Appendix A

Technical Procedures for the NAEP 2009 Mathematics Assessment

This appendix provides an overview of some of the technical procedures for the NAEP 2009 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 http://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 2009 National Assessment of Educational Progress* and *Assessment and Item Specifications for the NAEP 2009 Mathematics Assessment* are available on the Governing Board's website at http://www.nagb.org/publications/frameworks.htm.

The frameworks for 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. 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. 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.

The 2005 framework was used in developing the 2007 assessment for grades 4 and 8 (grade 12 was not assessed in 2007) and the 2009 assessment. The only change to the framework for 2009 was the addition of new objectives for grade 12 to report on how well-prepared twelfth-grade students are for postsecondary education and training.

Each question in the 2009 mathematics assessment was classified based on two criteria: mathematical content and mathematical complexity. By considering these two criteria for each question, the framework ensures that NAEP assesses an appropriate balance of content along with a variety of ways of knowing and doing mathematics.

Content Areas: Although the names of the content areas, as well as some of the topics in those areas, may 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 (including computation and the understanding of number concepts)
- Measurement (including use of instruments, application of processes, and concepts of area and volume)
- Geometry (including spatial reasoning and applying geometric properties)
- Data Analysis, Statistics, and Probability (including graphical displays and statistics)
- Algebra (including representations and relationships)

All five content areas apply to each of the three grades assessed. In 2005, the five content areas were collapsed into four for grade 12, combining geometry and measurement because most measurement topics suitable for twelfth-grade students are geometric in nature. Detailed descriptions and specific objectives of each content area are included in the *Mathematics Framework for the 2009 National Assessment of Educational Progress*.

Because of differences in curricular emphasis, the proportion of the assessment devoted to each content area varies by grade (table A-1). For example, there is more emphasis on number properties and operations than on algebra at grade 4. In comparison, the percentage of algebra questions increases at grades 8 and 12, and the percentage of number properties and operations questions decreases. Within each grade, the proportion of questions for each content area has also changed in relation to changes in the framework over time.

Table A-1. Target percentage distribution of NAEP mathematics questions, by grade and content area: Various years, 1990–2009

Grade and content area	1990 and 1992	1996, 2000, and 2003	2005, 2007, and 2009	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
Grade 12 [2]				
Number sense, properties, and operations	†	†	10	Number properties and operations
Measurement	†	†		
			30	Measurement and geometry[3]
Geometry and spatial sense	†	†		
Data analysis, statistics, and probability	†	†	25	Data analysis, statistics, and probability
Algebra and functions	†	†	35	Algebra

† Not applicable. Item distributions from previous years are not comparable because of changes in the framework for grade 12 in 2005.

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

[2] Grade 12 was not assessed in 2003 and 2007.

[3] At grade 12, the five content areas were collapsed into four, with geometry and measurement combined into one.

NOTE: The data analysis, statistics, and probability content area was called data analysis and probability in the 2005 and 2007 frameworks.

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

Complexity: The three levels of mathematical complexity—low, moderate, and high—form an ordered description of the demands a question makes on a student's thinking. Questions with a low level of complexity, for example, may ask students to recall a property. At the moderate level, a question may ask the student to make a connection between two properties, and questions at the high level may ask students to analyze the assumptions made in a mathematical model. Using the dimension of complexity to describe each question allows for a balance of mathematical thinking in the design of the assessment.

Content of the 2009 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 items that collect information from students, teachers, and school administrators about background variables that are related to student achievement. Both the cognitive and noncognitive items are developed through a process that includes reviews by external advisory groups and field-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 2009 mathematics assessment was made up of 159 cognitive questions at fourth grade, 159 questions at eighth grade, and 164 questions at twelfth grade. The number of questions 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 percentage distribution of questions administered from 1990 to 2009 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, 1990–2009

Grade and question type	1990	1992	1996	2000	2003	2005	2007	2009
Grade 4								
Multiple-choice	71	61	51	60	63	64	69	68
Short constructed-response	29	36	41	34	33	32	27	27
Extended constructed-response	0	3	8	6	4	4	4	5
Grade 8								
Multiple-choice	78	62	56	63	65	69	74	72
Short constructed-response	22	34	38	32	29	28	23	23
Extended constructed-response	0	3	7	6	5	4	4	4
Grade 12								
Multiple-choice	†	†	†	†	—	67	—	66
Short constructed-response	†	†	†	†	—	28	—	27
Extended constructed-response	†	†	†	†	—	5	—	7

— Not available. Data were not collected at grade 12 in 2003 and 2007.

† Not applicable. Item distributions from previous years are not comparable because of changes in the framework for grade 12 in 2005.

NOTE: 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, 1990–2009 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 2009, there were a total of 10 cognitive blocks at fourth grade, 10 blocks at eighth grade, and 12 blocks at twelfth grade. Each mathematics assessment booklet contained two separately timed 25-minute blocks. Each block contained between 13 and 19 questions depending on the balance between multiple-choice 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 http://nces.ed.gov/nationsreportcard/itmrls/. Questions released from the 2005, 2007, and 2009 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 and question type.

NAEP Samples

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

The 2005–06 Common Core of Data (CCD) file, a comprehensive list of operating public schools in each jurisdiction that is compiled each school year by the National Center for Education Statistics, served as the sampling frame for the selection of public schools in each state/jurisdiction. The sample of students in districts participating in the Trial Urban District Assessment (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, and the state samples are included as part of the national sample.

The 2005–06 Private School Survey (PSS), a mail survey of all U.S. private schools carried out biennially by the Census Bureau under contract to NCES, served 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 public and private schools. Although information about the combined public and private school national samples is provided here for context, perfomance results in the State Report Generator and the District Report Generator are for public school students only.

Table A-3 shows the target populations and sample sizes in 2009 for the nation and participating states and jurisdictions at grades 4 and 8.

Because each school that participated in the assessment, and each student assessed, represents only a portion of the larger population of interest, the results are weighted to make appropriate inferences between the student samples and the respective populations from which they are drawn. Sampling weights are adjusted 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, 8, and 12, by state/jurisdiction: 2009

	Grade 4		Grade 8		Grade 12	
State/jurisdiction	Sample size	Target population	Sample size	Target population	Sample size	Target population
Nation	**173,300**	**3,824,000**	**167,300**	**3,849,000**	**TBA**	**TBA**
Public	167,300	3,485,000	161,700	3,504,000	TBA	TBA
Private	2,800	330,000	3,100	337,000	TBA	TBA
Alabama	2,700	56,000	2,800	53,000	TBA	TBA
Alaska	2,600	9,000	2,500	9,000	TBA	TBA
Arizona	3,100	78,000	3,000	73,000	TBA	TBA
Arkansas	2,800	37,000	2,600	33,000	TBA	TBA
California	7,600	444,000	7,300	469,000	TBA	TBA
Colorado	2,700	55,000	2,800	54,000	TBA	TBA
Connecticut	2,800	41,000	2,800	42,000	TBA	TBA
Delaware	2,900	9,000	2,800	9,000	TBA	TBA
Florida	4,800	186,000	4,500	180,000	TBA	TBA
Georgia	4,100	117,000	3,600	109,000	TBA	TBA
Hawaii	2,800	13,000	2,900	12,000	TBA	TBA
Idaho	3,100	21,000	3,000	20,000	TBA	TBA
Illinois	4,300	146,000	4,300	154,000	TBA	TBA
Indiana	2,800	76,000	2,800	77,000	TBA	TBA
Iowa	2,900	34,000	2,700	33,000	TBA	TBA
Kansas	3,100	34,000	2,800	33,000	TBA	TBA
Kentucky	3,900	48,000	3,800	47,000	TBA	TBA
Louisiana	3,000	53,000	2,600	45,000	TBA	TBA
Maine	2,700	13,000	2,700	14,000	TBA	TBA
Maryland	3,600	56,000	3,500	58,000	TBA	TBA
Massachusetts	3,900	71,000	3,800	72,000	TBA	TBA
Michigan	3,500	117,000	3,500	117,000	TBA	TBA
Minnesota	3,400	62,000	3,000	60,000	TBA	TBA
Mississippi	2,900	39,000	2,900	37,000	TBA	TBA
Missouri	2,700	63,000	2,700	64,000	TBA	TBA
Montana	2,700	10,000	2,700	11,000	TBA	TBA
Nebraska	3,100	21,000	2,800	20,000	TBA	TBA
Nevada	3,100	32,000	2,900	32,000	TBA	TBA
New Hampshire	2,800	15,000	2,600	15,000	TBA	TBA
New Jersey	2,900	102,000	2,900	100,000	TBA	TBA
New Mexico	2,900	25,000	2,600	23,000	TBA	TBA
New York	4,100	194,000	3,900	198,000	TBA	TBA
North Carolina	4,500	105,000	4,500	112,000	TBA	TBA
North Dakota	2,100	7,000	2,300	7,000	TBA	TBA
Ohio	3,600	126,000	3,800	129,000	TBA	TBA
Oklahoma	3,000	46,000	2,800	44,000	TBA	TBA
Oregon	2,900	39,000	2,900	42,000	TBA	TBA
Pennsylvania	3,800	121,000	3,700	127,000	TBA	TBA
Rhode Island	2,500	10,000	2,800	11,000	TBA	TBA
South Carolina	3,000	53,000	2,900	50,000	TBA	TBA
South Dakota	2,800	9,000	2,900	9,000	TBA	TBA
Tennessee	3,000	75,000	3,000	75,000	TBA	TBA
Texas	6,500	318,000	6,100	322,000	TBA	TBA
Utah	3,400	42,000	3,000	38,000	TBA	TBA
Vermont	2,700	6,000	2,900	7,000	TBA	TBA
Virginia	3,000	86,000	2,900	90,000	TBA	TBA
Washington	3,300	75,000	2,900	75,000	TBA	TBA
West Virginia	2,800	20,000	3,000	23,000	TBA	TBA
Wisconsin	4,000	59,000	3,600	61,000	TBA	TBA
Wyoming	2,000	7,000	1,900	6,000	TBA	TBA
Other jurisdictions						
BIE[1]	1,100	3,000	800	2,000	TBA	TBA
District of Columbia	1,900	4,000	1,800	4,000	TBA	TBA
DoDEA[2]	2,100	7,000	1,600	5,000	TBA	TBA

— Not available. The state/jurisdiction did not participate.

[1] Bureau of Indian Education.

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

TBA = to be announced. Data for grade 12 will be published at a later date.

NOTE: 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 nation total, but not in the nation (public) total. Data for the District of Columbia public schools are counted, along with the states, in nation (public). 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), 2009 Mathematics Assessment.

