	1	(
Columbia DoDEA ¹	5	1	4	2	2	6	#	5	3	3
0000.				#	#				·	

[—] Not available.

NOTE: Beginning with the 2017 assessment, NAEP mathematics results are from a digitally based assessment; prior to 2017, results were from a paper-and-pencil based assessment. Detail may not sum to totals because of rounding. In Puerto Rico, the English language learner (ELL) category is for the Spanish language learner (SLL).

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 2000–19 Mathematics Assessments.

[#] Rounds to zero.

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

Table A-29.

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 identified SD and/or ELL students, by state/jurisdiction: 2019

			op		1		SD and/or ELL stude					
			SD and/or ELL				SD				ELL	
State/jurisdiction	Excluded	Assessed	Assessed without accom-modations	Assessed with accom-modations	Excluded	Assessed	Assessed without accom-modations	Assessed with accommodations	Excluded	Assessed	Assessed without accommodations	Assessed with accom modations
Nation (public)	7	93	37	56	10	90	21	3	5	95	52	4:
Alabama	8	92	47	45	7	93	40	6	9	91	65	20
Alaska	2	98	41	56	2	98	25	4	2	98	56	42
Arizona	5	95	35	60	7	93	27	4	1	99	47	5
Arkansas	5	95	20	75	6	94	15	3	3	97	29	67
California	8	92	68	24	16	84	36	5	6	94	77	17
Colorado	5	95	51	44	6	94	31	4	5	95	66	29
Connecticut	7	93	26	67	7	93	18	3	7	93	38	5
Delaware	5	95	38	57	6	94	15	3	4	96	61	3
Florida	8	92	10	82	8	92	12	2	7	93	6	8
Georgia	6	94	30	64	9	91	17	2	4	96	45	5
Hawaii	8	92	60	32	10	90	37	4	6	94	76	1
Idaho	7	93	46	47	10	90	26	3	2	98	70	28
Illinois	3	97	42	55	4	96	19	3	2	98	57	4
Indiana	5	95	19	75	8	92	18	3	4	96	19	7
Iowa	7	93	16	77	8	92	10	1	7	93	28	6
Kansas	6	94	51	43	8	92	28	4	3	97	77	20
Kentucky	8	92	24	68	9	91	24	4	9	91	22	69
Louisiana	8	92	10	81	9	91	11	2	5	95	8	8
Maine	4	96	19	77	4	96	12	2	4	96	51	4:
Maryland	6	94	22	72	6	94	10	2	4	96	32	6:
	8		30	62			12	2	8	90	53	39
Massachusetts	8	92	43	50	8	92		3			59	
Michigan	7	92			13	87	27		3	97		38
Minnesota		93	59	34	10	90	39	6	2	98	80	18
Mississippi	6	94	30	65	6	94	26	4	5	95	44	5
Missouri	6	94	36	58	6	94	26	4	5	95	58	37
Montana	7	93	43	50	8	92	35	5	4	96	79	17
Nebraska	5	95	30	64	6	94	26	5	4	96	38	58
Nevada	6	94	63	31	12	88	44	5	3	97	72	24
New Hampshire	6	94	28	67	6	94	17	3	5	95	65	25
New Jersey	7	93	7	86	7	93	8	1	6	94	6	8
New Mexico	4	96	42	53	8	92	26	4	2	98	50	4
New York	11	89	13	76	13	87	11	2	10	90	16	74
North Carolina	6	94	36	58	10	90	16	2	3	97	57	40
North Dakota	8	92	31	60	9	91	25	4	6	94	54	40
Ohio	13	87	12	75	14	86	10	2	12	88	23	6
Oklahoma	7	93	37	56	10	90	25	5	4	96	53	42
Oregon	5	95	55	39	7	93	46	7	4	96	63	33
Pennsylvania	11	89	26	63	12	88	21	4	7	93	40	5
Rhode Island	7	93	25	69	6	94	8	1	7	93	41	5
South Carolina	5	95	42	53	5	95	32	5	6	94	67	2
South Dakota	5	95	51	45	5	95	47	8	4	96	59	3
Tennessee	10	90	25	65	10	90	32	5	8	92	11	8
Texas	7	93	34	59	14	86	10	2	3	97	47	5
Utah	7	93	57	35	9	91	42	6	5	95	73	2
Vermont	5	95	26	69	5	95	23	5	7	93	45	4
Virginia	5	95	36	59	7	93	21	3	4	96	52	4
Washington	10	90	48	42	16	84	31	4	6	94	62	3
West Virginia	5	95	44	51	5	95	43	9	‡	‡	‡	
Wisconsin	6	94	35	59	8	92	26	4	2	98	47	5
Wyoming	5	95	25	71	5	95	17	3	4	96	55	4
Other jurisdictions		ıh		l					L			
District of Columbia	6	94	10	85	6	94	4	1	5	95	16	7
DoDEA ¹ Puerto Rico	7	93	32 —	61	6	94	22 —	3	8	92	41	5

Not available.

NOTE: Beginning with the 2017 assessment, NAEP mathematics results are from a digitally based assessment; prior to 2017, results were from a paper-and-pencil based assessment. 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. SD includes students identified as having either an Individualized Education Program or protection under Section 504 of the Rehabilitation Act of 1973. Detail may not sum to totals because of rounding. In Puerto Rico, the English language learner (ELL) category is for the Spanish language learner (SLL).

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2019 Mathematics Assessment.

[±] Reporting standards not met.

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

Table A-30.

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 identified SD and/or ELL students, by state/jurisdiction: 2019

					Percentage	of identified	SD and/or ELL stude	nts				
			SD and/or ELL				SD				ELL	
State/jurisdiction	Excluded	Assessed	Assessed without accom-modations	Assessed with accom-modations	Excluded	Assessed	Assessed without accom-modations	Assessed with accom- modations	Excluded	Assessed	Assessed without accommodations	Assesse wit accon modation
Nation (public)	8	92	29	64	8	92	15	77	7	93	52	4
Alabama	10	90	41	48	10	90	38	52	‡	‡	‡	
Alaska	5	95	31	64	7	93	16	78	4	96	44	5
Arizona	9	91	28	63	10	90	22	68	8	92	39	5
Arkansas	9	91	16	76	10	90	10	79	5	95	28	6
California	7	93	53	41	9	91	22	70	6	94	69	2
Colorado	6	94	38	56	7	93	20	73	5	95	59	3
Connecticut	9	91	25	66	8	92	22	70	14	86	35	5
Delaware	9	91	25	67	8	92	20	72	9	91	42	4
Florida	8	92	7	85	8	92	8	84	9	91	4	8
Georgia	10	90	12	79	11	89	8	81	4	96	29	6
Hawaii	14	86	54	32	13	87	44	43	17	83	69	1
Idaho	8	92	26	65	9	91	17	73	4	96	50	4
Illinois	5	95	18	77	5	95	8	87	5	95	35	6
Indiana	8	92	16	76	8	92	8	83	7	93	39	5
lowa	6	94	14	80	7	93	8	85	3	97	27	7
Kansas	6	94	46	48	7	93	24	68	5	95	77	1
Kentucky	11	89	8	81	11	89	7	83	13	87	12	7
Louisiana	11	89	7	83	11	89	4	85	11	89	21	6
	5			77				82				
Maine		95	18		5	95	12		‡	‡	‡	0
Maryland	9	91	5	86	8	92	3	89	8	92	9	8
Massachusetts	10	90	23	67	8	92	15	77	16	84	43	4
Michigan	13	87	29	58	16	84	18	65	5	95	53	4
Minnesota	10	90	46	45	12	88	38	50	7	93	64	2
Mississippi	8	92	21	70	8	92	14	78	‡	‡	‡	
Missouri	5	95	23	72	5	95	19	76	‡	‡	‡	
Montana	6	94	27	67	6	94	22	71	‡	#	‡	:
Nebraska	7	93	22	72	7	93	17	76	6	94	38	5
Nevada	5	95	58	36	7	93	41	52	5	95	70	2
New Hampshire	5	95	28	67	5	95	26	70	‡	‡	‡	
New Jersey	8	92	7	84	5	95	8	87	19	81	6	7
New Mexico	7	93	37	56	9	91	24	68	6	94	50	4
New York	6	94	6	88	5	95	3	92	10	90	15	7
North Carolina	8	92	23	69	7	93	18	75	10	90	38	5
North Dakota	8	92	23	69	8	92	20	72	‡	#	‡	
Ohio	8	92	6	86	9	91	4	87	5	95	19	7
Oklahoma	11	89	27	62	12	88	20	68	9	91	43	4
Oregon	8	92	39	53	8	92	29	63	7	93	60	3
Pennsylvania	7	93	23	70	7	93	19	74	5	95	36	5
Rhode Island	6	94	24	70	5	95	13	83	9	91	41	5
South Carolina	7	93	47	46	8	92	30	62	3	97	77	2
South Dakota	9	91	49	43	10	90	46	44	‡	±	‡	_
Tennessee	12	88	17	72	11	89	15	74	14	86	22	6
Texas	6	94	45	49	8	92	12	80	3	97	70	2
Utah	5	95	32	63	5	95	20	75	5	95	58	3
	7	93	20	73	7	93	19	74				3
Vermont	12	88	20	66	13	87	17	74	‡ 12	‡ 88	‡ 36	5
Virginia Washington												
Washington	8	92	40	51	8	92	24	68	10	90	62	2
West Virginia	7	93	29	64	7	93	28	65	‡	‡	‡	
Wisconsin	7	93	20	72	7	93	10	83	8	92	43	4
Wyoming	10	90	15	74	11	89	10	80	‡	‡]	‡	
Other												
jurisdictions	r	· · · · · · · · · · · · · · · · · · ·			r	Ţ			· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·		
District of	6	94	7	86	5	95	6	88	11	89	10	7
Columbia												
DoDEA ¹	8	92	24	68	8	92	12	80	7	93	46	4
Puerto Rico			_			_	_				_	_

Not available.

NOTE: Beginning with the 2017 assessment, NAEP mathematics results are from a digitally based assessment; prior to 2017, results were from a paper-and-pencil based assessment. 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. SD includes students identified as having either an Individualized Education Program or protection under Section 504 of the Rehabilitation Act of 1973. Detail may not sum to totals because of rounding. In Puerto Rico, the English language learner (ELL) category is for the Spanish language learner (SLL).

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2019 Mathematics Assessment.

[±] Reporting standards not met.

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

Table A-31.

