

## FEATURES OF THE 2009 MATHEMATICS ASSESSMENT

Nationally representative  
student samples

- 168,800 4th-graders
- 161,700 8th-graders

Trend comparisons to seven  
previous mathematics  
assessments

Results available for

- Nation
- 50 states
- District of Columbia
- Department of Defense  
school system



The   
Nation's  
Report Card

# Mathematics 2009

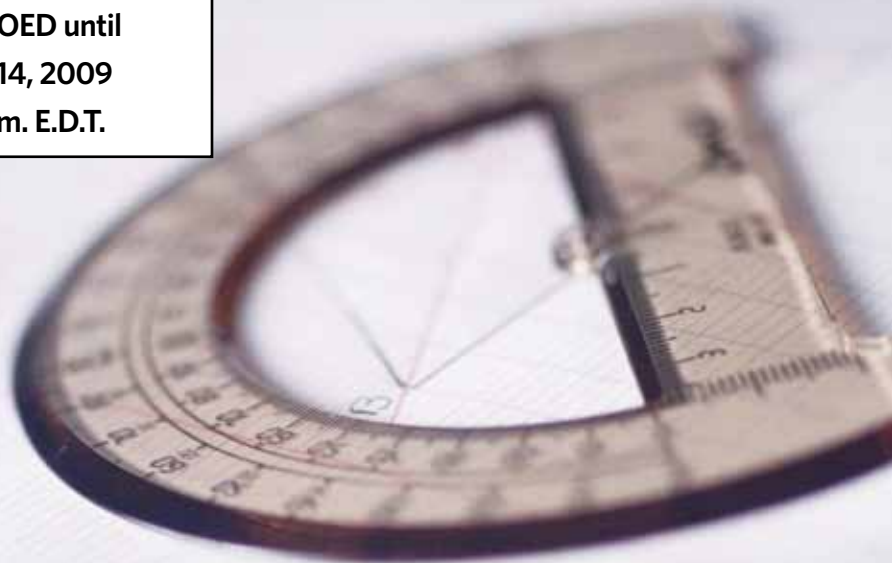
NATIONAL ASSESSMENT OF EDUCATIONAL PROGRESS AT GRADES 4 AND 8

# Highlights

**ies** INSTITUTE OF  
EDUCATION SCIENCES  
Institute of Education Sciences

U.S. Department of Education

**EMBARGOED until**  
**October 14, 2009**  
**10:00 a.m. E.D.T.**

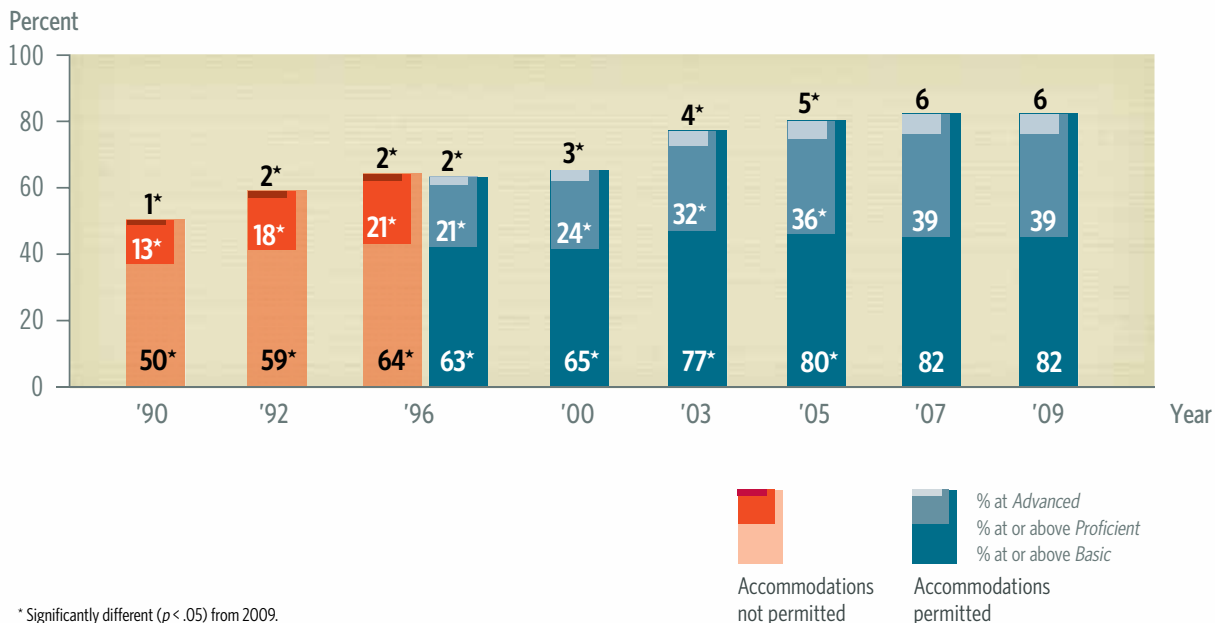


## Fourth-grade mathematics score unchanged from 2007



\* Significantly different ( $p < .05$ ) from 2009.