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: 2009

District	Grade 4		Grade 8	
	Sample size	Target population	Sample size	Target population
Atlanta	TBA	TBA	TBA	TBA
Austin	TBA	TBA	TBA	TBA
Baltimore	TBA	TBA	TBA	TBA
Boston	TBA	TBA	TBA	TBA
Charlotte	TBA	TBA	TBA	TBA
Chicago	TBA	TBA	TBA	TBA
Cleveland	TBA	TBA	TBA	TBA
Detroit	TBA	TBA	TBA	TBA
District of Columbia	TBA	TBA	TBA	TBA
Fresno	TBA	TBA	TBA	TBA
Houston	TBA	TBA	TBA	TBA
Jefferson County (KY)	TBA	TBA	TBA	TBA
Los Angeles	TBA	TBA	TBA	TBA
Miami-Dade	TBA	TBA	TBA	TBA
Milwaukee	TBA	TBA	TBA	TBA
New York City	TBA	TBA	TBA	TBA
Philadelphia	TBA	TBA	TBA	TBA
San Diego	TBA	TBA	TBA	TBA

TBA = to be announced. Data for participating districts will be published at a later date.

NOTE: The sample size is rounded to the nearest hundred. The target population is rounded to the nearest thousand.

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

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 2009 mathematics assessment are presented in table A-5. Student-weighted school participation rates were 97 percent for grade 4 (100 percent for public schools and 73 percent for private schools) and 97 percent for grade 8 (100 percent for public schools and 72 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 2009, 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-8).

Table A-5. National school and student participation rates in NAEP mathematics, by grade and type of school: 2009

	School participation					Student participation	
	Student-weighted		School-weighted				
Grade and type of school	Percent before substitution	Percent after substitution	Percent before substitution	Percent after substitution	Number of schools participating after substitution	Student-weighted percent	Number of students assessed
Grade 4							
Nation	97	98	91	95	9,510	95	168,800
Public	100	100	100	100	8,920	95	163,000
Private	73	85	68	80	370	96	2,800
Grade 8							
Nation	97	98	87	92	7,030	93	161,700
Public	100	100	100	100	6,520	92	156,200
Private	72	83	68	80	360	95	3,100
Grade 12							
TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA
TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA
TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA

TBA = to be announced. Data for grade 12 will be published at a later date.

NOTE: 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 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.

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

Table A-6. Public school and student participation rates in NAEP mathematics at grade 4, by state/jurisdiction: 2009

State/jurisdiction	School participation			Student participation	
	Student-weighted percent	School-weighted percent	Number of schools participating	Student-weighted percent	Number of students assessed
Nation (public)	**100**	**100**	**8,920**	**95**	**163,000**
Alabama	100	100	130	98	2,700
Alaska	96	89	160	98	2,600
Arizona	100	100	140	98	3,100
Arkansas	100	100	140	98	2,800
California	100	100	310	98	7,400
Colorado	100	100	150	98	2,700
Connecticut	100	100	130	98	2,700
Delaware	100	100	100	98	2,800
Florida	100	100	180	94	4,700
Georgia	100	100	170	95	4,000
Hawaii	100	100	140	94	2,800
Idaho	100	100	160	96	3,100
Illinois	100	100	230	95	4,100
Indiana	100	100	140	95	2,800
Iowa	100	100	180	95	2,800
Kansas	100	100	150	96	3,000
Kentucky	100	100	190	95	3,800
Louisiana	100	100	150	95	2,900
Maine	100	100	200	93	2,700
Maryland	99	99	200	95	3,400
Massachusetts	97	99	210	94	3,700
Michigan	100	100	190	94	3,400
Minnesota	100	99	170	95	3,300
Mississippi	100	100	130	96	2,900
Missouri	100	100	160	95	2,600
Montana	100	98	240	94	2,700
Nebraska	100	100	170	96	3,000
Nevada	100	100	130	95	3,000
New Hampshire	99	99	160	94	2,700
New Jersey	100	100	140	94	2,900
New Mexico	100	100	160	94	2,800
New York	100	100	180	94	4,100
North Carolina	100	100	190	95	4,400
North Dakota	100	100	250	96	2,000
Ohio	100	100	210	94	3,400
Oklahoma	100	100	180	96	2,900
Oregon	100	100	170	93	2,800
Pennsylvania	100	100	190	95	3,600
Rhode Island	100	100	150	94	2,500
South Carolina	100	100	130	94	2,900
South Dakota	100	100	290	96	2,700
Tennessee	100	100	140	94	2,900
Texas	100	100	270	95	6,300
Utah	100	100	150	95	3,300
Vermont	100	100	220	95	2,700
Virginia	100	100	130	95	2,900
Washington	100	100	160	94	3,200
West Virginia	100	100	190	95	2,800
Wisconsin	99	99	240	95	3,800
Wyoming	100	100	160	94	2,000
Other jurisdictions					
District of Columbia	100	100	120	95	1,800
DoDEA[1]	99	98	110	92	2,000

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

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

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

Table A-7. Public school and student participation rates in NAEP mathematics at grade 8, by state/jurisdiction: 2009

State/jurisdiction	School participation			Student participation	
	Student-weighted percent	School-weighted percent	Number of schools participating	Student-weighted percent	Number of students assessed
Nation (public)	**100**	**100**	**6,520**	**92**	**156,200**
Alabama	100	100	110	94	2,700
Alaska	98	88	100	90	2,400
Arizona	100	100	130	93	2,900
Arkansas	100	100	120	92	2,600
California	100	100	230	92	7,100
Colorado	100	100	120	93	2,700
Connecticut	100	100	110	91	2,800
Delaware	100	100	50	91	2,700
Florida	100	100	160	91	4,300
Georgia	100	100	120	93	3,500
Hawaii	100	100	70	92	2,800
Idaho	100	100	110	94	3,000
Illinois	100	100	200	94	4,100
Indiana	100	100	110	93	2,600
Iowa	100	100	130	94	2,600
Kansas	99	99	120	93	2,700
Kentucky	100	100	130	94	3,700
Louisiana	100	100	120	92	2,600
Maine	100	100	130	92	2,700
Maryland	100	100	130	92	3,200
Massachusetts	100	100	140	92	3,600
Michigan	100	100	150	93	3,400
Minnesota	100	100	140	92	2,900
Mississippi	100	100	120	94	2,800
Missouri	100	100	130	93	2,700
Montana	100	98	170	91	2,600
Nebraska	100	100	120	95	2,700
Nevada	100	100	90	91	2,800
New Hampshire	96	96	90	89	2,500
New Jersey	100	100	110	93	2,800
New Mexico	100	100	110	90	2,500
New York	97	98	150	90	3,800
North Carolina	100	100	150	93	4,400
North Dakota	100	100	180	95	2,200
Ohio	100	100	190	93	3,500
Oklahoma	100	100	150	93	2,600
Oregon	100	100	130	93	2,900
Pennsylvania	100	100	150	92	3,600
Rhode Island	100	100	60	92	2,700
South Carolina	100	100	110	94	2,800
South Dakota	100	100	220	95	2,800
Tennessee	100	100	120	94	2,900
Texas	99	100	170	92	5,800
Utah	100	100	110	91	2,900
Vermont	100	100	120	92	2,800
Virginia	100	100	110	93	2,800
Washington	100	100	130	92	2,800
West Virginia	100	100	120	93	2,900
Wisconsin	99	99	170	93	3,500
Wyoming	100	100	80	91	1,900
Other jurisdictions					
District of Columbia	100	100	60	87	1,700
DoDEA[1]	99	97	60	92	1,600

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

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

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

Table A-8. Public school and student participation rates in NAEP mathematics at grade 12, by state/jurisdiction: 2009

State/jurisdiction	School participation			Student participation	
	Student-weighted percent	School-weighted percent	Number of schools participating	Student-weighted percent	Number of students assessed
Nation (public)	**TBA**	**TBA**	**TBA**	**TBA**	**TBA**
Arkansas	TBA	TBA	TBA	TBA	TBA
Connecticut	TBA	TBA	TBA	TBA	TBA
Florida	TBA	TBA	TBA	TBA	TBA
Idaho	TBA	TBA	TBA	TBA	TBA
Illinois	TBA	TBA	TBA	TBA	TBA
Iowa	TBA	TBA	TBA	TBA	TBA
Massachusetts	TBA	TBA	TBA	TBA	TBA
New Hampshire	TBA	TBA	TBA	TBA	TBA
New Jersey	TBA	TBA	TBA	TBA	TBA
South Dakota	TBA	TBA	TBA	TBA	TBA
West Virginia	TBA	TBA	TBA	TBA	TBA

TBA = to be announced. Data for grade 12 will be published at a later date.

NOTE: The number of schools is rounded to the nearest ten. The number of students is rounded to the nearest hundred. Columns of percentages have different denominators. Detail may not sum to totals because of rounding. The school participation rates are student-weighted percentages before substitution. Eleven states volunteered for tha assessment and met the reporting criteria.

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

Table A-9. Public school and student participation rates for Trial Urban District Assessment (TUDA) in mathematics, by grade and urban district: 2009

Grade and district	School participation		Student participation	
	Student-weighted percent	Number of schools participating	Student-weighted percent	Number of students assessed
Grade 4				
Atlanta	TBA	TBA	TBA	TBA
Austin	TBA	TBA	TBA	TBA
Baltimore	TBA	TBA	TBA	TBA
Boston	TBA	TBA	TBA	TBA
Charlotte	TBA	TBA	TBA	TBA
Chicago	TBA	TBA	TBA	TBA
Cleveland	TBA	TBA	TBA	TBA
Detroit	TBA	TBA	TBA	TBA
District of Columbia	TBA	TBA	TBA	TBA
Fresno	TBA	TBA	TBA	TBA
Houston	TBA	TBA	TBA	TBA
Jefferson County (KY)	TBA	TBA	TBA	TBA
Los Angeles	TBA	TBA	TBA	TBA
Miami-Dade	TBA	TBA	TBA	TBA
Milwaukee	TBA	TBA	TBA	TBA
New York City	TBA	TBA	TBA	TBA
Philadelphia	TBA	TBA	TBA	TBA
San Diego	TBA	TBA	TBA	TBA
Grade 8				
Atlanta	TBA	TBA	TBA	TBA
Austin	TBA	TBA	TBA	TBA
Baltimore	TBA	TBA	TBA	TBA
Boston	TBA	TBA	TBA	TBA
Charlotte	TBA	TBA	TBA	TBA
Chicago	TBA	TBA	TBA	TBA
Cleveland	TBA	TBA	TBA	TBA
Detroit	TBA	TBA	TBA	TBA
District of Columbia	TBA	TBA	TBA	TBA
Fresno	TBA	TBA	TBA	TBA
Houston	TBA	TBA	TBA	TBA
Jefferson County (KY)	TBA	TBA	TBA	TBA
Los Angeles	TBA	TBA	TBA	TBA
Miami-Dade	TBA	TBA	TBA	TBA
Milwaukee	TBA	TBA	TBA	TBA
New York City	TBA	TBA	TBA	TBA
Philadelphia	TBA	TBA	TBA	TBA
San Diego	TBA	TBA	TBA	TBA

TBA = to be announced. Data for participating districts will be published at a later date.