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, by SD/ELL category and urban district/jurisdiction: Various years, 2003–19

					2003					2005	
Mater people 1948		Identified	Excluded	Assessed	Assessed without accom-		Identified	Excluded	Assessed	Assessed without accom-	Assessed with accom- modations
Logs-On-Part Logs	SD and/or ELL										
Logs of Signate 31	Nation (public)	22	4	18	10	8	23	3	20	10	10
Authors ()	Large city ¹ (public)	31	5	25	17	9	32	4	28	17	11
Audio	Albuquerque	_	_	_	_	_	_	_	_	_	_
Matemary Column		9	1	8	4	4					6
Basten 33 5 28 11 17 20 8 27 11		_	_	_	_	_	37	10	27	12	14
Cheefant 21 4 77 8 79 22 3 89 7 7 7 8 7 8 7 7 8 7 8 7 8 7 8 7 8 7 8 7 8 7 8 7 8 7 8 7 8 8											_
Design 10											15
Controlled 1											12
Checked 10					16						9
Date					_						_
Description					3		17		12		9
Depot Depo			_		_		_		_	_	_
Disast of Calman (China)			_		_		_			_	_
Does County (F)											10
Far Worth Far Wo					_						-
President Control (PG)		_	_	_	_	_	_	_		_	_
Gallering County (NCT)		_	_	_	_	_	_	_	_	_	_
Histonomy Contry (FL)	Guilford County (NC)		_	_	_		_	_	_	_	_
Houseon (Kr)		_	_	_	_	_	_	_	_	_	_
La Arugeiss		45	8	37	19	18	46	7	38	17	21
Mare Joseph (1972) Mare Joseph (Jefferson County (KY)	_	_	_	_	_	_	_	_	_	_
Minesakasa	Los Angeles	60	3	56	48	8	59	5	54	47	7
New York (Cry 22 6 16 4 17 24 4 10 2 2 2 3 3 3 3 3 3 3	Miami-Dade		_	_	_	_	_	_	_	_	_
Philadelphis		_	_		_	_	_	_	-	_	_
Ser Diego 4 2 38 34 4 43 4 99 33 Ser Diego 70 70 70 70 70 70 70 7			6	16	4		24	4	19	2	17
Siebly Careful (19)			_		_		_	_	_	_	_
Nation (public)		41	2	38	34		43	4	39	33	6
Nation (public) 14 3 11 4 7 14 3 11 4 3 11 4 3 11 4 3 3 11 4 3 3 11 4 3 3 11 4 3 3 11 4 3 3 11 3 3 3 3 3 3		I	I	ll			l	I			
Large-Orly (Pachic) 13 3 9 4 6 13 3 10 3		T	r	······				r			
Abustarson						·					8
Asharis 8 1 7 7 3 4 9 1 7 8 2 2 1 6 Estimate City		13	3	9	4	6	13	3	10	3	7
Austin		_	_	_	_	_	_	_	_	-	_
Baltimor (Cly Baltim		8	1	7	3	4					6
Beston 20 3 16 4 12 22 5 17 3 Chraighe 17 3 14 3 10 15 2 11 3 Chraighe 17 3 14 3 10 13 4 10 3 Chraighe 17 3 14 3 10 13 4 10 3 Chraighe 17 2 5 6 2 5 13 5 8 1 Clivelland 12 8 6 2 5 13 5 8 1 Clivelland 12 8 6 2 5 13 5 8 1 Clivelland 12 8 6 2 5 13 5 8 1 Clivelland 12 8 6 2 5 13 5 8 1 Clivelland 12 8 6 2 5 13 5 8 1 Clivelland 12 8 6 2 5 13 5 8 1 Clivelland 12 8 8 6 2 5 13 5 8 1 Clivelland 12 8 8 6 2 7 16 5 11 Clivelland 12 8 8 8 1 Clivelland 12 8 8 8 9 Clivelland 12 8 8 9 Clivelland 13 8 8 9 Clivelland 14 15 9 Clivelland 15 15 13 9 Clivelland 15 15 15 15 Clivelland 15 Clivella			_		_				8		6
Charlotine 17 3 14 3 10 13 2 11 3 3 3 4 0 3 3 4 0 3 3 4 0 3 3 4 0 3 3 4 0 3 3 4 10 3 3 4 10 3 3 4 10 3 3 4 10 3 3 4 10 3 3 4 10 3 4 10 3 4 10 3 4 10 3 4 10 3 4 10 3 4 10 3 4 10 3 4 10 3 4 10 3 4 10 3 4 10 3 4 10 3 4 10 3 4 10 3 4 10 3 4 10 3 4 10 3 4 10 3 3 4 10 3 3 4 10 3 3 4 10 3 3 4 10 3 3 3 4 10 3 3 3 3 3 3 3 3 3					_						
Chicago 15 5 10 4 6 13 4 10 3 Chicago 15 5 10 4 6 13 4 10 3 Chicago 12 5 6 2 5 13 5 8 1 Chicago 12 5 6 2 5 13 5 8 1 Chicago 12 5 6 2 5 13 5 8 1 Chicago 12 5 6 2 5 13 5 8 1 Chicago 1 1 1 1 1 1 1 1 1											14
Clark County (NY)											8
Ceveland			5		4				10	3	7
Dales					_				_	_	8
Deriver			_		_		13		_		-
Deboth			_				_				
District Columbia (ICPS)			_		_		_		_	_	_
David County (FL)			4		2		16		11		8
For Worth					_				_	_	_
Guilford County (NC)		_	_	_	_	_	_	_	_	_	_
Hillsbrough County (FL)		_	_	_	_	_	_	_	_	_	_
Houston	Guilford County (NC)	_	_	_	_	_	_	_		_	_
Jeffesson County (KY)	Hillsborough County (FL)	_	_	_	_	_	_	_	_	_	_
Los Angeles	Houston	18	7	11	8	3	12	5	7	3	4
Main-Dade					_				_		_
Milwaukee		11	2		5		11		8	3	5
New York City		_	_	_	_	_	_	_	_	_	_
Philadelphia		_	_		_		_	_	_	_	
San Diego		12	1	12	1	10	14	2	11	1	11
Shelby County (TN)					_	_			_	-	_
Nation (public)			1				11		9		4
Nation (public) 11		1	I	ll	_		I	I			-
Large city 1 (public) 21 3 18 14 4 21 2 19 19 14 Albuquerque — — — — — — — — — — — — — — — — — — —		T	r	ŗ		· · · · · · · · · · · · · · · · · · ·		r	······································		
Albuquerque	Nation (public)									7	3
Alatanta 2 # 2 1 # 2 # 2 1 Austin — <			3	18	14	4	21		19	14	5
Austin					_	_	_		-	-	_
Baltimore City			#		1						1
Boston			_		_						9
Charlotte 8 2 6 2 4 10 1 8 4 Chicago 20 5 15 13 2 18 2 16 12 Clark County (NV) —					_						3
Chicago											3
Clark County (NV) —											4
Cleveland					13		18		10		4
Dallas — <td></td> <td></td> <td>1</td> <td></td> <td>-1</td> <td></td> <td>Α</td> <td></td> <td>3</td> <td></td> <td></td>			1		-1		Α		3		
Deriver County (PC) County (NC) Coun							-				_
Detroit					_		_				_
District of Columbia (DCPS) 7 1 5 2 3 5 1 4 1 1 Duval County (FL)			_		_		_			_	_
Duval County (FL) —			1		2		5		4	1	2
Fort Worth					_				_		_
Fresno					_		_	_	_	_	_
Guilford County (NC)					_		_	-	_	_	_
Hillsborough County (FL)					_		_	_	_	_	_
Houston 35 4 31 14 17 37 4 33 15 Jefferson County (KY)			_		_		_	_	_	_	_
Jefferson County (KY) - <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>18</td></td<>											18
Los Angeles 56 2 53 47 6 54 4 50 45 Miami-Dade — — — — — — — — — — — — — — — — — — —			-		_				_		_
Miami-Dade — — — — — — Milwaukee — — — — — — New York City 13 6 7 3 4 12 3 9 1			2		47		54		50	45	5
Milwaukee —	Miami-Dade				_			-	_		_
			_	_	_		_	_	_	_	_
Philadelphia	New York City	13	6	7	3	4	12	3	9	1	8
	Philadelphia		_		_		_	_	_	_	_
San Diego 34 2 32 30 2 36 3 33 30			2		30		36	3	33		3
Shelby County (TN)	Shelby County (TN)										_

Table A-31.

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, by SD/ELL category and urban district/jurisdiction: Various years, 2003–19—Continued

					2007					2009	
Note Depth 30 50 10 10 20 2 2 20 9 11 11 12 13 14 15 15 15 15 15 15 15	SD/ELL category and urban district/jurisdiction	Identified	Excluded	Assessed	Assessed without accom-		Identified	Excluded	Assessed	Assessed without accom-	
	SD and/or ELL										
	Nation (public)	23	3	20	10	10	23	2	20	9	11
Absumption			4	29	17	12		3	28	14	14
Assence 1	Albuquerque	_	_	_	_	_	_	_	_	_	_
Aught (Aught (Au		12	2	11	4	7	12	1	11	4	7
Selection Color				34	17	18		5	39	20	19
Cauchand 22 3 59 7 12 10 2 17 4 11	Baltimore City		_		_		19	9	11		9
Chappe 32 5 20 17 19 24 4 20 7 11 Chappe 3 5 5 5 5 7 12 Chappe 4 5 5 5 5 7 Chappe 5 5 5 7 Chappe 5 5 7 Chappe 5 Chappe 5 7 Chappe 5 Chappe 5 7 Chappe 5 Chappe	Boston	47	5	42	25	17	35	6	30	13	16
Glace Clause (1970) Glace Cla	Charlotte	22		19	7	12	19	2	17	4	13
Georgian 12	Chicago	32	5	26	17	10	24	4	20	7	13
Delete	Clark County (NV)			_	_	_				-	_
Description		23	13	10	1	8	25	10	15	2	13
Disable		_	_	_	_	_	_	_	_	-	_
Discript Contains (CPCP)			_		_		_	_		_	_
Dead County (F)											
Service			6		2		21		17		14
Server		_	_	_	_	_	_	_	_	-	_
Gulsted Compt (NC)		_	_	_	_	_		_	- 04		_
Mishocogno Control Fish			_	_	_		38		34	29	5
Manuface 46			_	_	_		_		_	_	_
Authors Auth			_				42		40		
Los Apoples S											
Marse Seeds											
Managase					44						
Now York City		_	_		_	_					
Principal	New York City	29	2	27	2	25				-	
Sign Diggle 46			_	_	_					2	
Simbly Compress		46	3	43	36	7					
The Name (parks) 14		_	_	_	_		_	_	_		_
Nation (public) 14	SD	d				k	b	4			
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Abbagamages Alariars											
Advantaria 10 2 8 4 4 5 10 1 9 3 3 0 0 Advantaria 13 4 9 2 7 7 10 4 17 22 2 10 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		_	_	_	_	_	_	_	_		_
Aucin 13		10	2	8	4	5	10	1	9	3	6
Balmore Coly Southor S											
Section				-	_						
Charlote 12 2 10 2 8 12 2 11 2 3 8 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6			4		3						
Cheage of 14					2					2	
Covered					4	6			12	3	8
Dallas	Clark County (NV)	_	_	_	_	_	_	_	_	_	_
Deriver	Cleveland	17	13	5	#	4	20	10	10	#	10
Detail D	Dallas	_	_	_	_	_	_	_		-	_
District of Columbia (DCPS)			_		_		_	_	_	-	_
David County (FL)					_						
For Worth			5		1		15		10	2	9
Freamo		_	_	_	_	_	_	_	_	-	_
Guifford Country (IC)		_	_	_	_	_	_	_	_	-	_
Hisborogic County (FL)			_		_		11		7	3	5
Houston 10 3 7 2 4 7 2 5 1 4 4 4 5 13 5 8 8 Los Angeles 11 1 9 4 5 10 1 9 3 7 7 1 1 1 1 1 1 1 1			_		_		_		_	-	_
Jeffenson County (KY)			_		_					_	_
Los Angeles			3		2					5	
Mami-Dade			1		4			1			
Minauke								2		1	
New York City		_								1	
Philadelphia		16	1	15	1	14				1	
San Diego 12 2 9 4 5 13 3 10 4 6 6		_		_						2	
Shelby County (TN)		12	2	9	4	5					
Nation (public) 11							_	_	_		_
Nation (public) 11	ELL	4				k	h	L			
Large city ¹ (public) 22		11	1	10	7	۹.	10	1	10	I a	А
Abuquerque	Large city 1 (public)										7
Alastin				- 21	14	0			15	12	
Auslin			#	- 2		2		#	2		
Baltimore City —											
Boston					15						
Chiarlotte					22						
Chicago											
Clark County (NV)											
Cleveland			_		_						_
Dallas — <td></td> <td></td> <td>1</td> <td></td> <td>1</td> <td></td> <td>7</td> <td></td> <td>5</td> <td>1</td> <td>4</td>			1		1		7		5	1	4
Deriver Company Comp							_				
Detroit			_		_		_		_	_	_
District of Columbia (DCPS) 8 2 6 1 5 8 1 7 1 6 Duval County (FL) — <td></td> <td></td> <td>_</td> <td>_</td> <td>_</td> <td></td> <td>6</td> <td>#</td> <td>6</td> <td>4</td> <td>2</td>			_	_	_		6	#	6	4	2
Duval County (FL) —			2		1			1		1	
Fort Worth		_			_		_	_	_	_	_
Fresno — <td></td> <td></td> <td>_</td> <td></td> <td>_</td> <td></td> <td>_</td> <td>_</td> <td>_</td> <td>_</td> <td>_</td>			_		_		_	_	_	_	_
Guilford County (NC)		_	_	_	_	_	30	1	29	27	1
Hillsborough County (FL)			_	_	_		_	_	_	_	_
Jefferson County (KY) — — — — 4 1 2 1 2 Los Angeles 48 1 47 42 5 41 1 40 36 4 Milmam-Dade — — — 9 1 8 1 7 Milwaukee — — — — 12 2 10 1 9 New York City 17 2 15 1 13 16 1 15 1 14 Philadelphia — — — — 8 1 7 # 7 San Diego 40 1 38 34 4 35 1 34 30 4	Hillsborough County (FL)					_					
Los Angeles			2	36	21					21	
Miami-Dade — — — — 9 1 8 1 7 Milwaukee — — — — 12 2 10 1 9 New York City 17 2 15 1 13 16 1 15 1 14 Philadelphia — — — — 8 1 7 # 7 San Diego 40 1 38 34 4 35 1 34 30 4					_	_		1			
Miami-Dade — — — — 9 1 8 1 7 Milwaukee — — — — 12 2 10 1 9 New York City 17 2 15 1 13 16 1 15 1 14 Philadelphia — — — 8 1 7 # 7 San Diego 40 1 38 34 4 35 1 34 30 4	Los Angeles	48	1	47	42	5		1		36	4
New York City 17 2 15 1 13 16 1 15 1 14 Philadelphia — — — — — 8 1 7 # 7 San Diego 40 1 38 34 4 35 1 34 30 4	Miami-Dade		_	_	_			1	8		
Philadelphia — — — — — 8 1 7 # 7 San Diego 40 1 38 34 4 35 1 34 30 4				_	_	_	12	2	10	1	9
San Diego 40 1 38 34 4 35 1 34 30 4		17	2	15	1	13		1		1	
			_	_	_			1			
Shelby County (TN) - - - - - - - - -			1	38	34		35	1	34		4
	Shelby County (TN)										