## Achievement-level results flat since 2007



\* Significantly different ( $p < .05$ ) from 2009.

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.

## No significant change in performance of racial/ethnic groups since 2007

	CHANGE IN AVERAGE SCORES	
	Since 1990	Since 2007
<b>Overall</b>	▲	◆
White	▲	◆
Black	▲	◆
Hispanic	▲	◆
Asian/Pacific Islander	▲	◆
American Indian/ Alaska Native	‡	◆

- ▲ Indicates the score was higher in 2009.
- ◆ Indicates no significant change in the score in 2009.
- ‡ Reporting standards not met. Sample size insufficient to permit a reliable estimate.

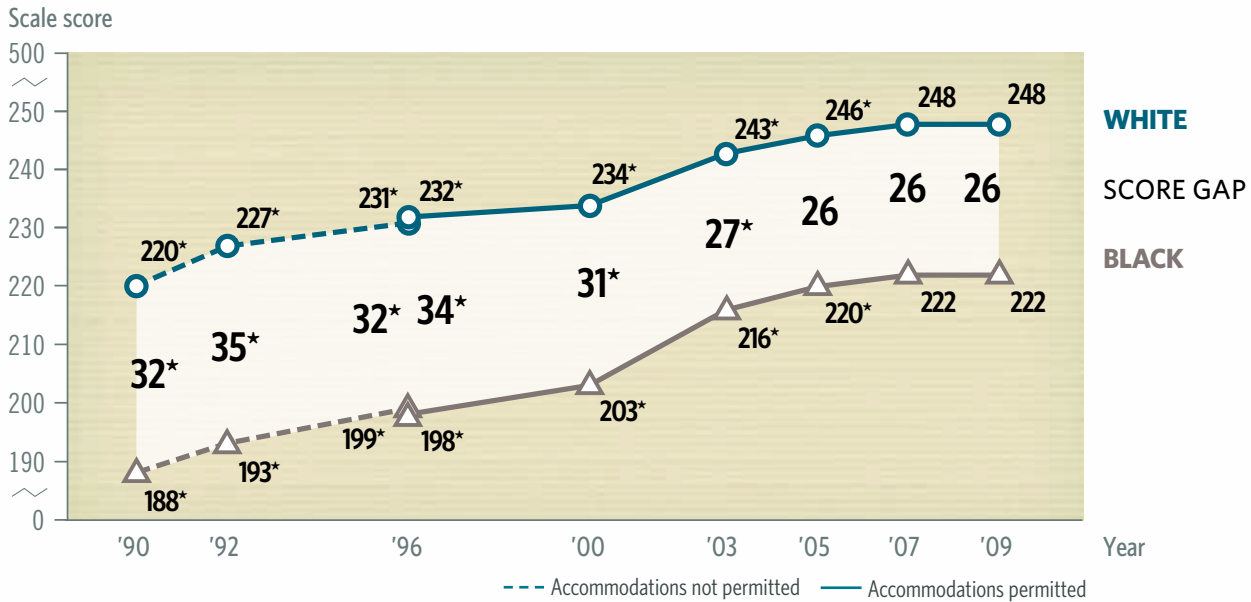
### Since 1990

- **White** students up 28 points
- **Black** students up 35 points
- **Hispanic** students up 27 points
- **Asian/Pacific Islander** students up 30 points