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. The percentages for school-weighted and student-weighted school participation were both at 100 percent for the participating districts in 2009.

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

Inclusion of Students With Disabilities and/or English Language Learners

Testing all sampled students is the best way for NAEP to ensure that results are as representative as possible of the performance of students in the nation and in participating states/jurisdictions and districts. NAEP has always endeavored to assess all students selected as a part of its sampling process, including students who are classified by their schools as students with disabilities (SD) and/or as English language learners (ELL).

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 2009 are presented in table A-10. Students assessed with accommodations typically received some combination of accommodations. In contrast to earlier assessment years 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 2009. 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-10.

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-10. Percentage of fourth-, eighth-, and twelfth-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 primary accommodation: 2009

	Grade 4			Grade 8			Grade 12		
Type of accommodation	**SD and/or ELL**	**SD**	**ELL**	**SD and/or ELL**	**SD**	**ELL**	**SD and/or ELL**	**SD**	**ELL**
Bilingual book	0.4	#	0.4	0.1	#	0.1	TBA	TBA	TBA
Bilingual dictionary	0.5	#	0.5	0.5	0.1	0.5	TBA	TBA	TBA
Large-print book	#	#	#	#	#	#	TBA	TBA	TBA
Extended time	9.0	6.8	2.8	7.9	6.8	1.6	TBA	TBA	TBA
Read aloud	6.1	4.9	1.6	3.9	3.4	0.7	TBA	TBA	TBA
Small group	8.3	6.5	2.3	6.8	6.1	1.1	TBA	TBA	TBA
One-on-one	0.7	0.6	0.1	0.2	0.2	#	TBA	TBA	TBA
Scribe/computer	0.4	0.4	#	0.2	0.2	#	TBA	TBA	TBA
Breaks	3.7	3.0	1.0	2.3	2.0	0.5	TBA	TBA	TBA
Magnifying device	#	#	#	#	#	#	TBA	TBA	TBA
School staff administers	0.6	0.5	0.1	0.4	0.3	0.1	TBA	TBA	TBA
Directions read aloud in Spanish	0.3	#	0.3	0.2	0.1	0.2	TBA	TBA	TBA
Braille version of the text	#	#	#	#	#	#	TBA	TBA	TBA
Other	1.1	0.9	0.2	1.0	0.9	0.2	TBA	TBA	TBA

— Not available.

Rounds to zero.

TBA = to be announced. Data for grade 12 will be published at a later date.

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.

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

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.

Jurisdictions vary in their proportions of special-needs students. These variations, as well as differences in policies and practices regarding the identification and inclusion of special-needs 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): In the 1992 national sample, when accommodations were not permitted, 9 percent of fourth- and eighth-graders were identified as SD and/or ELL and 6 percent were excluded at each grade (table A-11). In 2009, between 17 and 21 percent of students across the two grades were identified as SD and/or ELL, with 2 percent excluded at grade 4, and 3 percent excluded at grade 8 (table A-12). The percentage of SD and/or ELL students assessed with accommodations in 2009 ranged from 9 percent at grade 8 to 10 percent at grade 4. (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. The proportions of SD and/or ELL students excluded and assessed with and without accommodations as a percentage of students identified are provided in table A-13.)

State Exclusion Rates (public school students only): Across the states/jurisdictions that participated in the 1992 mathematics assessment at grade 4, the percentage of students identified as SD and/or ELL ranged from 7 to 28 percent, and the percentage excluded ranged from 2 to 12 percent (table A-14). In comparison, the state percentages of fourth-graders identified as SD and/or ELL in 2009 ranged from 10 to 36 percent, and exclusion rates ranged from 1 to 5 percent (table A-15).

Across the states/jurisdictions that participated in the 1990 mathematics assessment at grade 8, the percentage of students identified as SD and/or ELL ranged from 6 to 15 percent, and the percentage excluded ranged from 2 to 7 percent (table A-16). In comparison, the state percentages of eighth-graders identified as SD and/or ELL in 2009 ranged from 10 to 25 percent, and exclusion rates ranged from 1 to 7 percent (table A-17).

Rates by state are reported separately for SD and ELL students at each grade in tables A-19 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-31.

Table A-11. Percentage of fourth-, eighth-, and twelfth-grade public and nonpublic school students identified as students with disabilities (SD) and/or English language learners (ELL), and percentage 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
Excluded	6	6
Assessed	3	8
SD		
Identified	7	11
Excluded	4	5
Assessed	3	6
ELL		
Identified	3	3
Excluded	2	1
Assessed	1	2
Grade 8		
SD and/or ELL		
Identified	9	11
Excluded	6	4
Assessed	4	6
SD		
Identified	7	9
Excluded	4	4
Assessed	3	5
ELL		
Identified	2	3
Excluded	2	1
Assessed	1	2
Grade 12		
SD and/or ELL		
Identified	TBA	TBA
Excluded	TBA	TBA
Assessed	TBA	TBA
SD		
Identified	TBA	TBA
Excluded	TBA	TBA
Assessed	TBA	TBA
ELL		
Identified	TBA	TBA
Excluded	TBA	TBA
Assessed	TBA	TBA

Rounds to zero.

TBA = to be announced. Data for grade 12 will be published at a later date.

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), 1992 and 1996 Mathematics Assessments.

Table A-12. Percentage of fourth-, eighth-, and twelfth-grade public and nonpublic school students identified as students with disabilities (SD) and/or English language learners (ELL), and percentage excluded and assessed in NAEP mathematics when accommodations were permitted: Various years, 1996–2009

Grade and SD/ELL category	1996	2000	2003	2005	2007	2009
Grade 4						
SD and/or ELL						
Identified	15	18	21	21	21	21
Excluded	4	4	4	3	3	2
Assessed	11	14	17	18	19	19
Without accommodations	7	9	9	9	9	8
With accommodations	5	5	8	9	10	10
SD						
Identified	10	12	13	13	13	13
Excluded	3	3	3	2	2	2
Assessed	7	9	10	10	10	11
Without accommodations	4	5	4	3	3	3
With accommodations	4	4	6	7	7	8
ELL						
Identified	6	7	10	10	10	10
Excluded	1	1	1	1	1	1
Assessed	5	6	8	8	9	9
Without accommodations	3	4	6	6	6	6
With accommodations	2	1	2	2	3	3
Grade 8						
SD and/or ELL						
Identified	12	13	17	17	17	17
Excluded	3	4	3	3	4	3
Assessed	8	10	14	14	13	14
Without accommodations	6	7	7	6	6	5
With accommodations	3	3	6	8	7	9
SD						
Identified	9	10	13	12	12	12
Excluded	3	3	3	3	3	3
Assessed	6	7	10	10	8	9
Without accommodations	4	5	4	3	2	2
With accommodations	2	2	6	7	6	8
ELL						
Identified	3	4	6	6	6	5
Excluded	1	1	1	1	1	#
Assessed	2	3	5	5	5	5
Without accommodations	2	2	4	4	4	3
With accommodations	#	1	1	1	2	2
Grade 12						
SD and/or ELL						
Identified	TBA	TBA	TBA	TBA	TBA	TBA
Excluded	TBA	TBA	TBA	TBA	TBA	TBA
Assessed	TBA	TBA	TBA	TBA	TBA	TBA
Without accommodations	TBA	TBA	TBA	TBA	TBA	TBA
With accommodations	TBA	TBA	TBA	TBA	TBA	TBA
SD						
Identified	TBA	TBA	TBA	TBA	TBA	TBA
Excluded	TBA	TBA	TBA	TBA	TBA	TBA
Assessed	TBA	TBA	TBA	TBA	TBA	TBA
Without accommodations	TBA	TBA	TBA	TBA	TBA	TBA
With accommodations	TBA	TBA	TBA	TBA	TBA	TBA
ELL						
Identified	TBA	TBA	TBA	TBA	TBA	TBA
Excluded	TBA	TBA	TBA	TBA	TBA	TBA
Assessed	TBA	TBA	TBA	TBA	TBA	TBA
Without accommodations	TBA	TBA	TBA	TBA	TBA	TBA
With accommodations	TBA	TBA	TBA	TBA	TBA	TBA

— Not available. Grade 12 was not assessed in 2003 and 2007.

Rounds to zero.

TBA = to be announced. Data for grade 12 will be published at a later date.

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, 1996–2009 Mathematics Assessments.

Table A-13. Percentage of fourth-, eighth-, and twelfth-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 all identified SD and/or ELL students, by grade and SD/ELL category: 2009

	Percentage of identified SD and/or ELL students			
Grade and SD/ELL category	Excluded	Assessed	Assessed without accommodations	Assessed with accommodations
Grade 4				
SD and/or ELL	10	90	40	50
SD	15	85	23	62
ELL	6	94	59	35
Grade 8				
SD and/or ELL	17	83	29	54
SD	22	78	15	63
ELL	8	92	58	34
Grade 12				
SD and/or ELL	TBA	TBA	TBA	TBA
SD	TBA	TBA	TBA	TBA
ELL	TBA	TBA	TBA	TBA

TBA = to be announced. Data for grade 12 will be published at a later date.

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), 2009 Mathematics Assessment.

Table A-14. Percentage of fourth-grade public school students identified as students with disabilities and/or English language learners, and percentage 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
Iowa	9	3	6	13	6	7	15	10	5
Kansas	—	—	—	—	—	—	16	7	9
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	—	—	—
West Virginia	9	4	4	13	8	5	13	10	3
Wisconsin	11	5	5	12	8	4	19	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. The state/jurisdiction did not participate or did not meet the minimum participation guidelines for reporting.

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

NOTE: 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.

Table A-15. Percentage of fourth-grade public school students identified as students with disabilities and/or English language learners, and percentage excluded and assessed in NAEP mathematics when accommodations were permitted, by state/jurisdiction: Various years, 2000–2009

State/jurisdiction	2000 Identified	2000 Excluded	2000 Assessed	2000 Assessed without accommodations	2000 Assessed with accom-modations	2003 Identified	2003 Excluded	2003 Assessed	2003 Assessed without accommodations	2003 Assessed with accom-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
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
Iowa	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
Louisiana	16	3	13	2	11	22	3	19	3	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 Columbia	19	5	14	7	7	18	4	14	4	10
DoDEA[1]	11	3	8	4	4	14	1	13	6	7

See notes at end of table.