Table A-31.

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, by SD/ELL category and urban district/jurisdiction: Various years, 2003–19—Continued

Secondary Column 1	Mileston	essed with accor modation
Name part 1969 20 2 2 3 6 5 2 2 7 7 1 1 1 1 1 1 1 1		
Large role	public) 32 3 29 14 15 30 2 29 11 30 3 3 27 7 19 31 1 30 9 9 1 11 1 1 10 1 1 8 12 1 11 1 1 1 1 1 1 1 1 1 1 1 1 1	
Large role	public) 32 3 29 14 15 30 2 29 11 30 3 3 27 7 19 31 1 30 9 9 1 11 1 1 10 1 1 8 12 1 11 1 1 1 1 1 1 1 1 1 1 1 1 1	
Absorption 30 31 27 7 9 31 1 1 0 9 Absorption 10 1 1 1 1 0 9 Absorption 10 1 1 1 1 1 1 1 1	10 10 10 10 10 10 10 10	
Allering Charles 11	11	
Author March 19	y 21 11 1 10 2 8 821 2 2 0 1 1	
Salmone City 11 10 2 3 8 21 2 2 3 4 4 5 4 4 6 6 7 6 6 7 6 6 7 6 6	Y	
Consisting 20 1 19 7 10 10 1 17 4 4 17 17 4 4 17 17	1	
Charges 20 2 2 2 2 2 3 3 3 3 3	(NV)	
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Conversion 20	28	
Distance	Section Sect	
Discord Control Cont	Stumbia (DCPS)	
Deposit Depo	Second	:
Subset of Cambrian (CPTS)	Stumbia (DCPS) 23	
The Control (F)	y (FL)	
First Womb	mty (NC)	
Propose 1	nty (NC)	
Gulfert Complex (NC)	nky (NC)	
### ### ### ### ### ### ### ### ### ##	County (FL)	
Notation	tunty (KY) 19	
Justice 1967 19	Sunty (KY)	
Los Argopies	1	
Manuscales	1	
Messaese 33 3 3 3 0 3 3 20 3 20 2 2 2 2 2 2 1 2 2 2 3 1 2 2 2 3 1 2 2 2 3 1 2 2 3 1 2 2 3 1 2 2 3 1 2 2 3 1 2 2 3 1 2 2 3 1 3 1	ty	
New York Coty	ty 30	:
Philadelphia 2 2 4 18 2 2 16 22 3 16 2 3 16 2 2 3 16 2		
Sen Diego 40 5 41 32 8 40 1 80 20	try (TN) 43	:
Singly Congrey (19)	try (TN)	
Note Section Section	C)	
Name Company Company	c)	
Large of Py (Poshley) 13	public)	
Large Off, (South)	public)	
Abougaveyone 15	15 2 13 2 11 16 1 9 1 15 3 12 2 10 15 2 13 1 17 10 1 9 1 18 1 1 6 18 1 17 1 19 11 8 1 1 6 18 1 177 1 21 3 18 2 16 18 1 177 1 21 3 18 2 16 21 3 18 1 11 1 1 10 2 8 11 1 10 1 15 2 13 3 10 1 12 1 (NV)	
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Austin 15 3 12 2 10 15 2 13 1 Boston 21 3 18 2 16 15 17 1 Boston 21 3 18 2 16 15 17 1 Boston 21 3 18 2 16 21 3 18 1 Clark Common 11 1 10 2 8 11 10 1 Clark Common 12 3 18 2 18 11 10 1 Clark Common 12 3 18 2 18 11 10 1 Clark Common 12 2 5 77 1 1 16 22 4 18 1 Dallas 8 2 6 1 1 1 16 22 8 1 Dallas 8 2 6 1 1 1 1 1 1 2 8 1 Dallas 8 2 6 1 1 1 1 1 1 1 1 Dallas 8 2 6 1 1 1 1 1 1 1 1 Dallas 8 1 1 1 1 1 1 1 1 1	ty	
Balminner City 19	y 19 11 8 1 1 6 18 1 17 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
Boston	21 3 18 2 16 21 3 18 1 1 1 10 1 1 15 2 13 3 10 13 1 12 1 1 1 1 1 1 1	
Charlote	Y (NV)	
Chicago 15 2 13 3 10 13 1 12 1 1 1 1 1 1 1	/ (NV)	
Clark Control (NY)	V(NV)	
Circulated 22 5 17 1 16 22 4 18 1 1 1 1 1 1 1 1	22 5 17 1 16 22 4 18 1 8 2 6 1 5 10 2 8 1 - - - - - - - 15 6 9 3 6 16 5 11 3	
Delies	8 2 6 1 5 10 2 8 1 - - - - - - - - 15 6 9 3 6 16 5 11 3	
Deriver	- - - - - - - - - -	
Debote 15		
Dainted Colombia (ICPS)		
David County (FL)		
Fort Worth		
Freshoon 10		
Suiffeed County (NC)	10 1 9 2 7 9 1 8 1	
Hilsborough County (FL)		
Houston		
Jefferson County (KY) 15 3 12 4 8 8 13 1 12 4 Man-Dade 12 2 10 1 1 9 9 2 8 1 1 10 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
Los Angeles 12 2 10 1 9 9 2 8 1 Milmani-Dade 12 2 10 1 10 11 1 10 1 1 Milmani-Dade 12 2 10 1 10 11 1 10 1 1 Milmani-Dade 12 2 10 1 10 1 1 10 1 1 1	punty (KY) 15 3 12 4 8 13 1 12 4	
Mam-Dade	12 2 10 1 9 9 2 8	
Milwaukee		
New York City		
Philadelphia 16		
San Diego		
Shelby County (TN)		
Nation (public)		
Nation (public) 11		
Large city 1 (nublic) 22	e)	
Albarda		
Allanta 2 # 2 # 2 # 2 # 3 # 3 # 3 # 3 # 1		
Austine City 2 # 2 # 2 # 4 # 4 # 4 # # 5		
Baltimore City 2 # 2 # 3 4 # 4 # 4 # 5 5 26 Chicago 36 3 3 34 28 6 6 36 1 35 26 Charlotte 10 # 10 6 5 8 1 1 8 2 2 Chicago 18 1 17 4 13 15 1 14 2 2 Clark County (NV)		
Boston 36		:
Charlotte		
Chicago 18 1 17 4 13 15 1 14 2 Clark County (NV) —		
Clark County (NV)		
Cleveland 7 1 6 # # 6 8 1 7 # # Dallas 50 1 48 44 4 4 52 1 51 19 Denver — — — — — — — — — — — — — — — — — — —		
Dallas 50 1 48 44 4 52 1 51 19 Derivor <t< td=""><td></td><td></td></t<>		
Denvier		
Detroit 12	50 1 48 44 4 52 1 51 19	
District of Columbia (DCPS) 8 1 7 1 6 8 1 7 1 Duval County (FL) — — — — — — — — Fresno 30 # 30 27 3 27 # 27 24 Guilford County (NC) — — — — — — — Hillsborough County (FL) 17 1 16 # 16 # 10 # 10 # Houston 38 2 36 25 11 40 1 39 16 Jefferson County (KY) 5 3 2 1 1 5 1 5 1 5 1 Los Angeles 34 1 33 27 6 28 1 27 21 Milman-Dade 17 1 16 # 15 25 2 23 # Milwaukee 15 # 15 1 13 14 1 13 14 1 13 #		
Duval County (FL) —		
Fort Worth		
Fresno 30 # 30 27 3 27 # 27 24 Guilford County (NC) — — — — — — — — — — — — — — — — — — —		
Guilford County (NC)		
Hillsborough County (FL)		
Houston 38 2 36 25 11 40 1 39 16 Jefferson County (KY) 5 3 2 1 1 1 5 1 5 1 Los Angeles 34 1 33 27 6 28 1 27 Milmin-Dade 17 1 16 # 15 25 2 23 # Milwaukee 15 # 15 1 13 14 1 13 #		
Jefferson County (KY) 5 3 2 1 1 5 1 5 1 Los Angeles 34 1 33 27 6 28 1 27 21 Milami-Dade 17 1 16 # 15 25 2 23 # Milwaukee 15 # 15 1 13 14 1 13 #		
Los Angeles 34 1 33 27 6 28 1 27 21 Miami-Dade 17 1 16 # 15 25 2 23 # Milwaukee 15 # 15 1 13 14 1 13 #		
Los Angeles 34 1 33 27 6 28 1 27 21 Miami-Dade 17 1 16 # 15 25 2 23 # Milwaukee 15 # 15 1 13 14 1 13 #		
Miami-Dade 17 1 16 # 15 25 2 23 # Milwaukee 15 # 15 1 13 14 1 13 #		
Milwaukee 15 # 15 1 13 14 1 13 #		
New York City 17 1 16 1 15 16 1 15 #		
Philadelphia 8 # 7 1 6 8 1 7 1		
San Diego 36 1 35 31 4 33 1 32 25		

Table A-31.