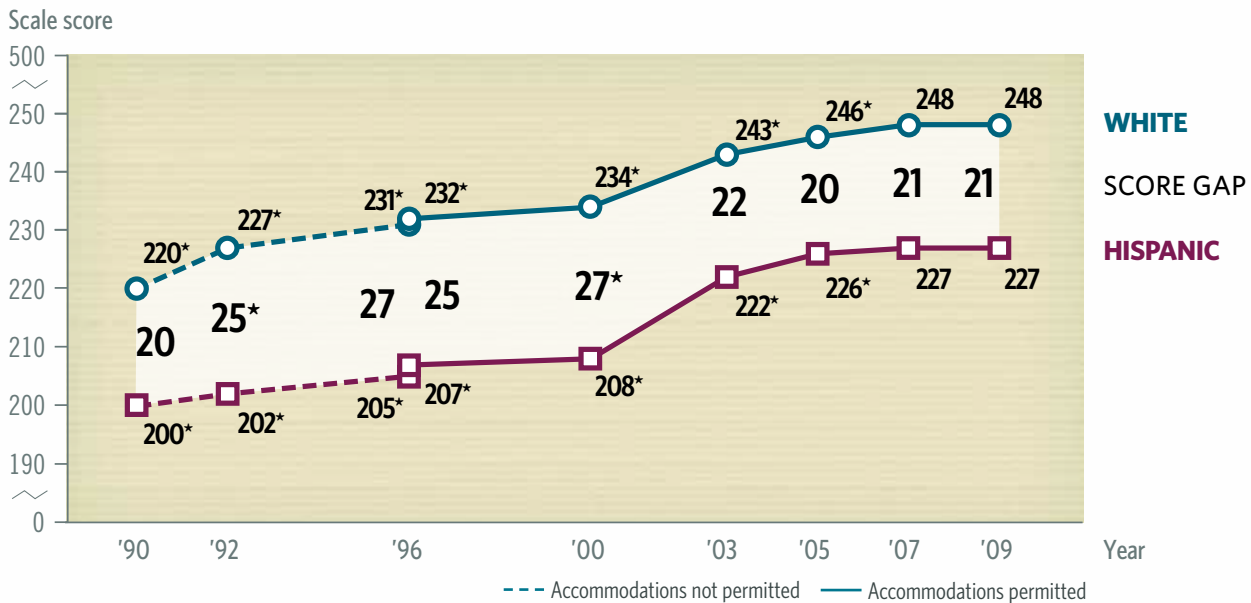


NOTE: Black includes African American, Hispanic includes Latino, and Pacific Islander includes Native Hawaiian. Race categories exclude Hispanic origin.  
 SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 2007, and 2009 Mathematics Assessments.