Table A-15. Percentage of fourth-grade public school students identified as students with disabilities and/or English language learners, and percentage excluded and assessed in NAEP mathematics when accommodations were permitted, by state/jurisdiction: Various years, 2000–2009—Continued

State/jurisdiction	2005 Identified	2005 Excluded	2005 Assessed	2005 Assessed without accommodations	2005 Assessed with accom-modations	2007 Identified	2007 Excluded	2007 Assessed	2007 Assessed without accommodations	2007 Assessed with accom-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	10
Indiana	18	2	16	5	11	22	3	19	7	12
Iowa	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
New Hampshire	22	2	20	5	14	21	2	18	4	14
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 Columbia	20	6	14	4	10	20	6	14	2	13
DoDEA[1]	17	2	15	6	8	17	2	15	6	9

See notes at end of table.

Table A-15. Percentage of fourth-grade public school students identified as students with disabilities and/or English language learners, and percentage excluded and assessed in NAEP mathematics when accommodations were permitted, by state/jurisdiction: Various years, 2000–2009—Continued

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

— Not available. The state/jurisdiction did not participate or did not meet the minimum participation guidelines for reporting.

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

NOTE: 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, 2000–2009 Mathematics Assessments.

Table A-16. Percentage of eighth-grade public school students identified as students with disabilities and/or English language learners, and percentage 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
Iowa	10	4	6	11	4	6	13	5	7	—	—	—
Kansas	—	—	—	—	—	—	—	—	—	14	6	8
Kentucky	7	5	3	9	5	4	9	5	5	14	9	4
Louisiana	6	4	2	7	4	3	10	6	4	13	6	7
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	13	4	9
Other jurisdictions												
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. The state/jurisdiction did not participate or did not meet the minimum participation guidelines for reporting.

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

NOTE: 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.

Table A-17. Percentage of eighth-grade public school students identified as students with disabilities and/or English language learners, and percentage excluded and assessed in NAEP mathematics when accommodations were permitted, by state/jurisdiction: Various years, 2000–2009

State/jurisdiction	2000 Identified	2000 Excluded	2000 Assessed	2000 Assessed without accommodations	2000 Assessed with accommodations	2003 Identified	2003 Excluded	2003 Assessed	2003 Assessed without accommodations	2003 Assessed with accommodations
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
Iowa	—	—	—	—	—	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	—	—	—	—	—	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
North Dakota	11	2	9	8	2	16	1	14	7	7
Ohio	11	4	7	4	3	13	5	8	3	5
Oklahoma	15	4	11	8	3	19	2	17	10	7
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 Columbia	15	6	9	3	6	20	6	14	5	9
DoDEA[1]	9	1	8	6	2	11	1	10	4	6

See notes at end of table.

Table A-17. Percentage of eighth-grade public school students identified as students with disabilities and/or English language learners, and percentage excluded and assessed in NAEP mathematics when accommodations were permitted, by state/jurisdiction: Various years, 2000–2009—Continued

State/jurisdiction	2005 Identified	2005 Excluded	2005 Assessed	2005 Assessed without accommodations	2005 Assessed with accom-modations	2007 Identified	2007 Excluded	2007 Assessed	2007 Assessed without accommodations	2007 Assessed with accom-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
Idaho	17	2	15	8	7	15	2	13	7	7
Illinois	18	3	14	4	11	18	6	12	3	9
Indiana	17	4	13	3	10	18	6	13	3	9
Iowa	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
Nevada	19	2	17	10	7	20	4	17	9	8
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
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 Columbia	19	6	14	2	11	21	10	11	3	8
DoDEA[1]	13	2	11	4	7	12	2	10	3	7

See notes at end of table.

Table A-17. Percentage of eighth-grade public school students identified as students with disabilities and/or English language learners, and percentage excluded and assessed in NAEP mathematics when accommodations were permitted, by state/jurisdiction: Various years, 2000–2009—Continued

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

— Not available. The state/jurisdiction did not participate or did not meet the minimum participation guidelines for reporting.

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

NOTE: 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, 2000–2009 Mathematics Assessments.

Table A-18. Percentage of twelfth-grade public school students identified as students with disabilities and/or English language learners, and percentage excluded and assessed in NAEP mathematics when accommodations were permitted, by state/jurisdiction: 2009

State/jurisdiction	Identified	Excluded	Assessed	Assessed without accommodations	Assessed with accommodations
Nation (public)	**TBA**	**TBA**	**TBA**	**TBA**	**TBA**
Arkansas	TBA	TBA	TBA	TBA	TBA
Connecticut	TBA	TBA	TBA	TBA	TBA
Florida	TBA	TBA	TBA	TBA	TBA
Idaho	TBA	TBA	TBA	TBA	TBA
Illinois	TBA	TBA	TBA	TBA	TBA
Iowa	TBA	TBA	TBA	TBA	TBA
Massachusetts	TBA	TBA	TBA	TBA	TBA
New Hampshire	TBA	TBA	TBA	TBA	TBA
New Jersey	TBA	TBA	TBA	TBA	TBA
South Dakota	TBA	TBA	TBA	TBA	TBA
West Virginia	TBA	TBA	TBA	TBA	TBA

TBA = to be announced. Data for grade 12 will be published at a later date.

NOTE: 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), 2009 Mathematics Assessment.

Table A-19. Percentage of fourth-grade public school students identified as students with disabilities, and percentage 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
Idaho	8	3	5	—	—	—	12	5	6
Illinois	—	—	—	—	—	—	11	7	4
Indiana	6	3	3	11	5	6	11	6	4
Iowa	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
North Carolina	11	3	8	13	6	6	14	12	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									
District of Columbia	8	7	1	9	7	1	14	7	7
DoDEA[1]	—	—	—	8	4	4	8	4	4

— Not available. The state/jurisdiction did not participate or did not meet the minimum participation guidelines for reporting.

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

NOTE: 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.

Table A-20. Percentage of fourth-grade public school students identified as students with disabilities, and percentage excluded and assessed in NAEP mathematics when accommodations were permitted, by state/jurisdiction: Various years, 2000–2009

State/jurisdiction	2000 Identified	2000 Excluded	2000 Assessed	2000 Assessed without accommodations	2000 Assessed with accom-modations	2003 Identified	2003 Excluded	2003 Assessed	2003 Assessed without accommodations	2003 Assessed with accom-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	—	—	—	—	—	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
Iowa	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
North Dakota	11	1	9	5	4	15	2	14	6	7
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
Other jurisdictions										
District of Columbia	13	3	10	5	5	13	4	10	2	7
DoDEA[1]	8	2	6	3	4	10	1	9	2	6

See notes at end of table.

Table A-20. Percentage of fourth-grade public school students identified as students with disabilities, and percentage excluded and assessed in NAEP mathematics when accommodations were permitted, by state/jurisdiction: Various years, 2000–2009—Continued

State/jurisdiction	2005 Identified	2005 Excluded	2005 Assessed	2005 Assessed without accommodations	2005 Assessed with accommodations	2007 Identified	2007 Excluded	2007 Assessed	2007 Assessed without accommodations	2007 Assessed with accommodations
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
Iowa	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
Michigan	14	4	11	3	7	13	3	10	4	7
Minnesota	13	2	11	5	6	13	2	12	4	7
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 Columbia	16	5	11	2	8	14	5	9	1	8
DoDEA[1]	10	1	9	2	7	11	1	10	3	7

See notes at end of table.

Table A-20. Percentage of fourth-grade public school students identified as students with disabilities, and percentage excluded and assessed in NAEP mathematics when accommodations were permitted, by state/jurisdiction: Various years, 2000–2009—Continued

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

— Not available. The state/jurisdiction did not participate or did not meet the minimum participation guidelines for reporting.

Rounds to zero.

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

NOTE: 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, 2000–2009 Mathematics Assessments.

Table A-21. Percentage of eighth-grade public school students identified as students with disabilities, and percentage 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)	**—**	**—**	**—**	**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	—	—	—	—	—	—	11	6	5
Indiana	7	5	2	8	4	4	12	5	6	11	7	4
Iowa	9	4	6	10	4	6	12	5	7	—	—	—
Kansas	—	—	—	—	—	—	—	—	—	10	5	5
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	—	—	—	—	—	—	12	4	8	16	9	7
Virginia	8	4	4	10	5	5	12	7	5	14	10	4
Washington	—	—	—	—	—	—	11	5	6	—	—	—
West Virginia	9	5	4	10	6	4	13	8	4	14	11	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. The state/jurisdiction did not participate or did not meet the minimum participation guidelines for reporting.

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

NOTE: 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.

Table A-22. Percentage of eighth-grade public school students identified as students with disabilities, and percentage excluded and assessed in NAEP mathematics when accommodations were permitted, by state/jurisdiction: Various years, 2000–2009

State/jurisdiction	2000 Identified	2000 Excluded	2000 Assessed	2000 Assessed without accommodations	2000 Assessed with accommodations	2003 Identified	2003 Excluded	2003 Assessed	2003 Assessed without accommodations	2003 Assessed with accommodations
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
Iowa	—	—	—	—	—	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
Nevada	12	3	9	5	4	12	2	10	5	5
New Hampshire	—	—	—	—	—	19	3	15	6	9
New Jersey	—	—	—	—	—	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
Utah	10	2	8	6	2	11	2	9	5	4
Vermont	16	3	13	9	4	17	3	15	7	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	9
Other jurisdictions										
District of Columbia	11	5	7	2	4	16	5	11	3	8
DoDEA[1]	6	1	5	4	2	8	1	7	1	5

See notes at end of table.

Table A-22. Percentage of eighth-grade public school students identified as students with disabilities, and percentage excluded and assessed in NAEP mathematics when accommodations were permitted, by state/jurisdiction: Various years, 2000–2009—Continued

State/jurisdiction	2005 Identified	2005 Excluded	2005 Assessed	2005 Assessed without accommodations	2005 Assessed with accom-modations	2007 Identified	2007 Excluded	2007 Assessed	2007 Assessed without accommodations	2007 Assessed with accom-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
Colorado	10	2	9	2	6	10	2	9	1	7
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
Maine	18	4	14	5	8	17	5	12	3	9
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
Vermont	18	4	14	6	8	19	4	15	5	10
Virginia	15	4	10	3	7	14	6	8	2	6
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 Columbia	17	5	12	2	10	17	9	8	2	6
DoDEA[1]	9	1	8	2	5	7	1	7	1	6

See notes at end of table.

Table A-22. Percentage of eighth-grade public school students identified as students with disabilities, and percentage excluded and assessed in NAEP mathematics when accommodations were permitted, by state/jurisdiction: Various years, 2000–2009—Continued

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

— Not available. The state/jurisdiction did not participate or did not meet the minimum participation guidelines for reporting.

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

NOTE: 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, 2000–2009 Mathematics Assessments.