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, by SD/ELL category and urban district/jurisdiction: Various years, 2003–19—Continued

				2015					2017	
SD/ELL category and urban district/jurisdiction	Identified	Excluded	Assessed	Assessed without accom- modations	Assessed with accom- modations	Identified	Excluded	Assessed	Assessed without accom- modations	Assessed with accom- modations
SD and/or ELL										
Nation (public)	24	2	23	8	14	25	2	23	10	13
Large city ¹ (public)	32	2	29	12	17	31	2	29	13	16
Albuquerque	33	2	31	9	22	30	1	29	12	17
Atlanta	14	2	12	2	10	16	1	15	2	13
Austin	50	4	46	17	29	50	3	47	13	34
Baltimore City	22	1	20	2	19	23	2	21	2	18
Boston	49	3	45	19	26	48	3	45	21	24
Charlotte	19	2	18	7	11	19	2	16	6	10
Chicago	25	2	23	6	16	29	3	27	7	20
Clark County (NV)	-	_	_	-	_	28	1	26	19	8
Cleveland	29	6	23	2	21	31	6	25	5	20
Dallas	56	4	53	29	24	60	4	56	23	33
Denver		_	_	_	_	46	3	43	33	11
Detroit	28	5	24	16	8	31	5	26	17	9
District of Columbia (DCPS)	20	2	17	2	15	23	3	20	5	16
Duval County (FL)	21	4	17	2	15	22	3	19	3	15
Fort Worth		_			_	52	4	48	33	16
Fresno	34	1	33	25	7	32	1	31	26	6
Guilford County (NC)		_		-		20	2	18	9	9
Hillsborough County (FL)	28	2	26	2	24	26	2	24	2	22
Houston	48	3	45	16	28	47	2	44	19	25
Jefferson County (KY)	20	2	18	7	11	20	2	18	6	12
Los Angeles	37	2	35	25	10	35	2	33	27	6
Milwaykaa	29	4	25	#	25	26	4	23	2	21
Milwaukee	- 22		- 24	-		32	3	29	7	21
New York City	32	2	31	1	30	31	2	29	3	25
Philadelphia	24	5	19	3	16	26	5	21	5	15
San Diego	46	3	42	35	8	41	2	38	28	10
Shelby County (TN)	1	I	l			18	4	15	4	11
SD		r					r	·	······	
Nation (public)	14	1	13	3	11	15	2	13	4	9
Large city ¹ (public)	14	2	13	2	11	14	1	13	3	10
Albuquerque	17	1	15	2	13	17	1	16	5	11
Atlanta	10	1	9	1	8	13	1	12	2	11
Austin	17	2	15	2	13	19	2	17	2	16
Baltimore City	17	1	16	1	15	17	1	16	1	14
Boston	22	3	19	#	19	21	2	19	2	18
Charlotte	10	1	9	2	8	11	1	10	2	8
Chicago	14	2	12	1	12	16	2	14	1	13
Clark County (NV)	-	-	-	-	_	11	1	10	6	4
Cleveland	21	5	17	1	16	22	4	18	2	16
Dallas	8	2	6	1	6	10	2	8	1	7
Denver		_	_	-	_	11	1	10	5	5
Detroit	15	4	11	3	8	15	4	11	3	8
District of Columbia (DCPS)	13	1	12	#	12	15	2	14	2	12
Duval County (FL)	17	3	14	2	12	17	2	14	3	12
Fort Worth		_	_	-	_	13	2	11	3	8
Fresno	10	1	8	2	6	10	1	9	4	5
Guilford County (NC)		_	_	-	_	16	2	14	7	7
Hillsborough County (FL)	20	2	18	2	16	17	1	16	2	14
Houston	10	2	8	1	7	8	2	6	1	5
Jefferson County (KY)	13	1	11	4	7	14	1	12	4	8
Los Angeles	13	2	11	2	9	12	1	11	6	5
Miami-Dade	10	2	9	#	8	11	1	10	1	9
Milwaukee		_	_	_	_	18	2	16	4	12
New York City	22	1	22	1	21	21	1	20	2	18
Philadelphia	16	4	12	1	11	17	4	13	2	11
San Diego	12	3	10	3	7	13	1	12	4	7
Shelby County (TN)		l				11	3	8	3	5
ELL										
Nation (public)	12	1	11	6	5	12	1	11	7	5
Large city ¹ (public)	21	1	20	11	9	21	1	19	10	9
Albuquerque	21	1	20	6	14	18	1	17	8	9
Atlanta	4	#	4	1	3	3	#	3	1	3
Austin	38	2	36	16	19	36	2	34	12	22
Baltimore City	5	#	4	#	4	7	1	6	1	5
Boston	33	1	32	19	13	34	2	32	20	12
Charlotte	11	1	10	5	5	9	1	8	5	3
Chicago	15	1	13	6	7	18	2	16	6	10
Clark County (NV)		_	_	_	_	20	1	19	14	6
Cleveland	10	2	8	1	7	11	2	9	3	5
Dallas	51	2	48	28	20	54	3	51	22	29
Denver	_	_	_	_	_	39	2	37	30	7
Detroit	14	#	13	13	#	16	1	16	14	2
District of Columbia (DCPS)	8	1	7	2	5	10	1	8	3	5
Duval County (FL)	5	1	4	#	3	6	1	5	1	4
Fort Worth	_	_	_	_	_	43	1	41	31	11
Fresno	27	1	27	24	3	25	#	24	22	2
Guilford County (NC)	_	_	_	_	_	6	#	5	2	3
Hillsborough County (FL)	12	#	12	#	12	12	1	11	#	11
Houston	41	1	40	16	24	41	1	40	19	22
Jefferson County (KY)	9	1	8	3	5	8	1	7	2	5
Los Angeles	31	1	30	24	6	30	2	28	24	4
Miami-Dade	22	3	20	#	19	18	3	15	1	15
Milwaukee		3	20	#	19	18	3	15	1 4	
	14	1	13	#	13	15	1	15	2	11
New York City Philadelphia	10		13	2			1			12
		1			6	11		9	3	6
San Diego Shelby County (TN)	39	2	37	33	4	33	1	32	25	7
	_ I _	l —	_	-	_	9	J 1	7	1	6

Table A-31. 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, by SD/ELL category and urban district/jurisdiction: Various years, 2003-19—Continued

				2019	
SD/ELL category and urban district/jurisdiction	Identified	Excluded	Assessed	Assessed without accom-modations	Assessed with accom-modations
SD and/or ELL	identified	Lxciuded	Assessed	Assessed without accommodations	Assessed with accommodations
Nation (public)	27	2	25	10	15
Large city ¹ (public)	33	3	30	13	17
Albuquerque	39	2	37	15	22
Atlanta	21	1	20	2	18
Austin	52	3	49	14	35
Baltimore City	25	2	23	2	21
Boston	50	4	46	21	25
Charlotte	27	2	25	14	11
				11	
Chicago	36	2	34		23
Clark County (NV)	32	2	31	20	11
Cleveland	31	4	27	5	23
Dallas	59	3	55	30	26
Denver	45	2	44	29	15
Detroit	29	5	24	17	7
District of Columbia (DCPS)	30	2	28	2	26
Duval County (FL)	27	2	25	2	23
Fort Worth	54	2	52	36	16
Fresno	33	2	31	25	(
Guilford County (NC)	27	1	25	10	16
Hillsborough County (FL)	30	3	27	3	24
Houston	48	2	45	23	22
Jefferson County (KY)	25	3	22	6	17
Los Angeles	31	2	29	19	10
Miami-Dade	32	4	29	2	27
Milwaukee	32	2	30	6	24
New York City	35	4	31	5	26
Philadelphia	30	6	24	10	14
San Diego	38	2	36	22	14
Shelby County (TN)	19	2	17	5	11
SD		_	"	ů –	"
Nation (public)	16	2	14	3	1*
Large city 1 (public)	15	2	13	3	11
	21	2	20	7	13
Albuquerque		1			
Atlanta	16	1	15	1	14
Austin	23	2	21	1	20
Baltimore City	17	#	16	1	15
Boston	23	2	21	3	18
Charlotte	11	2	10	2	3
Chicago	15	1	13	1	12
Clark County (NV)	11	1	10	5	(
Cleveland	22	3	19	2	17
Dallas	14	3	11	1	10
Denver	12	1	11	3	8
Detroit	14	4	10	5	(
District of Columbia (DCPS)	17	2	16	#	15
Duval County (FL)	22	2	20	1	19
Fort Worth	15	2	13	4	9
Fresno	12	2	10	4	(
Guilford County (NC)	15	1	14	4	10
Hillsborough County (FL)	21	2	19	2	11
Houston	9	2	8	1	
Jefferson County (KY)	14	2	12	3	
Los Angeles	13	1	11	4	
Miami-Dade	14	2	13	1	12
Milwaukee	22		20	3	17
		2	21		18
New York City	24	3		3	
Philadelphia	17	4	13	3	11
San Diego	16	2	14	3	1
Shelby County (TN)	9	2	8	3	
ELL				_	
Nation (public)	13	1	12	7	
Large city ¹ (public)	21	1	20	11	
Albuquerque	23	1	22	10	1:
Atlanta	7	1	6	1	
Austin	36	1	34	13	22
Baltimore City	9	1	8	1	
Boston	35	2	33	19	1
Charlotte	18	1	17	13	
Chicago	25	1	24	11	1.
Clark County (NV)	23	1	23	16	
Cleveland	11	#	10	3	
Dallas	51	2	49	30	2
Denver	38	1	37	26	1
Detroit	16	1	15	12	
District of Columbia (DCPS)	16	1	15	2	1
Duval County (FL)	6	#	5	#	'
Fort Worth	44	#	44	33	1
Fresno	25	1	25	22	'
		1			
Guilford County (NC)	13	#	13	6	
Hillsborough County (FL)	11	1	10	#	1
Houston	41	1	40	23	1
Jefferson County (KY)	13	1	11	3	
Los Angeles	25	1	23	17	
Miami-Dade	23	2	21	1	2
Milwaukee	13	1	12	3	9
New York City	16	2	14	3	1
Philadelphia	15	2	13	8	
San Diego	29	1	28	20	8
Shelby County (TN)	10	1	10	2	

— Not available.
Rounds to zero.
1 Large city includes students from all cities in the nation with populations of 250,000 or more including the participating districts.

NOTE: Beginning with the 2017 assessment, NAEP mathematics results are from a digitally based assessment; prior to 2017, results were from a paper-and-pencil based assessment. DCPS = District of Columbia Public Schools. Beginning in 2009, if the results for charter schools are not included in the school district's Adequate Yearly Progress (AP) report to the U.S. Department of Education under the Elementary and Secondary Education Act, they are excluded from that district's Trial Urban District Assessment (TUDA) results. 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. SD includes students identified as having either an Individualized Education Program or protection under Section 504 of the Rehabilitation Act of 1973. 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, 2003–19 Mathematics Assessments.

Table A-32.