## White – Black score gap smaller than in 1990 but shows no change since 2007



## No significant change in White – Hispanic gap compared to 2007 or 1990

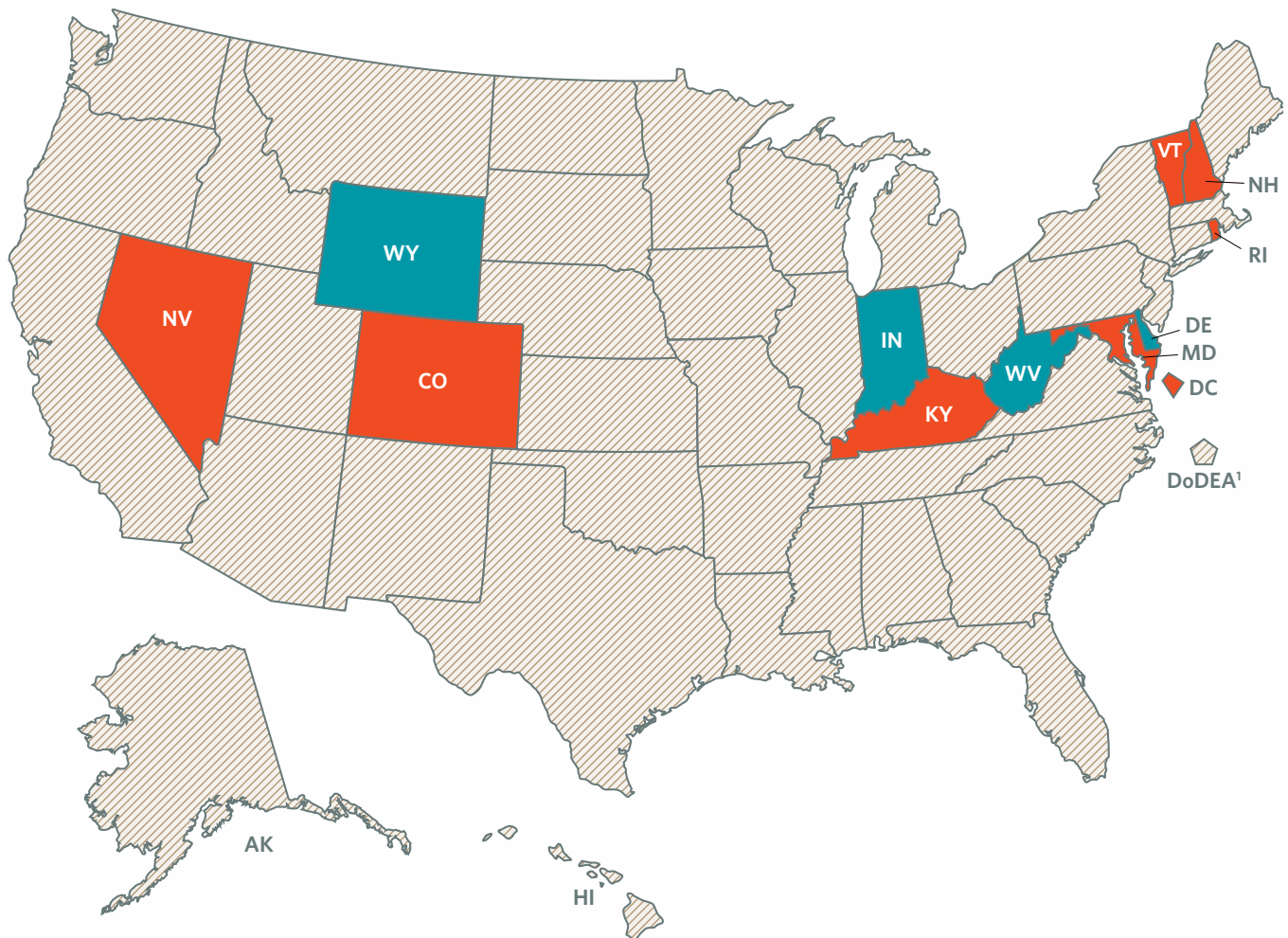


\* Significantly different ( $p < .05$ ) from 2009.

NOTE: Black includes African American, and Hispanic includes Latino. Race categories exclude Hispanic origin. Score gaps are calculated based on differences between unrounded average scores.

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.

## Scores increase since 2007 in 8 states and decrease in 4 states



**■** Scores increased in Colorado, District of Columbia, Kentucky, Maryland, New Hampshire, Nevada, Rhode Island, and Vermont