Table A-23. Percentage of twelfth-grade public school students identified as students with disabilities, and percentage excluded and assessed in NAEP mathematics when accommodations were permitted, by state/jurisdiction: 2009

State/jurisdiction	Identified	Excluded	Assessed	Assessed without accommodations	Assessed with accommodations
Nation (public)	**TBA**	**TBA**	**TBA**	**TBA**	**TBA**
Arkansas	TBA	TBA	TBA	TBA	TBA
Connecticut	TBA	TBA	TBA	TBA	TBA
Florida	TBA	TBA	TBA	TBA	TBA
Idaho	TBA	TBA	TBA	TBA	TBA
Illinois	TBA	TBA	TBA	TBA	TBA
Iowa	TBA	TBA	TBA	TBA	TBA
Massachusetts	TBA	TBA	TBA	TBA	TBA
New Hampshire	TBA	TBA	TBA	TBA	TBA
New Jersey	TBA	TBA	TBA	TBA	TBA
South Dakota	TBA	TBA	TBA	TBA	TBA
West Virginia	TBA	TBA	TBA	TBA	TBA

Rounds to zero.

TBA = to be announced. Data for grade 12 will be published at a later date.

NOTE: 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), 2009 Mathematics Assessment.

Table A-24. Percentage of fourth-grade public school students identified as English language learners, and percentage 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	#
Iowa	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									
District of Columbia	4	2	1	6	4	1	6	3	4
DoDEA[1]	—	—	—	2	1	1	3	1	2

— Not available. The state/jurisdiction did not participate or did not meet the minimum participation guidelines for reporting.

Rounds to zero.

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

NOTE: 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.

Table A-25. Percentage of fourth-grade public school students identified as English language learners, and percentage excluded and assessed in NAEP mathematics when accommodations were permitted, by state/jurisdiction: Various years, 2000–2009

State/jurisdiction	2000 Identified	2000 Excluded	2000 Assessed	2000 Assessed without accommodations	2000 Assessed with accommodations	2003 Identified	2003 Excluded	2003 Assessed	2003 Assessed without accommodations	2003 Assessed with accommodations
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
Hawaii	7	3	4	4	#	7	2	5	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	1	1	#	2	1	2	#	1
Montana	#	#	#	#	#	4	#	4	3	1
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	—	—	—	—	—	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 jurisdictions										
District of Columbia	6	2	4	2	2	7	1	5	2	3
DoDEA[1]	3	1	2	2	#	6	1	5	4	2

See notes at end of table.

Table A-25. Percentage of fourth-grade public school students identified as English language learners, and percentage excluded and assessed in NAEP mathematics when accommodations were permitted, by state/jurisdiction: Various years, 2000–2009—Continued

State/jurisdiction	2005 Identified	2005 Excluded	2005 Assessed	2005 Assessed without accommodations	2005 Assessed with accommodations	2007 Identified	2007 Excluded	2007 Assessed	2007 Assessed without accommodations	2007 Assessed with accommodations
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
Iowa	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 Columbia	5	1	4	1	2	8	2	6	1	5
DoDEA[1]	8	1	7	4	2	7	1	5	3	2

See notes at end of table.

Table A-25. Percentage of fourth-grade public school students identified as English language learners, and percentage excluded and assessed in NAEP mathematics when accommodations were permitted, by state/jurisdiction: Various years, 2000–2009—Continued

State/jurisdiction	2009				
	Identified	Excluded	Assessed	Assessed without accommodations	Assessed with accommodations
Nation (public)	**10**	**1**	**10**	**6**	**4**
Alabama	2	#	2	2	#
Alaska	10	#	10	3	7
Arizona	15	#	14	7	8
Arkansas	6	#	5	1	4
California	30	1	28	26	2
Colorado	11	#	10	5	6
Connecticut	6	1	5	1	5
Delaware	4	#	3	#	3
Florida	8	#	7	#	7
Georgia	4	#	4	1	3
Hawaii	10	#	10	4	6
Idaho	5	#	5	3	2
Illinois	8	1	7	2	5
Indiana	4	#	4	1	3
Iowa	5	#	4	1	3
Kansas	9	#	9	5	4
Kentucky	2	#	2	1	1
Louisiana	2	#	2	1	2
Maine	2	#	1	1	1
Maryland	6	1	5	1	4
Massachusetts	7	1	6	5	2
Michigan	3	#	3	2	1
Minnesota	8	1	8	4	4
Mississippi	1	#	1	#	1
Missouri	2	#	2	1	1
Montana	3	#	3	1	1
Nebraska	7	#	6	4	3
Nevada	20	1	20	8	12
New Hampshire	3	#	2	1	2
New Jersey	4	1	3	#	3
New Mexico	17	1	16	7	9
New York	8	1	7	#	7
North Carolina	6	#	5	2	4
North Dakota	2	#	1	1	1
Ohio	2	#	2	1	2
Oklahoma	4	#	4	2	2
Oregon	12	1	11	4	7
Pennsylvania	3	#	3	1	2
Rhode Island	6	1	6	2	3
South Carolina	5	#	5	2	2
South Dakota	2	#	2	1	1
Tennessee	2	#	2	#	2
Texas	21	1	20	16	4
Utah	9	1	8	3	5
Vermont	2	#	2	1	1
Virginia	7	#	6	2	5
Washington	10	#	10	4	5
West Virginia	#	#	#	#	#
Wisconsin	7	1	6	1	4
Wyoming	2	#	2	1	1
Other jurisdictions					
District of Columbia	8	1	6	1	5
DoDEA[1]	7	1	6	3	3

— Not available. The state/jurisdiction did not participate or did not meet the minimum participation guidelines for reporting.

Rounds to zero.

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

NOTE: 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, 2000–2009 Mathematics Assessments.

Table A-26. Percentage of eighth-grade public school students identified as English language learners, and percentage 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)	**—**	**—**	**—**	**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
Indiana	#	#	#	1	#	#	1	#	1	2	1	1
Iowa	#	#	#	1	#	1	#	#	#	—	—	—
Kansas	—	—	—	—	—	—	—	—	—	5	2	2
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
Oregon	1	#	1	—	—	—	2	1	1	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	1	#	3	2	1

— Not available. The state/jurisdiction did not participate or did not meet the minimum participation guidelines for reporting.

Rounds to zero.

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

NOTE: 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.

Table A-27. Percentage of eighth-grade public school students identified as English language learners, and percentage excluded and assessed in NAEP mathematics when accommodations were permitted, by state/jurisdiction: Various years, 2000–2009

State/jurisdiction	2000 Identified	2000 Excluded	2000 Assessed	2000 Assessed without accommodations	2000 Assessed with accom-modations	2003 Identified	2003 Excluded	2003 Assessed	2003 Assessed without accommodations	2003 Assessed with accom-modations
Nation (public)	**4**	**1**	**3**	**3**	**1**	**6**	**1**	**5**	**4**	**1**
Alabama	1	#	#	#	#	1	#	1	1	#
Alaska	—	—	—	—	—	11	#	11	10	1
Arizona	10	1	8	6	2	16	2	14	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
Iowa	—	—	—	—	—	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	—	—	—	—	—	5	1	4	3	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										
District of Columbia	4	2	2	1	2	5	1	4	2	2
DoDEA[1]	3	1	2	2	#	5	1	4	2	1

See notes at end of table.

Table A-27. Percentage of eighth-grade public school students identified as English language learners, and percentage excluded and assessed in NAEP mathematics when accommodations were permitted, by state/jurisdiction: Various years, 2000–2009—Continued

State/jurisdiction	2005 Identified	2005 Excluded	2005 Assessed	2005 Assessed without accommodations	2005 Assessed with accommodations	2007 Identified	2007 Excluded	2007 Assessed	2007 Assessed without accommodations	2007 Assessed with accommodations
Nation (public)	**6**	**1**	**5**	**4**	**1**	**7**	**1**	**6**	**4**	**2**
Alabama	1	#	1	1	#	2	#	2	2	#
Alaska	15	#	15	11	4	17	1	16	11	5
Arizona	14	2	12	10	2	10	1	9	7	2
Arkansas	1	1	1	#	#	3	#	3	1	2
California	21	1	20	18	2	22	1	21	19	2
Colorado	7	1	6	3	3	7	#	6	3	3
Connecticut	3	#	3	1	2	4	#	4	1	2
Delaware	4	1	2	2	1	3	1	2	1	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
Louisiana	1	#	1	#	1	1	#	1	1	1
Maine	1	#	1	#	1	2	#	1	1	#
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
New Jersey	2	1	1	#	1	4	1	3	1	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	1
South Dakota	2	#	2	1	1	1	#	1	#	#
Tennessee	1	#	1	1	#	2	#	2	1	1
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	1
Virginia	4	1	3	2	1	4	1	3	2	1
Washington	5	1	4	3	2	6	1	5	3	2
West Virginia	#	#	#	#	#	1	#	1	1	#
Wisconsin	4	1	3	1	1	5	1	3	1	2
Wyoming	4	#	4	3	1	3	#	3	1	1
Other jurisdictions										
District of Columbia	4	1	3	1	2	4	1	3	1	2
DoDEA[1]	4	1	4	2	1	5	1	3	2	1

See notes at end of table.

Table A-27. Percentage of eighth-grade public school students identified as English language learners, and percentage excluded and assessed in NAEP mathematics when accommodations were permitted, by state/jurisdiction: Various years, 2000–2009—Continued

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

— Not available. The state/jurisdiction did not participate or did not meet the minimum participation guidelines for reporting.

Rounds to zero.

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

NOTE: 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, 2000–2009 Mathematics Assessments.

Table A-28. Percentage of twelfth-grade public school students identified as English language learners, and percentage excluded and assessed in NAEP mathematics when accommodations were permitted, by state: 2009

State/jurisdiction	Identified	Excluded	Assessed	Assessed without accommodations	Assessed with accommodations
Nation (public)	TBA	TBA	TBA	TBA	TBA
Arkansas	TBA	TBA	TBA	TBA	TBA
Connecticut	TBA	TBA	TBA	TBA	TBA
Florida	TBA	TBA	TBA	TBA	TBA
Idaho	TBA	TBA	TBA	TBA	TBA
Illinois	TBA	TBA	TBA	TBA	TBA
Iowa	TBA	TBA	TBA	TBA	TBA
Massachusetts	TBA	TBA	TBA	TBA	TBA
New Hampshire	TBA	TBA	TBA	TBA	TBA
New Jersey	TBA	TBA	TBA	TBA	TBA
South Dakota	TBA	TBA	TBA	TBA	TBA
West Virginia	TBA	TBA	TBA	TBA	TBA

Rounds to zero.

TBA = to be announced. Data for grade 12 will be published at a later date.

NOTE: 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), 2009 Mathematics Assessment.