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, by SD/ELL category and urban district/jurisdiction: Various years, 2003–19

Second complement		1			2003					2005	
Name	SD/ELL category and urban district/jurisdiction	Identified	Excluded	Assessed	Assessed without accom-		Identified	Excluded	Assessed	Assessed without accom-	Assessed with accom- modations
	SD and/or ELL										
	Nation (public)	19	4	15	8	7	19	4	15	7	8
Altername			5		13	7		4		12	8
Absolute 11 2 9 4 4 5 32 1 1 10 3 1 1 10 3 1 1 10 3 1 1 10 10 3 1 1 10 10 3 1 1 10 10 10 10 10 10 10 10 10 10 10 10		_	_	_	_	_	_	_		_	_
Acade		11	2	9	4	5	12	1	10	3	8
Subsect City		_	_	_							4
Basen		_	_	_	_						_
Clauded					9				16		9
Change 2 7 15 8 8 7 2 12 3 10 5 10 10 10 10 10 10 10 10 10 10 10 10 10										5	10
General Company (No)											12
Consistent			_		_	_			_	_	_
Design			9	12	2	9	20		12	3	9
Depted Contents (D/DP)			_		_		_		_		_
Disease			_		_	_	_		_	_	_
Description		_	_	_	_	_	_	_	_	_	_
Far York	District of Columbia (DCPS)	20	6	14	5	9	19	6	14	2	11
Finemon	Duval County (FL)	_	_	_	_	_	_	_	_	_	_
California (Party Party Part	Fort Worth	_	_	_	-	_	_	_	-	_	_
Hillahousey Carely (Fig.)	Fresno	_	_	_	_	_	_	_	_	_	_
Manusland 76	Guilford County (NC)	_	_	_	-	_	_	_	-	_	_
June Control (1977)	Hillsborough County (FL)	_	_	_	-	_	_	_	-	_	_
Les Angeres	Houston	26	8	18	16	3	24	6	18	14	4
Manus Code	Jefferson County (KY)	_	_	_	-	_	_	_	-	_	_
Monadaces	Los Angeles	37	2	35	29	6	39	3	36	30	6
New York Coty	Miami-Dade	-	_	_	-	_	_	-	-	-	_
PRIMORIPINS		_	_	_	-	_	_	_	-	_	_
Ser Diego 29 4 28 29 4 28 77		24	5	19	6	14	20	2	18	2	16
Sibely Confunction (1709) Sibely Confunction (1709)			_	_	-	_	_	_	-	_	_
Name Carlo		29	4	26	22		28	4	24	17	7
Nation (public) 14 3 11 5 6 6 13 3 3 10 3 3 Abazgargae		1	L	<u> —</u> [_	L	l	Il	-	_
Large dip (Bushel)		ą	· · · · · · · · · · · · · · · · · · ·	p			· · · · · · · · · · · · · · · · · · ·	r	p		
Abupengue	Nation (public)									-	7
Alamin		14	3	11	5	5	13	3	10	3	6
Auction		_	_	_	-	_	_	_	-	_	_
Batterse City		10	1	9	4	5					7
Boston			_		_		14		6	5	2
Charledee 14 3 12 4 6 17 2 10 2 3 3 1 1 1 1 1 1 1 1					_		_				_
Chicago 17 5 12 6 7 16 2 14 3 1 Chivago 17 5 12 6 7 16 2 14 3 1 Chivago 17 0 8 1 0 18 8 0 3 3 Chivago 17 0 8 1 0 18 8 0 3 3 Chivago 17 0 18 18 18 Chivago 18 18 18 Chivago 18 18 18 Chivago 18 18 18 Chivago 18 Chivago 18 18 Chiva											8
Clark Control (NY)						8					
Cleveland		1	5		0	,			14	3	11
Dalles			_		_						7
Denver		1	_				10				_
Detroit of Columbia (DCPS)					_		_				
Daniel of Columbia (ICPS)			_		_		_		_	_	_
David County (FL)			5		3		17		12		10
For Worth					_				_		_
Coulifor County (NC)		_	_	_	_	_	_	_	_	_	_
Hillsbrongth County (FL)	Fresno	_	_	_	_	_	_	_	_	_	_
Houston 16	Guilford County (NC)	_	_	_	_	_	_	_	_	_	_
Jeffesson County (KY)	Hillsborough County (FL)	-	_	_	-	_	_	-	-	-	_
Los Angeles 12 2 10 5 5 12 2 10 5 5 12 2 10 5 5 12 2 10 5 5 14 14 10 14 10 14 10 14 10 14 10 14 10 14 10 14 10 14 10 14 10 14 10 14 10 14 10 14 10 14 10 10		16	7	10	9	#	11	4	7	5	2
Mishi-Dade					-				_		_
Milwaukee			2	10	5		12		10	5	5
New York City		_	_	_	_	_	_	_	_	_	_
Philadelphia		1	_	_			_	_		_	
San Digo		15	2	13	3	10	12	1	11	1	10
Shelby County (TN)			_	-	_	_	_	_		-	_
Nation (public)			1				11		8		4
Nation (public) 6		1	l				L	I	I		-
Large city [†] [qublic) 13		1						r		т	
Albuquerque	Nation (public)										1
Allatina			2	11	9	3	13		12	9	3
Austin			_	_	_	_	_		-	-	_
Baltinore City					1						1
Boston					-				10	8	2
Charlotte										_	_ 1
Chicago											1 2
Clark County (NV)											2
Cleveland		1	3		3		-		5	2	_
Dallas			1		1		3		2	#	
Denver											_
Detroit							_				_
District of Columbia (DCPS) 5			_							_	_
Duval County (FL) —			1		2		4		3	1	2
Fort Worth											_
Fresno					_		_	_		_	_
Guilford County (NC)		1			_		_	-		_	_
Hillsborough County (FL)					_		_		_	_	_
Houston 16 5 11 9 2 16 3 12 10 3 Jefferson County (KY) — — — — — — — — — — — — — — — — — — —					_		_		_	_	_
Jefferson County (KY) — <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>3</td></td<>											3
Los Angeles 33 2 31 27 4 34 2 32 28 44 Miami-Dade — — — — — — — — — — — — — — — — — — —									_		_
Miami-Dade —		33	2	31	27	4	34	2	32	28	4
Milwaukee —	Miami-Dade				_	_			_		_
Philadelphia — <t< td=""><td></td><td></td><td>_</td><td>_</td><td>_</td><td>_</td><td>_</td><td>_</td><td>_ </td><td>_</td><td>_</td></t<>			_	_	_	_	_	_	_	_	_
San Diego 23 3 20 18 2 21 3 18 14		13	4	9	3	6	10	2	9	2	7
			_	_	_		_	_	_	_	_
Shelby County (TN) - - - - - - - - -	San Diego		3	20	18		21	3	18		4
	Shelby County (TN) See notes at end of table.			_		_				_	

Table A-32.

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, by SD/ELL category and urban district/jurisdiction: Various years, 2003–19—Continued

				2007					2009	
SD/ELL category and urban district/jurisdiction	Identified	Excluded	Assessed	Assessed without accommodations	Assessed with accom- modations	Identified	Excluded	Assessed	Assessed without accom- modations	Assessed with accom- modations
SD and/or ELL										
Nation (public)	18	4	14	6	8	18	3	15	5	10
Large city ¹ (public)	23	4	19	10	9	23	3	20	9	11
Albuquerque	_	_	_	_	_	_	_		_	_
Atlanta	11	3	8	2	6	12	1	10	1	9
Austin	29	5	23	16	8	29	7	23	13	9
Baltimore City	_	_	_	_	_	19	11	8	1	6
Boston	27	8	18	6	12	30	9	20	5	16
Charlotte	20	3	18	6	12	17	3	14	5	10
Chicago	23	6	17	5	12	21	4	17	3	13
Clark County (NV)	_	_	_	_	-	_	_	_	-	_
Cleveland	24	13	11	2	9	28	11	17	2	15
Dallas	_	_	_	_	-	_	_	_	-	_
Denver	_	_	_	_	-	_	_	_	-	_
Detroit	_	_	_	_	-	23	5	18	7	11
District of Columbia (DCPS)	21	10	11	3	8	23	7	16	3	14
Duval County (FL)	_	_	_	_	-	_	_		-	_
Fort Worth	_	_	_	_	_	_	_	_	-	_
Fresno	_	_	_	_	-	29	2	27	20	7
Guilford County (NC)	_	_	_	_	_	_	_	_	-	_
Hillsborough County (FL)	_	_	_	_	-	_	_	_	-	_
Houston	22	6	16	10	6	22	5	16	9	8
Jefferson County (KY)	_	_	_	_	_	15	4	11	4	7
Los Angeles	33	2	31	25	6	29	2	27	19	8
Miami-Dade	_	_	_	_	_	20	3	17	1	16
Milwaukee	_	_	_	_	_	26	4	22	2	20
New York City	22	2	20	1	19	23	2	21	1	20
Philadelphia	_	_		_	-	22	6	17	2	14
San Diego	28	4	24	19	5	25	5	20	15	5
Shelby County (TN)	I	l				L	I			
SD	r	ļ	······				r		т	
Nation (public)	13	4	9	2	6	13	3	10	2	8
Large city ¹ (public)	13	4	9	3	6	13	3	10	2	9
Albuquerque	_	_	_	_	_	_	_		_	_
Atlanta	11	3	7	2	5	11	1	10	1	9
Austin	16	4	12	7	5	17	6	10	3	7
Baltimore City	_		— 12	3	_	18	11 7	7	1	5
Boston	19	7		2	9	22		15	3	12
Charlotte Chicago	13 17	2 5	11 13	3	10 10	11 16	2 3	9	1	7
Clark County (NV)		5	- 13	3	- IU	-	_	13	· ·	- 11
Cleveland	20	13	7	1	6	23	11	12		11
Dallas	_	_	_		_	_		-		 —
Denver	_	_	_	_	_	_	_		_	_
Detroit	_	_	_	_	_	17	4	13	2	10
District of Columbia (DCPS)	17	9	8	2	6	19	6	12	1	11
Duval County (FL)	_	_	_	_	_	_	_		_	_
Fort Worth	_	_	_	_	_	_	_	_	_	_
Fresno	_	_	_	_	_	11	2	9	2	6
Guilford County (NC)	_	_	_	_	_	_	_		_	_
Hillsborough County (FL)	_	_	_	_	_	_	_	_	_	_
Houston	13	5	8	4	4	12	5	7	2	6
Jefferson County (KY)	-	_	_	_	-	12	3	9	3	6
Los Angeles	10	2	8	3	5	11	2	10	3	7
Miami-Dade	_	_	_	_	_	12	2	11	#	10
Milwaukee	_	_	_	_	_	21	3	17	1	16
New York City	13	1	12	1	11	15	1	14	#	13
Philadelphia	_	_	_	_	-	17	5	11	1	10
San Diego	11	4	7	3	4	12	5	7	2	5
Shelby County (TN)	l	l				L	l			
ELL	r	······	·····				r			
Nation (public)	7	1	6	4	2	6	#	5	3	2
Large city ¹ (public)	13	1	11	7	4	12	1	11	7	4
Albuquerque	_	_	_	_	_	_	_	-	-	_
Atlanta	1	#	1	#	1	1	#	1	#	#
Austin	16	2	13	10	3	16	2	14	10	4
Baltimore City	_	_	_	_	_	1	#	1	#	1
Boston	9	2	7	4	3	11	4	7	2	5
Charlotte	9	1	7	4	3	7	1	6	3	3
Chicago	7	2	5	2	3	7	2	5	2	3
Clark County (NV)	_	_	_	_	_	_	_	-	_	
Cleveland	5	1	4	1	3	6	1	5	1	4
Dallas	_	_	_	_	_	_	_	-	_	_
Denver Detroit	_	_	_	_	_	_	#	6		
Detroit District of Columbia (DCPS)			3	_	_ 2	6	2	6 4	5 2	1 2
District of Columbia (DCPS) Duval County (FL)	4		- -	1	2 —	6	_	4	2	2
Fort Worth	_		_	_	_	_	_	_	_	_
Fresno	_		_	_	_	22	1	21	19	
Guilford County (NC)	_	_	_		_			21	19	_
Hillsborough County (FL)	_		_	_	_	_	_	_	_	
Houston	12	2	10	7	2	12	2	10	7	3
Jefferson County (KY)	-	_	-		_	3	1	2	1	2
Los Angeles	28	1	27	23	4	23	1	22	18	4
Miami-Dade				23	_	8	1	7	#	6
Milwaukee	_				_	7	1	5	1	4
New York City	11	1	10	1	9	10	1	9	#	9
Philadelphia		_	_		_	6	#	6	1	5
San Diego	21	2	19	17	3	16	1	15	13	2
Shelby County (TN)	_	_	_		_	_	_		-	_
See notes at end of table.										