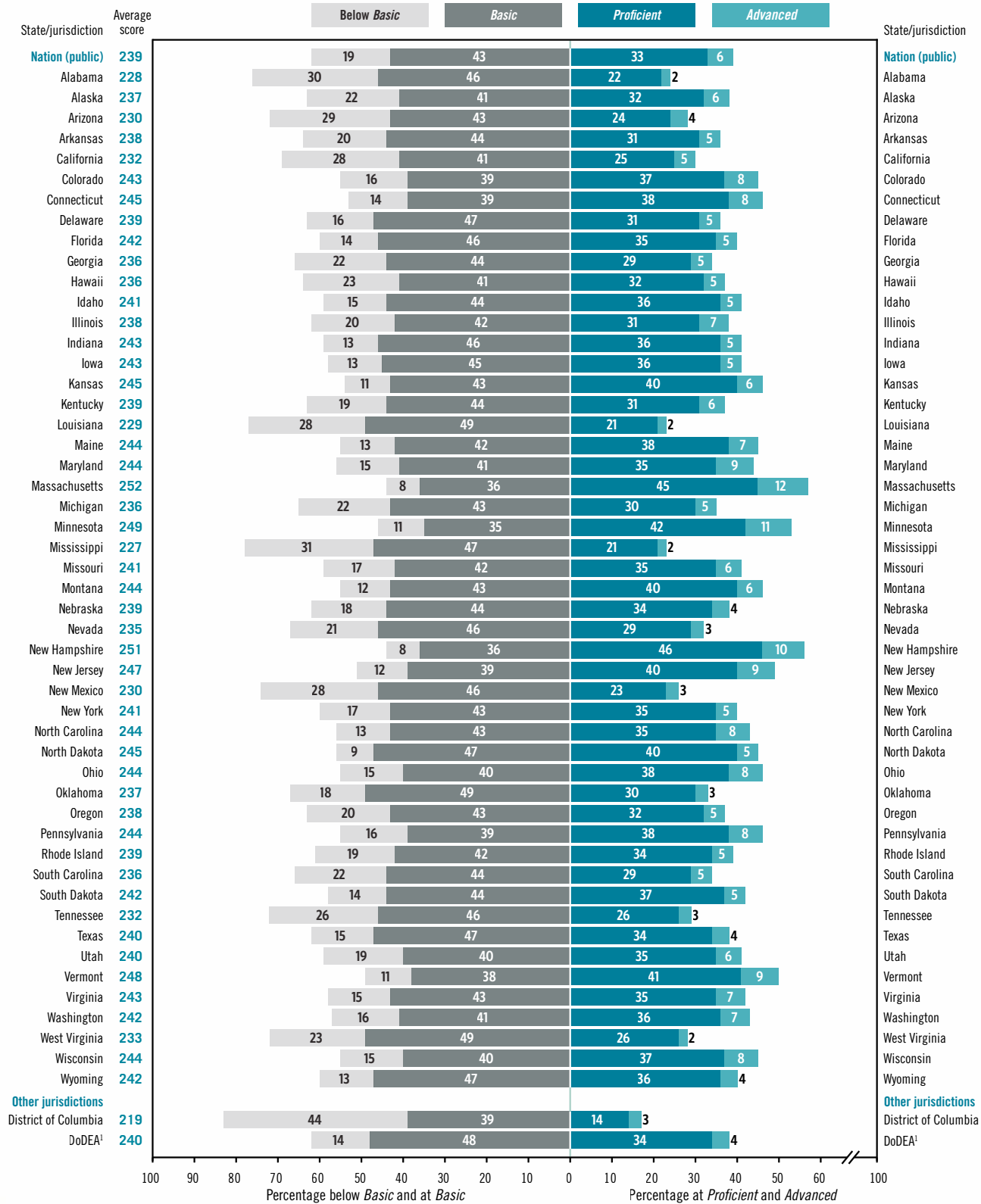
**■** Scores decreased in Delaware, Indiana, West Virginia, and Wyoming

**▨** No significant change

<sup>1</sup>Department of Defense Education Activity (overseas and domestic schools).

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

# State Scores and Achievement-Level Results

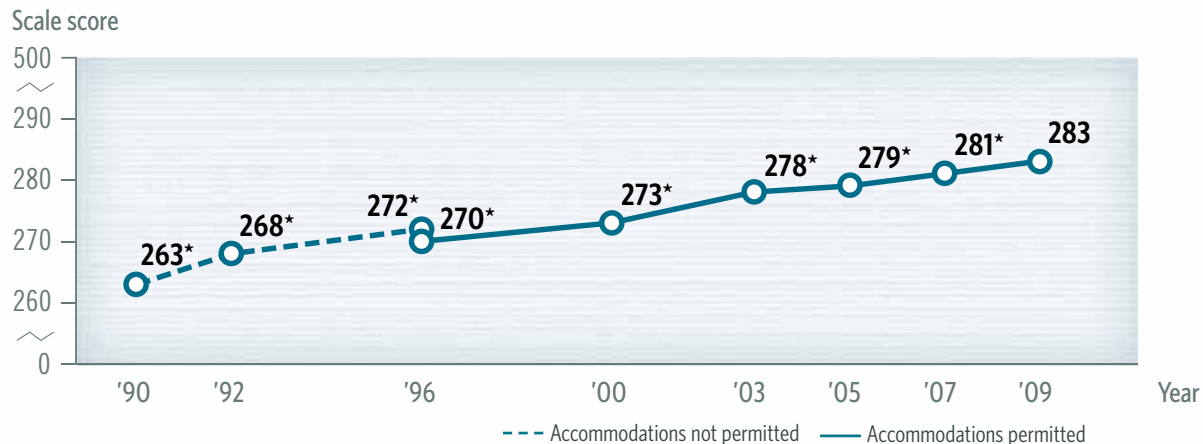


<sup>1</sup> Department of Defense Education Activity (overseas and domestic schools).

NOTE: The shaded bars are graphed using unrounded numbers. Detail may not sum to totals because of rounding.