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 all identified SD and/or ELL students, by state/jurisdiction: 2009

	Percentage of identified SD and/or ELL students											
	SD and/or ELL				SD				ELL			
State/jurisdiction	Excluded	Assessed	Assessed without accommo-dations	Assessed with accommo-dations	Excluded	Assessed	Assessed without accommo-dations	Assessed with accommo-dations	Excluded	Assessed	Assessed without accommo-dations	Assessed with accommo-dations
Nation (public)	**10**	**90**	**40**	**50**	**16**	**84**	**22**	**62**	**6**	**94**	**59**	**35**
Alabama	8	92	62	30	9	91	56	35	3	97	88	8
Alaska	5	95	25	70	7	93	23	70	3	97	27	70
Arizona	6	94	42	53	10	90	33	57	2	98	47	51
Arkansas	8	92	21	71	11	89	20	69	3	97	22	75
California	6	94	79	15	21	79	28	51	4	96	88	8
Colorado	8	92	28	64	13	87	11	76	4	96	45	52
Connecticut	13	87	12	75	14	86	11	75	13	87	12	75
Delaware	18	82	10	72	20	80	10	70	7	93	12	81
Florida	8	92	17	75	10	90	21	69	5	95	6	89
Georgia	9	91	27	64	11	89	25	64	3	97	31	66
Hawaii	7	93	27	66	11	89	14	75	4	96	39	57
Idaho	8	92	37	55	10	90	27	63	3	97	55	42
Illinois	12	88	26	62	12	88	28	60	15	85	21	65
Indiana	12	88	31	57	15	85	32	53	4	96	28	68
Iowa	11	89	19	71	12	88	15	73	6	94	28	66
Kansas	14	86	32	55	20	80	18	62	5	95	49	46
Kentucky	18	82	32	50	19	81	31	49	13	87	34	53
Louisiana	8	92	17	75	9	91	16	75	#	100	24	76
Maine	8	92	17	75	8	92	15	77	8	92	44	48
Maryland	25	75	14	61	32	68	15	53	15	85	10	75
Massachusetts	20	80	27	53	25	75	11	64	13	87	64	23
Michigan	16	84	36	48	18	82	27	55	8	92	71	21
Minnesota	9	91	39	52	11	89	34	55	6	94	43	50
Mississippi	8	92	31	61	8	92	31	61	5	95	35	61
Missouri	16	84	29	55	18	82	28	54	8	92	27	65
Montana	12	88	28	61	14	86	21	65	6	94	48	46
Nebraska	11	89	42	47	13	87	37	49	5	95	53	42
Nevada	8	92	36	56	19	81	29	52	5	95	37	59
New Hampshire	11	89	16	73	11	89	14	74	11	89	26	63
New Jersey	14	86	10	75	15	85	11	75	20	80	8	73
New Mexico	9	91	33	58	15	85	18	66	4	96	39	56
New York	6	94	5	89	6	94	5	88	8	92	3	90
North Carolina	11	89	22	67	13	87	20	67	4	96	26	69
North Dakota	22	78	26	52	23	77	25	52	16	84	31	53
Ohio	18	82	13	69	20	80	11	69	14	86	23	62
Oklahoma	21	79	33	45	26	74	28	47	6	94	52	42
Oregon	11	89	32	57	14	86	30	56	6	94	34	60
Pennsylvania	14	86	22	64	16	84	22	63	11	89	22	68
Rhode Island	9	91	23	68	9	91	17	74	9	91	39	52
South Carolina	10	90	38	52	12	88	34	54	5	95	48	47
South Dakota	12	88	37	51	13	87	36	51	#	100	46	54
Tennessee	21	79	20	58	24	76	22	54	6	94	9	85
Texas	11	89	61	29	28	72	21	51	5	95	76	20
Utah	12	88	31	57	16	84	28	56	6	94	32	62
Vermont	12	88	20	68	11	89	17	72	18	82	41	40
Virginia	11	89	25	64	14	86	24	62	5	95	24	71
Washington	9	91	36	55	13	87	28	59	4	96	43	53
West Virginia	9	91	39	52	9	91	38	53	#	100	52	48
Wisconsin	12	88	17	71	14	86	15	71	10	90	21	69
Wyoming	7	93	25	68	7	93	23	70	6	94	37	57
Other jurisdictions												
District of Columbia	21	79	13	65	27	73	11	61	14	86	15	71
DoDEA[1]	11	89	35	54	12	88	26	62	14	86	45	41

Rounds to zero.

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

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), 2009 Mathematics Assessment.

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 all identified SD and/or ELL students, by state/jurisdiction: 2009

	Percentage of identified SD and/or ELL students											
	SD and/or ELL				SD				ELL			
State/jurisdiction	Excluded	Assessed	Assessed without accommo-dations	Assessed with accommo-dations	Excluded	Assessed	Assessed without accommo-dations	Assessed with accommo-dations	Excluded	Assessed	Assessed without accommo-dations	Assessed with accommo-dations
Nation (public)	**17**	**83**	**29**	**54**	**22**	**78**	**15**	**63**	**8**	**92**	**58**	**34**
Alabama	13	87	60	26	13	87	59	28	17	83	67	15
Alaska	16	84	25	59	25	75	8	67	6	94	41	53
Arizona	12	88	29	59	16	84	21	63	9	91	39	52
Arkansas	7	93	21	72	9	91	17	74	3	97	32	65
California	6	94	69	25	15	85	25	59	4	96	81	15
Colorado	11	89	27	61	16	84	14	70	6	94	44	51
Connecticut	13	87	18	69	14	86	16	69	11	89	24	66
Delaware	15	85	7	78	15	85	6	79	24	76	12	64
Florida	12	88	6	82	13	87	6	81	9	91	5	86
Georgia	20	80	11	69	23	77	10	67	9	91	19	73
Hawaii	12	88	32	56	11	89	24	65	15	85	43	42
Idaho	11	89	37	51	15	85	28	57	2	98	60	38
Illinois	19	81	16	65	20	80	13	68	19	81	27	54
Indiana	27	73	17	56	31	69	12	57	10	90	42	49
Iowa	16	84	15	69	16	84	11	73	15	85	38	47
Kansas	17	83	26	57	24	76	10	66	5	95	57	38
Kentucky	36	64	13	51	37	63	12	51	36	64	21	44
Louisiana	10	90	13	76	11	89	11	78	3	97	41	56
Maine	12	88	20	69	12	88	17	71	10	90	46	44
Maryland	48	52	8	44	56	44	8	36	16	84	7	77
Massachusetts	27	73	18	55	28	72	15	56	25	75	34	42
Michigan	21	79	21	58	24	76	15	62	7	93	54	39
Minnesota	15	85	34	52	17	83	23	60	10	90	59	31
Mississippi	17	83	16	67	17	83	13	70	16	84	50	34
Missouri	26	74	19	56	26	74	18	56	28	72	35	37
Montana	19	81	21	60	22	78	15	64	4	96	53	43
Nebraska	20	80	25	55	23	77	19	58	8	92	52	40
Nevada	14	86	35	50	22	78	21	57	6	94	47	47
New Hampshire	14	86	27	59	14	86	26	61	15	85	51	34
New Jersey	11	89	9	80	11	89	10	79	13	87	8	79
New Mexico	14	86	33	53	22	78	20	58	6	94	43	51
New York	14	86	5	81	14	86	4	82	14	86	6	80
North Carolina	10	90	16	74	12	88	9	80	8	92	32	60
North Dakota	33	67	26	42	34	66	24	42	36	64	38	26
Ohio	33	67	9	58	33	67	8	58	43	57	22	34
Oklahoma	35	65	21	44	41	59	12	47	9	91	60	31
Oregon	15	85	41	44	20	80	31	50	6	94	58	36
Pennsylvania	17	83	14	69	19	81	10	71	17	83	44	40
Rhode Island	11	89	19	70	10	90	18	72	21	79	22	58
South Carolina	27	73	33	41	32	68	29	39	5	95	49	47
South Dakota	16	84	28	56	17	83	23	60	11	89	61	28
Tennessee	34	66	10	57	36	64	9	55	37	63	11	52
Texas	28	72	37	35	39	61	18	43	11	89	68	21
Utah	21	79	30	50	27	73	15	58	5	95	59	36
Vermont	11	89	26	63	11	89	24	64	8	92	41	50
Virginia	21	79	27	52	24	76	23	53	12	88	39	49
Washington	17	83	26	57	19	81	20	60	12	88	40	48
West Virginia	10	90	26	64	10	90	25	65	7	93	66	27
Wisconsin	15	85	16	70	16	84	12	72	15	85	27	58
Wyoming	12	88	19	69	13	87	17	70	#	100	34	66
Other jurisdictions												
District of Columbia	31	69	12	57	34	66	7	59	27	73	28	45
DoDEA[1]	13	87	35	52	13	87	27	60	16	84	46	38

Rounds to zero.

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

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), 2009 Mathematics Assessment.

Table A-31. Percentage of twelfth-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 identified SD and/or ELL students, by state/jurisdiction: 2009

	Percentage of identified SD and/or ELL students											
	SD and/or ELL				SD				ELL			
State/jurisdiction	Excluded	Assessed	Assessed without accommo-dations	Assessed with accommo-dations	Excluded	Assessed	Assessed without accommo-dations	Assessed with accommo-dations	Excluded	Assessed	Assessed without accommo-dations	Assessed with accommo-dations
Nation (public)	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA
Arkansas	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA
Connecticut	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA
Florida	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA
Idaho	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA
Illinois	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA
Iowa	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA
Massachusetts	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA
New Hampshire	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA
New Jersey	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA
South Dakota	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA
West Virginia	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA

Rounds to zero.

TBA = to be announced. Data for grade 12 will be published at a later date.

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), 2009 Mathematics Assessment.