Table A-32.

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, by SD/ELL category and urban district/jurisdiction: Various years, 2003–19—Continued

Section Section State Section State Section					2011					2013	
Bander K.		Identified	Excluded	Assessed	Assessed without accom-		Identified	Excluded	Assessed	Assessed without accom-	Assessed with accom- modations
Large of Pipe (1981) 23 3 25 8 8 12 22 2 20 5	d/or ELL										
Mountane 2 2 2 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1	n (public)	18	3	15	5	10	17	2	16	3	12
Marsian (1) 1	city ¹ (public)	23	3	20	8	12	22	2	20	5	15
Auchin					9			2			14
Bathers Coty 21 12 8 1 1 7 7 22 2 2 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1											11
Stote											21
Devoting											20
Discription 19											21 10
Clark County (Aft)								1			17
Diabet Color Col			_		_			_	_	_	_
Decode Company Compa		31	6	25	1	24	32	3	29	1	28
Detailed (CPG)	3	29	5	24	18	6	29	2	26	8	18
District Clarify (CF)			_	_	_	_	_			_	_
Deed Conference			8		10						15
FOR WORTH					1				23	1	22
Priceson 1						_				_	
Collect County (NC)			1		16	7	21	2	20	13	7
Hisboorgo County FL 24		_	_	_	_	_	_	_		_	_
Jefferson Courty (vf) 15 3 12 3 8 16 2 16 2 2 16 2 2 16 16		24	2	22	1	21	22	1	21	#	20
Lear Angeles 20 1 24 15 9 21 2 20 9											15
Meminobes			3								13
Manushee 33 5 20 3 25 31 4 27 1			1								11
New York City 26											19 26
Philaselphiche 26 7 19 9 1 1 18 22 4 22 19 1 Shell people 24 3 24 22 19 1 Shell people 24 3 24 22 19 1 Shell people 34 24 22 2 19 1 Shell people 34 2 2 2 19 1 Shell people 34 2 2 2 2 19 1 Shell people 34 2 19 1 Shell peop											26
Sam Degay 24 3 21 13 8 24 2 22 10											21
Simply Carry (This)											12
Nation (public) 13 2 10 2 0 13 1 12 1 Allouge (n) (public) 13 3 11 2 1 Allouge (n) (public) 15 3 13 3 1 1 12 1 Allouge (n) (public) 16 3 13 3 1 1 15 4 Allouge (n) (public) 17 2 8 1 1 1 1 1 1 1 1 1			_	_	_	_	_		_		
Lage Grig (Buble) 13											
Aboutemenge 15 3 1 13 3 9 9 10 1 1 15 4 Alamina 11 2 8 1 1 7 12 1 1 11 2 Austin 13 4 10 0 2 8 8 15 2 14 1 1 2 Austin 13 4 10 0 2 8 8 15 2 14 1 1 2 Botton Cly 13 12 7 1 1 1 8 2 2 14 1 1 Botton Cly 13 12 7 1 1 1 8 2 2 14 1 1 1 Botton Cly 13 14 1 10 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1								1			10
Alarsin								1			11
Austin 13 4 0 10 2 8 8 15 2 14 1 1 Bellimore City 19 12 77 1 1 6 2 0 2 18								1			11
Bathmore Cty 19 12 7 1 6 20 2 18 # Bathmore Cty Bathmore Cty 20 4 15 1 15 2 2 17 1 Charlotide											10
Boston											13 18
Charlotino					1						17
Chicago											8
Clark County (NY)								1			14
Dalles			_		_			_	-	_	_
Denver											24
Definite of Columbia (ICPS) 20 5 15 1 14 18 1 17 #		9	4	5	1	4	9	2	7	#	7
District Columbia (COFS) 20 5 15 1 14 18 1 17 # Fort Worth		- 40	_	- 40	_	_	_	_		_	
David County (FE) -								4			13 17
Fort Worth Freshon 9 1 8 2 6 10 2 8 1 Guilford County (NC) 16 2 14 1 14 15 1 14 # # # # # # # # # # # # # # # # #			_				_				
Guilfor County (NC)			_	_	_	_	_	_		_	_
Hilsborough County (FL)		9	1	8	2	6	10	2	8	1	7
Houston			_		_	_	_			_	_
Jufferson County (KY)											14
Los Angeles 12									-		7
Mismi-Dade			2					2			10 10
Milwaukee			1					1			9
New York City											20
Philadelpha 17					#			1			16
Shelby County (TN)		17	6		#	11	20	3	17	1	16
Nation (public)		14	3	11	4	7	14	2	12	3	9
Nation (public) 6	y County (TN)		l			_	l	l	l1.	_	_
Large city 1 (public) 12 1 11 6 5 5 11 1 1 1 0 4 Albuquerque 13 2 11 6 5 11 1 1 1 0 4 Albuquerque 13 2 11 6 5 11 1 1 1 1 0 0 4 Altanta 2 # 2 # 1 1 2 # 2 # 2 # 2 # 2 # 2 Austin 16 2 14 11 3 15 1 15 3 Baltimore City 2 1 1 1 # 1 1 2 # 2 # 2 # 2 Baltimore City 2 1 1 1 # 1 1 2 # 2 # 2 # 2 Boston 21 3 18 11 7 23 1 1 22 13 Charlotte 8 # # 7 3 4 4 8 # 8 8 4 4 Chicago 7 1 6 2 4 4 7 1 7 1 7 1 1 6 Clark County (NV) — — — — — — — — — — — — — — — — — — —			r	······			r	· · · · · · · · · · · · · · · · · · ·	·		
Albuquerque		-		-	-			#		_	3
Atlatha 2 # 2 # 2 # 2 # 2 # 2 # 2 # 3 15 1 15 3 Austin 16 2 14 11 # 1 2 # 2 # 15 3 8 # 15 1 15 3 18 11 7 23 1 22 # 2 13 3 4 8 # 2 13 4 8 # 8 4 2 13 4 8 # 4 2 13 4 8 # 4 4 22 1 7 1 1 6 2 4 7 1 7 1 1 6 7 1 7 # 4 22 1 2 1 2 1 2 1 2 1 2 1 2 <td< td=""><td></td><td></td><td>1</td><td></td><td></td><td></td><td></td><td>1 "</td><td></td><td></td><td>6</td></td<>			1					1 "			6
Austin 16 2 14 11 3 15 1 15 3 Baltimore City 2 1 1 # 1 2 # 2 # 2 # 2 # 2 # 2 # 2 # 2 # 2 # 2 # 2 # 2 # 1 2 # 2 13 * * # 8 # 4 * * # 8 # 4 * * # * 4 * <td></td> <td>7 2</td>											7 2
Baltimore City 2 1 1 1 # 1 2 # 2 # 2 # 1 22 13								1			11
Boston								#			2
Charlottle 8 # 7 3 4 8 # 8 4 Chicago 7 1 6 2 4 7 1 7 1 Clerk County (NV) — <						7		1			9
Clark County (NV) —	otte			7	3	4	8	#			3
Cleveland 8 1 7 1 6 7 1 7 # Dallas 24 2 22 18 4 22 1 21 8 Derver — — — — — — — Detroit 9 # 9 8 1 10 # 10 7 District of Columbia (DCPS) 7 1 6 1 5 8 1 7 1 Duval County (FL) —			1		2	4		1	7	1	6
Dallas 24 2 22 18 4 22 1 21 8 Deriver -			_		_			_	-	_	_
Denver											6
Detroit		24		22	18	4		1	21	8	13
District of Columbia (DCPS) 7 1 6 1 5 8 1 7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		9		9	 8		1	#	10	7	3
Duval County (FL) —			1					1			6
Fort Worth					_						_
Guilford County (NC) —	Vorth		_	_	_	_		_	_	_	_
Hillsborough County (FL) 9 # 9 # 9 # 9 # 8 # 8 # Houston 14 2 12 10 3 17 1 16 7 Jefferson County (KY) 4 1 3 2 1 4 # 4 1 1 Los Angeles 19 1 19 14 5 15 1 1 14 8			#	19	16	3	15	1	14	12	2
Houston 14 2 12 10 3 17 1 16 7 Jefferson County (KY) 4 1 3 2 1 4 # 4 1 Los Angeles 19 1 19 14 5 15 1 14 8			_	_	_	_	_	_	-	_	_
Jefferson County (KY) 4 1 3 2 1 4 # 4 1 Los Angeles 19 1 19 14 5 15 1 14 8								#			8
Los Angeles 19 1 19 14 5 15 1 14 8								1 1			9
			1					1			5
		10	1	9		9	12	1	11	#	11
Milwaukee 14 1 13 2 12 9 1 8 1			1					1			8
New York City 12 1 12 # 12 15 1 14 #			1					1			14
Philadelphia 10 1 9 # 8 8 1 7 #	delphia	10	1	9	#	8	8	1	7	#	7
San Diego 16 1 15 11 4 15 1 14 8		16	1	15	11	4	15	1	14	8	7
Shelby County (TN) —	y County (TN)	_		_	_	_				_	

Table A-32.

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, by SD/ELL category and urban district/jurisdiction: Various years, 2003–19—Continued