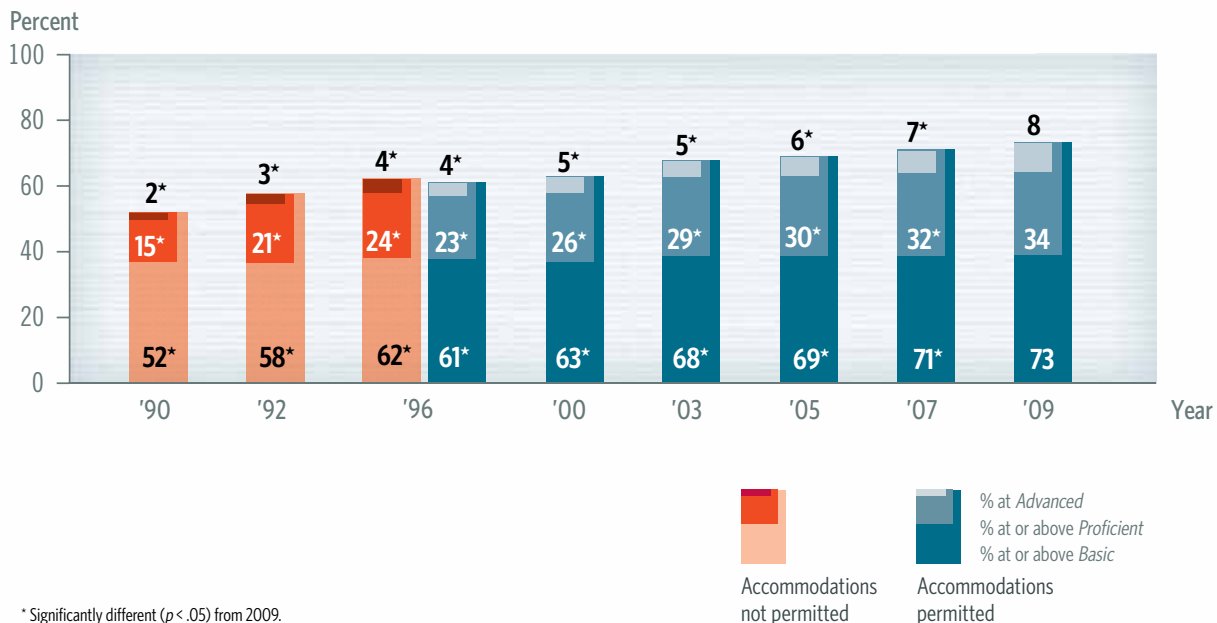
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2009 Mathematics Assessment.

## Eighth-graders' mathematics performance continues to improve



\* Significantly different ( $p < .05$ ) from 2009.

## Gains since 2007 across achievement levels



\* Significantly different ( $p < .05$ ) from 2009.

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.

## Most racial/ethnic groups continue to make gains

	CHANGE IN AVERAGE SCORES	
	Since 1990	Since 2007
<b>Overall</b>	▲	▲
White	▲	▲
Black	▲	▲
Hispanic	▲	▲
Asian/Pacific Islander	▲	▲
American Indian/ Alaska Native	‡	◆

- ▲ Indicates the score was higher in 2009.
- ◆ Indicates no significant change in the score in 2009.
- ‡ Reporting standards not met. Sample size insufficient to permit a reliable estimate.