Table A-32. Percentage of fourth-grade public school students identified as students with disabilities (SD) and/or English language learners (ELL), and percentage excluded and assessed in NAEP mathematics, by SD/ELL category and urban district: Various years, 2003–2009

SD/ELL category and district	2003					2005				
	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)	22	4	18	10	8	23	3	20	10	10
Large central city (public)	31	5	25	17	9	32	4	28	17	11
Atlanta	9	1	8	4	4	11	1	9	3	6
Austin	—	—	—	—	—	37	10	27	12	14
Baltimore	—	—	—	—	—	—	—	—	—	—
Boston	33	5	28	11	17	33	6	27	11	15
Charlotte	21	4	17	5	12	22	3	19	7	12
Chicago	31	8	23	16	7	29	4	25	15	9
Cleveland	15	7	8	3	5	17	6	12	2	9
Detroit	—	—	—	—	—	—	—	—	—	—
District of Columbia	18	4	14	4	10	20	6	14	4	10
Fresno	—	—	—	—	—	—	—	—	—	—
Houston	45	8	37	19	18	46	7	38	17	21
Jefferson County (KY)	—	—	—	—	—	—	—	—	—	—
Los Angeles	60	3	56	48	8	59	5	54	47	7
Miami-Dade	—	—	—	—	—	—	—	—	—	—
Milwaukee	—	—	—	—	—	—	—	—	—	—
New York City	22	6	16	4	12	24	4	19	2	17
Philadelphia	—	—	—	—	—	—	—	—	—	—
San Diego	41	2	38	34	4	43	4	39	33	6
SD										
Nation (public)	14	3	11	4	7	14	3	11	4	8
Large central city (public)	13	3	9	4	6	13	3	10	3	7
Atlanta	8	1	7	3	4	9	1	8	2	6
Austin	—	—	—	—	—	15	7	8	2	6
Baltimore	—	—	—	—	—	—	—	—	—	—
Boston	20	3	16	4	12	22	5	17	3	14
Charlotte	17	3	14	3	10	13	2	11	3	8
Chicago	15	5	10	4	6	13	4	10	3	7
Cleveland	12	5	6	2	5	13	5	8	1	8
Detroit	—	—	—	—	—	—	—	—	—	—
District of Columbia	13	4	10	2	7	16	5	11	2	8
Fresno	—	—	—	—	—	—	—	—	—	—
Houston	18	7	11	8	3	12	5	7	3	4
Jefferson County (KY)	—	—	—	—	—	—	—	—	—	—
Los Angeles	11	2	9	5	4	11	3	8	3	5
Miami-Dade	—	—	—	—	—	—	—	—	—	—
Milwaukee	—	—	—	—	—	—	—	—	—	—
New York City	12	1	12	1	10	14	2	11	1	11
Philadelphia	—	—	—	—	—	—	—	—	—	—
San Diego	11	1	10	7	3	11	2	9	4	4
ELL										
Nation (public)	11	1	9	7	2	10	1	9	7	3
Large central city (public)	21	3	18	14	4	21	2	19	14	5
Atlanta	2	#	2	1	#	2	#	2	1	1
Austin	—	—	—	—	—	25	5	20	11	9
Baltimore	—	—	—	—	—	—	—	—	—	—
Boston	18	3	15	8	7	15	3	12	9	3
Charlotte	8	2	6	2	4	10	1	8	4	4
Chicago	20	5	15	13	2	18	2	16	12	4
Cleveland	4	1	2	1	1	4	1	3	2	2
Detroit	—	—	—	—	—	—	—	—	—	—
District of Columbia	7	1	5	2	3	5	1	4	1	2
Fresno	—	—	—	—	—	—	—	—	—	—
Houston	35	4	31	14	17	37	4	33	15	18
Jefferson County (KY)	—	—	—	—	—	—	—	—	—	—
Los Angeles	56	2	53	47	6	54	4	50	45	5
Miami-Dade	—	—	—	—	—	—	—	—	—	—
Milwaukee	—	—	—	—	—	—	—	—	—	—
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	3

See notes at end of table.

Table A-32. Percentage of fourth-grade public school students identified as students with disabilities (SD) and/or English language learners (ELL), and percentage excluded and assessed in NAEP mathematics, by SD/ELL category and urban district: Various years, 2003–2009—Continued

	2007					2009				
SD/ELL category and district	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)	23	3	20	10	10	TBA	TBA	TBA	TBA	TBA
Large central city (public)	33	4	29	17	12	TBA	TBA	TBA	TBA	TBA
Atlanta	12	2	11	4	7	TBA	TBA	TBA	TBA	TBA
Austin	40	5	34	17	18	TBA	TBA	TBA	TBA	TBA
Baltimore	—	—	—	—	—	TBA	TBA	TBA	TBA	TBA
Boston	47	5	42	25	17	TBA	TBA	TBA	TBA	TBA
Charlotte	22	3	19	7	12	TBA	TBA	TBA	TBA	TBA
Chicago	32	5	26	17	10	TBA	TBA	TBA	TBA	TBA
Cleveland	23	13	10	1	8	TBA	TBA	TBA	TBA	TBA
Detroit	—	—	—	—	—	TBA	TBA	TBA	TBA	TBA
District of Columbia	20	6	14	2	13	TBA	TBA	TBA	TBA	TBA
Fresno	—	—	—	—	—	TBA	TBA	TBA	TBA	TBA
Houston	45	4	41	23	18	TBA	TBA	TBA	TBA	TBA
Jefferson County (KY)	—	—	—	—	—	TBA	TBA	TBA	TBA	TBA
Los Angeles	53	1	51	44	8	TBA	TBA	TBA	TBA	TBA
Miami-Dade	—	—	—	—	—	TBA	TBA	TBA	TBA	TBA
Milwaukee	—	—	—	—	—	TBA	TBA	TBA	TBA	TBA
New York City	29	2	27	2	25	TBA	TBA	TBA	TBA	TBA
Philadelphia	—	—	—	—	—	TBA	TBA	TBA	TBA	TBA
San Diego	46	3	43	36	7	TBA	TBA	TBA	TBA	TBA
SD										
Nation (public)	14	3	11	3	8	TBA	TBA	TBA	TBA	TBA
Large central city (public)	13	3	10	3	7	TBA	TBA	TBA	TBA	TBA
Atlanta	10	2	8	4	5	TBA	TBA	TBA	TBA	TBA
Austin	13	4	9	2	7	TBA	TBA	TBA	TBA	TBA
Baltimore	—	—	—	—	—	TBA	TBA	TBA	TBA	TBA
Boston	22	4	18	3	15	TBA	TBA	TBA	TBA	TBA
Charlotte	12	2	10	2	8	TBA	TBA	TBA	TBA	TBA
Chicago	14	4	10	4	6	TBA	TBA	TBA	TBA	TBA
Cleveland	17	13	5	#	4	TBA	TBA	TBA	TBA	TBA
Detroit	—	—	—	—	—	TBA	TBA	TBA	TBA	TBA
District of Columbia	14	5	9	1	8	TBA	TBA	TBA	TBA	TBA
Fresno	—	—	—	—	—	TBA	TBA	TBA	TBA	TBA
Houston	10	3	7	2	4	TBA	TBA	TBA	TBA	TBA
Jefferson County (KY)	—	—	—	—	—	TBA	TBA	TBA	TBA	TBA
Los Angeles	11	1	9	4	5	TBA	TBA	TBA	TBA	TBA
Miami-Dade	—	—	—	—	—	TBA	TBA	TBA	TBA	TBA
Milwaukee	—	—	—	—	—	TBA	TBA	TBA	TBA	TBA
New York City	16	1	15	1	14	TBA	TBA	TBA	TBA	TBA
Philadelphia	—	—	—	—	—	TBA	TBA	TBA	TBA	TBA
San Diego	12	2	9	4	5	TBA	TBA	TBA	TBA	TBA
ELL										
Nation (public)	11	1	10	7	3	TBA	TBA	TBA	TBA	TBA
Large central city (public)	22	1	21	14	6	TBA	TBA	TBA	TBA	TBA
Atlanta	3	#	2	#	2	TBA	TBA	TBA	TBA	TBA
Austin	29	2	27	15	12	TBA	TBA	TBA	TBA	TBA
Baltimore	—	—	—	—	—	TBA	TBA	TBA	TBA	TBA
Boston	31	2	28	22	6	TBA	TBA	TBA	TBA	TBA
Charlotte	11	2	10	5	5	TBA	TBA	TBA	TBA	TBA
Chicago	20	2	18	13	5	TBA	TBA	TBA	TBA	TBA
Cleveland	7	1	5	1	4	TBA	TBA	TBA	TBA	TBA
Detroit	—	—	—	—	—	TBA	TBA	TBA	TBA	TBA
District of Columbia	8	2	6	1	5	TBA	TBA	TBA	TBA	TBA
Fresno	—	—	—	—	—	TBA	TBA	TBA	TBA	TBA
Houston	38	2	36	21	15	TBA	TBA	TBA	TBA	TBA
Jefferson County (KY)	—	—	—	—	—	TBA	TBA	TBA	TBA	TBA
Los Angeles	48	1	47	42	5	TBA	TBA	TBA	TBA	TBA
Miami-Dade	—	—	—	—	—	TBA	TBA	TBA	TBA	TBA
Milwaukee	—	—	—	—	—	TBA	TBA	TBA	TBA	TBA
New York City	17	2	15	1	13	TBA	TBA	TBA	TBA	TBA
Philadelphia	—	—	—	—	—	TBA	TBA	TBA	TBA	TBA
San Diego	40	1	38	34	4	TBA	TBA	TBA	TBA	TBA

— Not available. The district did not participate.

Rounds to zero.

TBA = to be announced. Data for grade 12 will be published at a later date.

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. As of 2005, “large central city” includes nationally representative public schools located in large central cities (population of 250,000 or more) within a Metropolitan Statistical Area (MSA). 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, 2003–2009 Trial Urban District Mathematics Assessments.

Table A-33. Percentage of eighth-grade public school students identified as students with disabilities (SD) and/or English language learners (ELL), and percentage excluded and assessed in NAEP mathematics, by SD/ELL category and urban district: Various years, 2003–2009

SD/ELL category and district	2003					2005				
	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	4	15	8	7	19	4	15	7	8
Large central city (public)	24	5	19	13	7	24	4	20	12	8
Atlanta	11	2	9	4	5	12	1	10	3	8
Austin	—	—	—	—	—	26	10	16	12	4
Baltimore	—	—	—	—	—	—	—	—	—	—
Boston	31	7	24	9	15	25	9	16	7	9
Charlotte	18	3	14	5	9	18	3	15	5	10
Chicago	22	7	15	8	7	21	3	18	5	12
Cleveland	21	9	12	2	9	20	9	12	3	9
Detroit	—	—	—	—	—	—	—	—	—	—
District of Columbia	20	6	14	5	9	19	6	14	2	11
Fresno	—	—	—	—	—	—	—	—	—	—
Houston	26	8	18	16	3	24	6	18	14	4
Jefferson County (KY)	—	—	—	—	—	—	—	—	—	—
Los Angeles	37	2	35	29	6	39	3	36	30	6
Miami-Dade	—	—	—	—	—	—	—	—	—	—
Milwaukee	—	—	—	—	—	—	—	—	—	—
New York City	24	5	19	6	14	20	2	18	2	16
Philadelphia	—	—	—	—	—	—	—	—	—	—
San Diego	29	4	26	22	4	28	4	24	17	7
SD										
Nation (public)	14	3	11	5	6	13	3	10	3	7
Large central city (public)	14	3	11	5	5	13	3	10	3	6
Atlanta	10	1	9	4	5	11	1	9	3	7
Austin	—	—	—	—	—	14	8	6	5	2
Baltimore	—	—	—	—	—	—	—	—	—	—
Boston	24	4	20	7	13	18	7	11	3	8
Charlotte	14	3	12	4	8	12	2	10	2	8
Chicago	17	5	12	6	7	16	2	14	3	11
Cleveland	17	9	8	1	6	18	8	9	3	7
Detroit	—	—	—	—	—	—	—	—	—	—
District of Columbia	16	5	11	3	8	17	5	12	2	10
Fresno	—	—	—	—	—	—	—	—	—	—
Houston	16	7	10	9	#	11	4	7	5	2
Jefferson County (KY)	—	—	—	—	—	—	—	—	—	—
Los Angeles	12	2	10	5	5	12	2	10	5	5
Miami-Dade	—	—	—	—	—	—	—	—	—	—
Milwaukee	—	—	—	—	—	—	—	—	—	—
New York City	15	2	13	3	10	12	1	11	1	10
Philadelphia	—	—	—	—	—	—	—	—	—	—
San Diego	11	1	10	7	3	11	3	8	4	4
ELL										
Nation (public)	6	1	5	4	1	6	1	5	4	1
Large central city (public)	13	2	11	9	3	13	2	12	9	3
Atlanta	2	1	1	1	#	1	#	1	#	1
Austin	—	—	—	—	—	14	4	10	8	2
Baltimore	—	—	—	—	—	—	—	—	—	—
Boston	13	5	8	4	4	10	4	6	5	1
Charlotte	7	1	6	3	3	7	1	6	4	2
Chicago	8	3	5	3	2	6	2	5	2	2
Cleveland	5	1	4	1	3	3	1	2	#	2
Detroit	—	—	—	—	—	—	—	—	—	—
District of Columbia	5	1	4	2	2	4	1	3	1	2
Fresno	—	—	—	—	—	—	—	—	—	—
Houston	16	5	11	9	2	15	3	12	10	3
Jefferson County (KY)	—	—	—	—	—	—	—	—	—	—
Los Angeles	33	2	31	27	4	34	2	32	28	4
Miami-Dade	—	—	—	—	—	—	—	—	—	—
Milwaukee	—	—	—	—	—	—	—	—	—	—
New York City	13	4	9	3	6	10	2	9	2	7
Philadelphia	—	—	—	—	—	—	—	—	—	—
San Diego	23	3	20	18	2	21	3	18	14	4