				2015					2017	
SD/ELL category and urban district/jurisdiction	Identified	Excluded	Assessed	Assessed without accom- modations	Assessed with accom- modations	Identified	Excluded	Assessed	Assessed without accom- modations	Assessed with accom- modations
SD and/or ELL										
Nation (public)	19	2	17	5	13	20	2	18	6	12
Large city ¹ (public)	24	2	21	7	15	25	3	22	9	13
Albuquerque	27	1	26	12	14	26	2	24	9	16
Atlanta	14	1	12	1	11	15	1	14	3	11
Austin	29	3	26	8	18	33	2	31	9	22
Baltimore City	26	3	22	1	22	22	2	20	1	19
Boston	38	4	34	7	27	39	5	34	12	23
Charlotte	16	1	14	4	10	18	2	16	9	6
Chicago	21	1	20	3	18	21	2	19	4	15
Clark County (NV)	_	_	_	_	_	24	2	22	15	7
Cleveland	32	5	27	2	25	33	6	28	6	21
Dallas	41	3	38	17	21	53	3	50	23	27
Denver		_	- 07			39 35	3	36 29	27 19	9
Detroit District of Columbia (DCPS)	32 28	5 5	27 22	2	13 21	26	6 3	29	3	20
Duval County (FL)	16	2	13	2	12	18	3	15	3	13
Fort Worth	10		13	2	12	30	2	28	15	12
Fresno	26		24	16	8	21	2	19	13	6
Guilford County (NC)	20		24	10	0	20	1	18	6	12
Hillsborough County (FL)	25		23	1	22	25	2	23	1	21
Houston	27	4	23	6	17	28	4	24	10	14
Jefferson County (KY)	17	1	15	2	14	14	1	12	3	10
Los Angeles	22	3	20	8	12	22	3	19	12	7
Miami-Dade	22	3	19	#	19	23	3	20	2	18
Milwaukee	_	_	_		_	30	4	26	4	22
New York City	26	2	24	1	24	30	2	27	3	24
Philadelphia	24	3	21	3	18	27	5	22	6	15
San Diego	24	2	22	14	7	22	2	20	13	7
Shelby County (TN)	_	_	_	_	_	20	2	17	2	15
SD	4	4					* -			
Nation (public)	13	1	12	1	11	14	1	13	3	10
Large city ¹ (public)	14	1	12	1	11	14	2	12	3	10
Albuquerque	17	1	16	4	11	19	2	17	5	12
Atlanta	12	1	11	1	10	13	1	12	3	9
Austin	16	1	14	1	14	17	1	15	1	14
Baltimore City	20	1	19	#	19	19	2	18	1	17
Boston	20	3	16	1	16	20	4	16	1	16
Charlotte	9	1	9	1	8	10	1	10	5	5
Chicago	16	1	15	1	14	15	1	14	1	13
Clark County (NV)	_	_	_	_	_	10	1	9	4	5
Cleveland	26	4	22	1	21	24	5	19	2	18
Dallas	10	2	8	#	8	11	2	9	1	8
Denver	_	_	_	_	_	12	2	10	4	6
Detroit	19	5	14	1	13	18	5	13	4	9
District of Columbia (DCPS)	20	2	18	#	18	18	1	16	2	14
Duval County (FL)	12	1	10	1	9	14	2	12	2	10
Fort Worth	-	-	_	_	_	11	2	9	1	8
Fresno	11	1	9	2	7	10	2	9	2	6
Guilford County (NC)	_	_	_	_	_	16	1	15	4	11
Hillsborough County (FL)	17	1	16	1	16	17	2	15	1	14
Houston	11	2	9	1	8	10	2	7	1	6
Jefferson County (KY)	12	1	11	1	10	10	1	9	1	8
Los Angeles	14	2	12	2	10	13	2	12	6	6
Miami-Dade	10	1	9	#	9	11	1	10	1	9
Milwaukee	_	_	_	_		22	4	19	3	16
New York City	19	1	18	#	18	19	1	18	2	16
Philadelphia	18	3	15	1	14	18	4	15	2	13
San Diego	12	2	10	4	6	12	1	11	5	6
Shelby County (TN)	I	l		-		16	2	14	1.	13
ELL	т	r	r		· · · · · · · · · · · · · · · · · · ·		r	ŗ	т	
Nation (public)	7	#	6	3	3	7	1	6	3	3
Large city ¹ (public)	12	1 1	11	5	6	13	1	12	6	5
Albuquerque	15	#	15	8	6	12	1	11	5	7
Atlanta	2	#	2	#	2	2	#	2	#	1
Austin	17	2	15	8	7	20	2	19	8	11
Baltimore City	6	2	3	#	3	3	1	3	.1	2
Boston	25 7	2	23	7	16	25	2	23	11	12
Chicago			7 8	3 2	3	8 9	1		5	2
Clark County (NIV)	9	1	8	2	7	17	1 1	8	3	4
Clark County (NV)	_	1	7			17	1		12	
Cleveland Dallas	8	1		17		10 46	1 1	9 45	4	5
	33	1	32	17	15	46 32	1 2	45 30	23 25	23
Denver Detroit	15	1	14	13	_ 1	18	1	17	25 16	5
Detroit District of Columbia (DCPS)	15	1 4	14	13	1	18	1 2	17	16	1
Duval County (FL)	4	1	3	1 #	3	10	1	4	1 #	4
Fort Worth	4	'	_	#	3	23	#	22	15	8
Fresno	19	1	18	15	3	14	1	13	11	2
Guilford County (NC)	19		10	15	_	6	#	5	2	3
Hillsborough County (FL)	10	1	9	#	9	10	1	9	2	8
Houston	18	2	16	5	11	19	1	18	9	9
Jefferson County (KY)	5	#	5	1	4	4	#	4	2	2
Los Angeles	14	1	12	6	6	14	3	12	8	4
Miami-Dade	14	2	12	#	12	14	2	12	0	10
Milwaukee	14	2	12	#	12	14	1	12	1 2	10
New York City	10	1	9	#	8	13	2	10	2	10
Philadelphia	7	1	7	2	5	10	2	8	5	4
San Diego	17	1	16	12	4	14	1	12	9	3
Shelby County (TN)	17			12	- -	5	#	4	1	3
-,, (,					_		1 77		'	

Table A-32. 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, by SD/ELL category and urban district/jurisdiction: Various years, 2003-19—Continued

				2019	
D/ELL category and urban district/jurisdiction	Identified	Excluded	Assessed	Assessed without accom-modations	Assessed with accom-modatio
D and/or ELL	Idonanod	Lxoradou	71000000	7 ISSUES WILLIAM GOODIN INGGESTOR	, tooocoa min accom modalio
Nation (public)	21	2	19	6	
Large city ¹ (public)	25	2	24	8	
Albuquerque	30	2	28	13	
		2			
Atlanta	18	1	16	1	
Austin	35	2	34	11	
Baltimore City	25	2	24	1	
Boston	39	5	34	10	
Charlotte	17	2	15	6	
Chicago	24	1	22	4	
Clark County (NV)	23	1	22	14	
Cleveland	32	5	27	4	
Dallas	54	2	51	34	
Denver	33	1	32	20	
			25	11	
Detroit	31	6			
District of Columbia (DCPS)	27	2	24	1	
Duval County (FL)	21	3	18	2	
Fort Worth	34	1	33	21	
Fresno	23	1	22	13	
Guilford County (NC)	16	1	16	3	
Hillsborough County (FL)	27	1	26	2	
Houston	30	2	28	16	
Jefferson County (KY)	17	2	15	2	
				11	
Los Angeles	22	2	20		
Miami-Dade	25	2	23	1	
Milwaukee	31	3	28	3	
New York City	30	1	29	2	
Philadelphia	28	5	23	7	
San Diego	22	2	20	12	
Shelby County (TN)	17	2	15	3	
ED	1 ''	2			
	15	4	13	2	
Nation (public)		1			
_arge city ¹ (public)	14	1	13	2	
Albuquerque	20	2	19	6	
Atlanta	16	1	15	1	
Austin	18	1	17	1	
Baltimore City	20	1	20	1	
Boston	20	3	18	1	
Charlotte	9	1	8	2	
		1		2	
Chicago	16	1	15	1	
Clark County (NV)	11	1	10	4	
Cleveland	23	4	18	1	
Dallas	11	1	9	2	
Denver	11	1	10	2	
Detroit	19	6	13	1	
District of Columbia (DCPS)	18	1	17	1	
		2	14	,	
Duval County (FL)	16	2		1	
Fort Worth	11	1	10	3	
Fresno	12	1	11	2	
Guilford County (NC)	13	1	12	2	
Hillsborough County (FL)	19	1	18	2	
Houston	9	1	8	1	
lefferson County (KY)	11	1	10	1	
os Angeles	13	1	12	4	
Miami-Dade	12	1	11	#	
		1		#	
Milwaukee	22	3	19	1	
New York City	21	#	20	1	
Philadelphia	18	3	14	2	
San Diego	14	2	13	6	
helby County (TN)	12	2	10	2	
L					
lation (public)	8	1	7	4	
arge city (public)	14	1	13	7	
Ibuquerque	14	#	14	9 #	
tlanta		#	2	#	
ustin	22	1	21	10	
altimore City	5	1	4	#	
oston	25	3	21	9	
harlotte	9	1	8	4	
hicago	12	1	11	4	
lark County (NV)	15	1	15	11	
eveland	12	1	11	3	
allas	47	2	45	33	
enver		2			
	26	1	25	18	
etroit	14	1	13	9	
strict of Columbia (DCPS)	10	1	9	1	
ival County (FL)	5	1	5	1	
rt Worth	26	#	26	19	
esno	15	1	14	11	
uilford County (NC)	5	#	5	1	
llsborough County (FL)	9	#	9	#	
		#			
puston	23	1	22	15	
	6	1	6	2	
	15	1	13	8	
os Angeles		1	13	#	
os Angeles	14				
os Angeles liami-Dade		1	11	2	
os Angeles Iiami-Dade Iilwaukee	12	1	11	2	
os Angeles (liami-Dade (liiwaukee lew York City	12 12	1	11	2	
os Angeles diami-Dade diiwaukee lew York City [†] hiladelphia	12 12 12	1 1 2	11 10	2 6	
efferson County (KY) os Angeles filami-Dade filiwaukee lew York City hiladelphia san Diego shelby County (TN)	12 12	1 1 2 1	11	2	

— Not available.
Rounds to zero.
1 Large city includes students from all cities in the nation with populations of 250,000 or more including the participating districts.

NOTE: Beginning with the 2017 assessment, NAEP mathematics results are from a digitally based assessment; prior to 2017, results were from a paper-and-pencil based assessment. DCPS = District of Columbia Public Schools. Beginning in 2009, if the results for charter schools are not included in the school district's Adequate Yearly Progress (AYP) report to the U.S. Department of Education under the Elementary and Secondary Education Act, they are excluded from that district's Trial Urban District Assessment (TUDA) results. 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. SD includes students identified as having either an Individualized Education Program or protection under Section 504 of the Rehabilitation Act of 1973. 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, 2003–19 Mathematics Assessments.

Data Collection

The NAEP 2019 mathematics assessment was conducted from January to March 2019 by contractors to the U.S. Department of Education. Data collection for NAEP involves a collaborative effort among the participating schools, school districts, states, and NAEP staff. To reduce the burden on the participating schools, NAEP field staff perform most of the work associated with the assessment. The cooperation of the schools involves enlisting a school staff member to assist in coordinating selected students and providing space to administer the assessments.

Assessment sessions are scripted so that all students are given the same instructions and opportunity to demonstrate what they know and can do. Assessment administrators conduct the sessions under the supervision of their team's assessment coordinator. Training of assessment administrators focuses on their responsibilities in the classroom and on reading the scripts verbatim to administer the sessions in a uniform manner.

NAEP procedures guarantee the anonymity of participants. The names of students are never removed from the schools. The results of NAEP are reported on the national level and by region of the country, state, and for some urban districts—not by school or individual student.

Scoring

After students have entered their responses on their tablets, the National Assessment of Educational Progress (NAEP) representatives submit the response data from the administrator's tablet to a central server so that the responses can be exported for scoring.

The National Center for Education Statistics (NCES) oversees the scoring of multiple-choice items electronically, and employs human scorers for short and extended constructed-response items. NCES is also responsible for developing scoring guides that match criteria in assessment frameworks, recruiting and training qualified scorers, and monitoring scoring consistency.

NCES follows the NAEP scoring process which implements quality control and validity checks at each stage of a five-stage process:

- Rubric Development: Develop scoring guides that match criteria in assessment frameworks.
- Training Materials Development: Develop training materials after receiving actual student responses to the items during a pilot assessment.
- Pilot scoring: Identify and address any mismatches between what NCES expected from students, how they interpreted the item, and what students actually provided.
- Operational Scoring: Seek to develop consensus/agreement by having the team score consistently according to the rubric and training sets.
- Trend Scoring/Monitoring: Maintain consensus by scoring consistently with how items were scored in previous years.

Data Analysis and Scaling

The goal of the analysis of NAEP data is to summarize the performance of groups of students. Initial analysis activities verify the accuracy of the data and data files used in the analysis and provide the first indication of aspects of the data and analysis that require special consideration and attention. The first step is to determine the percentages of students who gave various responses to each cognitive item. Next, the properties of the items are further examined using classical test theory measures of item difficulty and item discrimination. Some of these activities are conducted without student weights or with preliminary student weights, but final student weights are used whenever possible.

After the initial activities are completed, NAEP score scales are created using Item Response Theory (IRT), and scale score distributions are estimated for groups of students. Not all students take the same blocks of items in a NAEP assessment, so results cannot be summarized using the total number of correct item responses. Instead, IRT models are used to describe the relationships between the item responses provided by students and the underlying scale (e.g., mathematics ability). The primary purpose of IRT scaling is to provide a common scale on which performance can be compared even when students receive different blocks of items. Item parameters that are used in the models are estimated from student response data for each item. Different IRT models with different types of item parameters are used to describe multiple-choice items, constructed-response items that are scored simply right or wrong, and complex constructed-response items that have three or more categories.

Because the NAEP design gives each student a small proportion of the pool of assessment items, the assessment cannot provide reliable information about individual student performance. Traditional test scores for individual students, even those based on IRT, would result in misleading estimates of population characteristics, such as student group means and percentages of students at or above a certain scale-score level. However, it is NAEP's goal to estimate these population characteristics. This is accomplished using marginal estimation techniques for latent variables. Under the assumptions of the analysis models, these population estimates will be consistent in the sense that the estimates approach the population values as the sample size increases.

IRT and the NAEP marginal estimation methodology are used to estimate score scales for each of the mathematics content areas at each grade (e.g., at grades 4 and 8, score scales are estimated for number properties and operations; measurement; geometry; data analysis, statistics, and probability; and algebra). The scales summarize student performance across all three types of questions in the assessment (multiple-choice, short constructed-response, and extended constructed-response). Each scale score distribution is transformed to a NAEP scale that ranges from 0 to 500. A mathematics composite scale is subsequently created by combining the content area scales. Summary statistics of the scale scores are estimated, and statistical tests are used to make inferences about the comparisons of results for different groups of students or for different assessment years. Finally, NAEP scale score distributions are described via achievement levels and/or item mapping procedures. For more information about NAEP analysis, IRT, and scaling see https://nces.ed.gov/nationsreportcard/tdw/analysis/.

Variance Estimation

The averages and percentages in this report are estimates based on samples of students rather than on entire populations. Moreover, the collection of questions used at each grade level is only a sample of the many questions that could have been asked to assess the skills and abilities described in the NAEP framework. Therefore, the results are subject to a measure of uncertainty, reflected in the standard error of the estimates—a range of up to a few points above or below the score or percentage—which takes into account potential score fluctuation due to sampling error and measurement error.

Because NAEP uses complex sampling procedures, conventional formulas for estimating sampling variability that assume simple random sampling are inappropriate. NAEP uses a jackknife replication procedure to estimate standard errors. The jackknife standard error provides a reasonable measure of uncertainty for any student information that can be observed without error. However, because each student typically responds to only a few questions within any mathematics content area, the estimated scale score for any single student would be imprecise. In this case, NAEP's marginal estimation methodology is used to describe the performance of groups of students without requiring precise estimates of individual student performance. The estimate of the variance of the students' scale score distributions (which reflect the imprecision due to lack of measurement accuracy) is computed. This component of variability is then included in the standard errors of NAEP scale scores.

Drawing Inferences from the NAEP Results

Drawing correct inferences from NAEP assessment results depends on the use of appropriate statistical procedures for comparing assessment results for population groups of interest and following guidelines to ensure the validity of the inferences. Comparisons of different groups of students with respect to scores or percentages of a certain attribute are of primary interest to users of NAEP results. The user is cautioned to rely on the results of statistical tests, rather than on the apparent magnitude of the difference between two numbers when determining whether differences are likely to represent actual differences among the groups in the population.

t Test Comparison: By convention, references to differences in NAEP reports indicate that scores or percentages from two groups are different (e.g., one group performed higher or lower than another group) only when the difference in the point estimates for the groups being compared is statistically significant at an approximate level of .05.

Since 1998, *t* tests have been used for most NAEP comparisons. These tests are more appropriate than *z* tests (based on normal distribution approximations) when the statistics that are being compared are from distributions with proportionally larger extremes (i.e., thicker tails) than the normal distribution. One aspect of the use of *t* tests that contributes to the difficulty in their use for large-scale surveys is the determination of the appropriate degrees of freedom for the *t* distribution of interest.

Multiple Comparison Procedures: The *t* test used by NAEP and the certainty ascribed to intervals (e.g., a 95 percent confidence interval) are based on statistical theory that assumes that only one confidence interval or test of statistical significance is being performed. However, in some sections of a report, many different groups may be compared (i.e., multiple sets of confidence intervals are being analyzed). In sets of confidence intervals, statistical theory indicates that certainty associated with the entire set of intervals is less than that attributable to each individual comparison from the set. To hold the significance level for the set of comparisons at a particular level (e.g., .05), adjustments—called multiple comparison procedures—must be made to the methods.

To ensure that comparisons made using NAEP data are as accurate as possible, error rates are controlled when multiple comparisons are made. When making a number of comparisons in a single analysis, such as analyzing White student performance versus the performance of Black, Hispanic, Asian/Pacific Islander, and American Indian/Alaska Native students, the probability of finding significant differences by chance, for at least one comparison, increases with the family size or number of comparisons. There are several ways to take into account how many related comparisons are being made. In NAEP, the Benjamini-Hochberg False Discovery Rate (FDR) procedure is used to control for this.

Unlike other multiple comparison procedures (e.g., the Bonferroni procedure) that control the familywise error rate (i.e., the probability of making even one false rejection in the set of comparisons), the FDR procedure controls the expected proportion of falsely rejected hypotheses. Familywise procedures are considered conservative for large families of comparisons; therefore the FDR procedure is more suitable for multiple comparisons in NAEP than other procedures. There are two exceptions where the FDR is not applied: when comparing multiple years and when comparing a state's overall results to the nation.

NAEP Reporting Groups

In addition to overall results for each grade assessed, NAEP results are reported for certain student groups provided there are sufficient numbers of students and adequate school representation. Results for some student groups may not be available for certain years, grades, or jurisdictions.

Race/Ethnicity: The school-recorded race/ethnicity variable records the race/ethnicity of each student as reported by the student's school. For 2019, the mutually exclusive racial/ethnic categories are White, Black, Hispanic, Asian, American Indian/Alaska Native, Native Hawaiian or Other Pacific Islander, and Two or more races. Black includes African American and Hispanic includes Latino. Race categories exclude Hispanic origin unless specified.

Gender: The gender of the student assessed is taken from school records.

Eligibility for the National School Lunch Program: NAEP first began collecting data in 1996 on student eligibility for NSLP as an indicator of poverty. Based on available school records, students were classified as either currently eligible for the free/reduced-price school lunch or not eligible. Eligibility for free and reduced-price lunches is determined by students' family income in relation to the federally established poverty level. Students from families with incomes at or below 130 percent of the poverty level qualify to receive free lunches and those from families with incomes between 130 and 185 percent of the poverty level qualify to receive reduced-price lunch. For the period July 1, 2018, through June 30, 2019, for a family of four, 130 percent of the poverty level is \$32,630 and 185 percent is \$46,435.

The classification applies only to the school year when the assessment was administered (i.e., the 2018–19 school year) and is not based on eligibility in previous years. If school records were not available, the student was classified as "Information not available." If the school did not participate in the program, all students in that school were classified as Information not available. Because of the improved quality of the data on students' eligibility for NSLP, the percentage of students for whom information was not available has decreased compared to the percentages reported prior to the 2003 assessment.

As a result of the passage of the Healthy, Hunger-Free Kids Act of 2010, schools can use a new universal meal service option, the "Community Eligibility Provision" (CEP). Through CEP, eligible schools can provide meal service to all students at no charge, regardless of economic status and without the need to collect eligibility data through household applications. CEP became available nationwide in the 2014-2015 school year; as a result, the percentage of students in many states categorized as eligible for NSLP may have increased in comparison to 2013. Therefore, readers should interpret NSLP trend results with caution.

Type of Location: Results for four mutually exclusive categories of school location are also reported: city, suburb, town, and rural. The categories are 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 classification system was revised for 2007; therefore, trend comparisons to previous years are not available. The new locale codes are based on an address's proximity to an urbanized area (a densely settled core with densely settled surrounding areas). This is a change from the original system based on metropolitan statistical areas. To distinguish the two systems, the new system is referred to as "urban-centric locale codes."

Parental Education: Eighth-graders were asked the following two questions, the responses to which were combined to derive the parental education variable:

How far in school did your mother go?

- She did not finish high school.
- She graduated from high school.
- She had some education after high school.

- · She graduated from college.
- I don't know.

How far in school did your father go?

- He did not finish high school.
- · He graduated from high school.
- He had some education after high school.
- · He graduated from college.
- I don't know.

The information was combined into one parental-education reporting variable in the following way:

- If a student indicated the extent of education for only one parent, that level was included in the data. If a student indicated the extent of education for both parents, the higher of the two levels was included in the data.
- If a student responded "I don't know" for both parents, or responded "I don't know" for one parent and did not respond for the other, the parental education level was classified as "I don't know."
- If the student did not respond for either parent, the student was recorded as having provided no response.

Because fourth-graders' responses to the questions tend to be highly variable, the questions are not presented to students at grade 4.

Region of the Country: Prior to 2003, NAEP results were reported for four NAEP-defined regions of the nation: Northeast, Southeast, Central, and West. To align NAEP with other federal data collections, NAEP analysis and reports have used the U.S. Census Bureau's definition of "region" beginning in 2003. The four regions defined by the U.S. Census Bureau are Northeast, South, Midwest, and West. Therefore, trend data by region are not provided for assessment years prior to 2003.

Figure A-1 shows how states are subdivided into these census regions. All 50 states and the District of Columbia are listed. Other jurisdictions, including the Department of Defense Education Activity schools, are not assigned to any region.

Figure A-1.
States/jurisdiction within regions of the country defined by the U.S. Census Bureau

Northeast	South	Midwest	West
Connecticut	Alabama	Illinois	Alaska
Maine	Arkansas	Indiana	Arizona
Massachusetts	Delaware	lowa	California
New Hampshire	District of Columbia	Kansas	Colorado
New Jersey	Florida	Michigan	Hawaii
New York	Georgia	Minnesota	Idaho
Pennsylvania	Kentucky	Missouri	Montana
Rhode Island	Louisiana	Nebraska	Nevada
Vermont	Maryland	North Dakota	New Mexico
	Mississippi	Ohio	Oregon
	North Carolina	South Dakota	Utah
	Oklahoma	Wisconsin	Washington
	South Carolina		Wyoming
	Tennessee		
	Texas		
	Virginia		
	West Virginia		

SOURCE: U.S. Department of Commerce Economics and Statistics Administration, U.S. Census Bureau

Caution in Interpretations

As previously stated, the NAEP mathematics scale makes it possible to examine relationships between students' performance and various background factors that NAEP measures. However, the relationship between achievement and another variable does not reveal its underlying cause, which may be influenced by a number of other variables. Similarly, the assessments do not reflect the influence of unmeasured variables. The results are most useful when considered in combination with other knowledge about the student population and the educational system, such as trends in instruction, changes in the school-age population, and societal demands and expectations.

Caution in interpretation is also warranted for some small population group estimates. At times in this report, smaller population groups show very large increases or decreases across years in average scores; however, it is necessary to interpret such score changes with extreme caution. The effects of exclusion-rate changes for small student groups may be more marked for small groups than they are for the whole population. In addition, standard errors are often quite large around the score estimates for small groups, which in turn means the standard error around the gain is also large.