See notes at end of table.

Table A-33. Percentage of eighth-grade public school students identified as students with disabilities (SD) and/or English language learners (ELL), and percentage excluded and assessed in NAEP mathematics, by SD/ELL category and urban district: Various years, 2003–2009—Continued

SD/ELL category and district	2007 Identified	2007 Excluded	2007 Assessed	2007 Assessed without accom-modations	2007 Assessed with accom-modations	2009 Identified	2009 Excluded	2009 Assessed	2009 Assessed without accom-modations	2009 Assessed with accom-modations
SD and/or ELL										
Nation (public)	18	4	14	6	8	TBA	TBA	TBA	TBA	TBA
Large central city (public)	23	4	19	10	9	TBA	TBA	TBA	TBA	TBA
Atlanta	11	3	8	2	6	TBA	TBA	TBA	TBA	TBA
Austin	29	5	23	16	8	TBA	TBA	TBA	TBA	TBA
Baltimore	—	—	—	—	—	TBA	TBA	TBA	TBA	TBA
Boston	27	8	18	6	12	TBA	TBA	TBA	TBA	TBA
Charlotte	20	3	18	6	12	TBA	TBA	TBA	TBA	TBA
Chicago	23	6	17	5	12	TBA	TBA	TBA	TBA	TBA
Cleveland	24	13	11	2	9	TBA	TBA	TBA	TBA	TBA
Detroit	—	—	—	—	—	TBA	TBA	TBA	TBA	TBA
District of Columbia	21	10	11	3	8	TBA	TBA	TBA	TBA	TBA
Fresno	—	—	—	—	—	TBA	TBA	TBA	TBA	TBA
Houston	22	6	16	10	6	TBA	TBA	TBA	TBA	TBA
Jefferson County (KY)	—	—	—	—	—	TBA	TBA	TBA	TBA	TBA
Los Angeles	33	2	31	25	6	TBA	TBA	TBA	TBA	TBA
Miami-Dade	—	—	—	—	—	TBA	TBA	TBA	TBA	TBA
Milwaukee	—	—	—	—	—	TBA	TBA	TBA	TBA	TBA
New York City	22	2	20	1	19	TBA	TBA	TBA	TBA	TBA
Philadelphia	—	—	—	—	—	TBA	TBA	TBA	TBA	TBA
San Diego	28	4	24	19	5	TBA	TBA	TBA	TBA	TBA
SD										
Nation (public)	13	4	9	2	6	TBA	TBA	TBA	TBA	TBA
Large central city (public)	13	4	9	3	6	TBA	TBA	TBA	TBA	TBA
Atlanta	11	3	7	2	5	TBA	TBA	TBA	TBA	TBA
Austin	16	4	12	7	5	TBA	TBA	TBA	TBA	TBA
Baltimore	—	—	—	—	—	TBA	TBA	TBA	TBA	TBA
Boston	19	7	12	3	9	TBA	TBA	TBA	TBA	TBA
Charlotte	13	2	11	2	10	TBA	TBA	TBA	TBA	TBA
Chicago	17	5	13	3	10	TBA	TBA	TBA	TBA	TBA
Cleveland	20	13	7	1	6	TBA	TBA	TBA	TBA	TBA
Detroit	—	—	—	—	—	TBA	TBA	TBA	TBA	TBA
District of Columbia	17	9	8	2	6	TBA	TBA	TBA	TBA	TBA
Fresno	—	—	—	—	—	TBA	TBA	TBA	TBA	TBA
Houston	13	5	8	4	4	TBA	TBA	TBA	TBA	TBA
Jefferson County (KY)	—	—	—	—	—	TBA	TBA	TBA	TBA	TBA
Los Angeles	10	2	8	3	5	TBA	TBA	TBA	TBA	TBA
Miami-Dade	—	—	—	—	—	TBA	TBA	TBA	TBA	TBA
Milwaukee	—	—	—	—	—	TBA	TBA	TBA	TBA	TBA
New York City	13	1	12	1	11	TBA	TBA	TBA	TBA	TBA
Philadelphia	—	—	—	—	—	TBA	TBA	TBA	TBA	TBA
San Diego	11	4	7	3	4	TBA	TBA	TBA	TBA	TBA
ELL										
Nation (public)	7	1	6	4	2	TBA	TBA	TBA	TBA	TBA
Large central city (public)	13	1	11	7	4	TBA	TBA	TBA	TBA	TBA
Atlanta	1	#	1	#	1	TBA	TBA	TBA	TBA	TBA
Austin	16	2	13	10	3	TBA	TBA	TBA	TBA	TBA
Baltimore	—	—	—	—	—	TBA	TBA	TBA	TBA	TBA
Boston	9	2	7	4	3	TBA	TBA	TBA	TBA	TBA
Charlotte	9	1	7	4	3	TBA	TBA	TBA	TBA	TBA
Chicago	7	2	5	2	3	TBA	TBA	TBA	TBA	TBA
Cleveland	5	1	4	1	3	TBA	TBA	TBA	TBA	TBA
Detroit	—	—	—	—	—	TBA	TBA	TBA	TBA	TBA
District of Columbia	4	1	3	1	2	TBA	TBA	TBA	TBA	TBA
Fresno	—	—	—	—	—	TBA	TBA	TBA	TBA	TBA
Houston	12	2	10	7	2	TBA	TBA	TBA	TBA	TBA
Jefferson County (KY)	—	—	—	—	—	TBA	TBA	TBA	TBA	TBA
Los Angeles	28	1	27	23	4	TBA	TBA	TBA	TBA	TBA
Miami-Dade	—	—	—	—	—	TBA	TBA	TBA	TBA	TBA
Milwaukee	—	—	—	—	—	TBA	TBA	TBA	TBA	TBA
New York City	11	1	10	1	9	TBA	TBA	TBA	TBA	TBA
Philadelphia	—	—	—	—	—	TBA	TBA	TBA	TBA	TBA
San Diego	21	2	19	17	3	TBA	TBA	TBA	TBA	TBA

— Not available. The district did not participate.

Rounds to zero.

TBA = to be announced. Data for grade 12 will be published at a later date.

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. As of 2005, "large central city" includes nationally representative public schools located in large central cities (population of 250,000 or more) within a Metropolitan Statistical Area (MSA). 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, 2003–2009 Trial Urban District Mathematics Assessments.

Data Collection

The NAEP 2009 mathematics assessment was conducted from January to March 2009 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

Three types of cognitive items were scored for the NAEP mathematics assessment. Responses to multiple-choice questions were scored by high-speed scanners during student booklet processing. Short constructed-response questions (those with two or three valid score points) and extended constructed-response questions (those with four or five valid score points) were scored by trained personnel using high-definition images of student responses also captured during processing.

Scoring a large number of short and extended constructed-responses with a high level of accuracy and reliability within a limited time frame is essential to the success of NAEP. To ensure reliable, efficient scoring, NAEP

- develops focused, explicit scoring guides for each item that match the criteria delineated in the assessment frameworks,
- pilot tests all items and adjusts the scoring guides (if necessary) to reflect actual student responses,
- recruits qualified and experienced scorers, trains them, and verifies their ability to score particular questions through qualifying tests,
- employs an image-processing and scoring system that routes images of student responses directly to the scorers so they can focus on scoring rather than paper routing,
- monitors scorer consistency through a second scoring,
- assesses the quality of scorer decision-making through constant monitoring by NAEP assessment experts, and
- documents all training, scoring, and quality control procedures in the technical reports.

For the 2009 mathematics assessment, more than four million individual student responses were scored in all three grades (including rescoring to monitor interrater reliability). Most of the mathematics items were scored with 95 percent or higher exact agreement between raters of the same student responses.

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. NAEP's objectives can be achieved with methodologies that produce estimates of the population-level parameters directly, without the intermediary computation of estimates of individuals. 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 http://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. When the school-recorded information is missing, student-reported data derived from the student background questions are used. The mutually exclusive racial/ethnic categories are White, Black, Hispanic, Asian/Pacific Islander, American Indian/Alaska Native, and Other. Black includes African American, Hispanic includes Latino, and Pacific Islander includes Native Hawaiian. Race categories exclude Hispanic origin unless specified. Unclassified students are those whose school-reported race/ethnicity was "other" or "unavailable" or was missing, and whose race/ethnicity category could not be determined from self-reported information.

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

Eligibility for the National School Lunch Program: The school lunch variable is based on available school records. Students are classified as either currently eligible or not currently eligible for the national lunch component of the Department of Agriculture's National School Lunch Program. The classification refers only to the school year when the assessment was administered and is not based on eligibility in previous years. If school records are not available, the student is 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." Eligibility for the program is determined by students' family income in relation to the federally established poverty level. Free lunch qualification is set at 130 percent of the poverty level or below, and reduced-price lunch qualification is set at between 130 and 185 percent of the poverty level. (For the period July 1, 2008 through June 30, 2009, for a family of four, 130 percent of the poverty level was $27,560, and 185 percent was $39,220.) Additional information on eligibility may be found at the U.S. Department of Agriculture website at http://www.fns.usda.gov/cnd/lunch/.

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- and twelfth-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 were not presented to students at grade 4 in 2009.

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 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	Iowa	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.

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.