### White

- Up 2 points from 2007
- Up 23 points from 1990

### Black

- Up 1 point from 2007
- Up 24 points from 1990

### Hispanic

- Up 2 points from 2007
- Up 21 points from 1990

### Asian/Pacific Islander

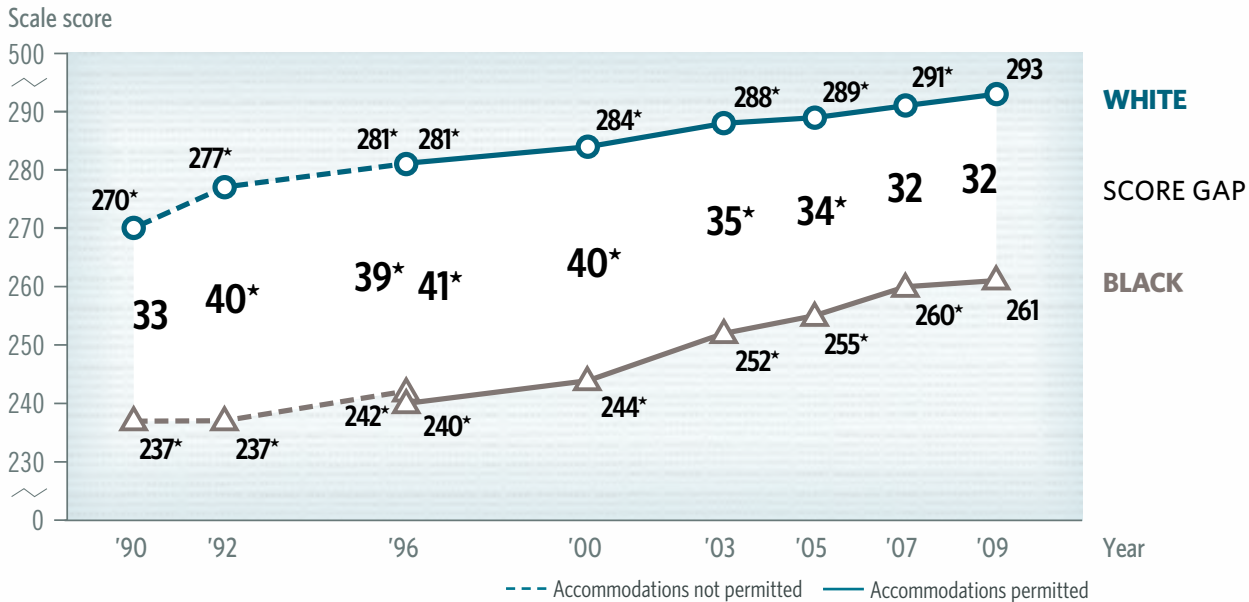
- Up 4 points from 2007
- Up 26 points from 1990

### American Indian/Alaska Native

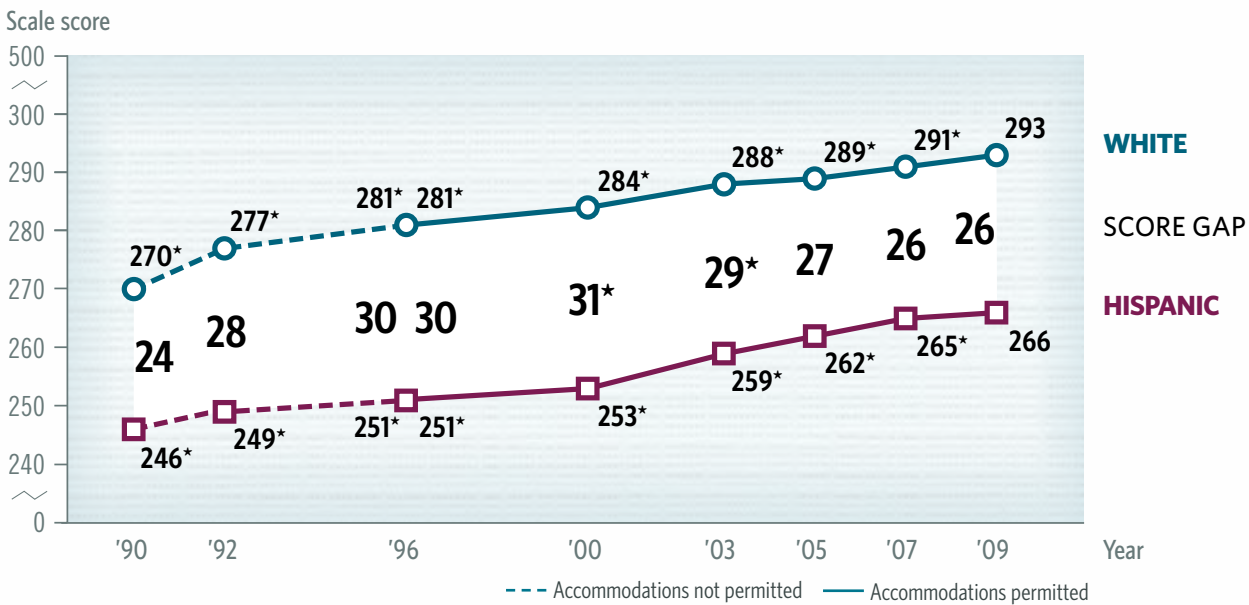
- No significant change from 2007

NOTE: Black includes African American, Hispanic includes Latino, and Pacific Islander includes Native Hawaiian. Race categories exclude Hispanic origin.  
 SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 2007, and 2009 Mathematics Assessments.

## No significant change in White – Black score gap compared to 2007 or 1990



## No significant change in White – Hispanic gap compared to 2007 or 1990

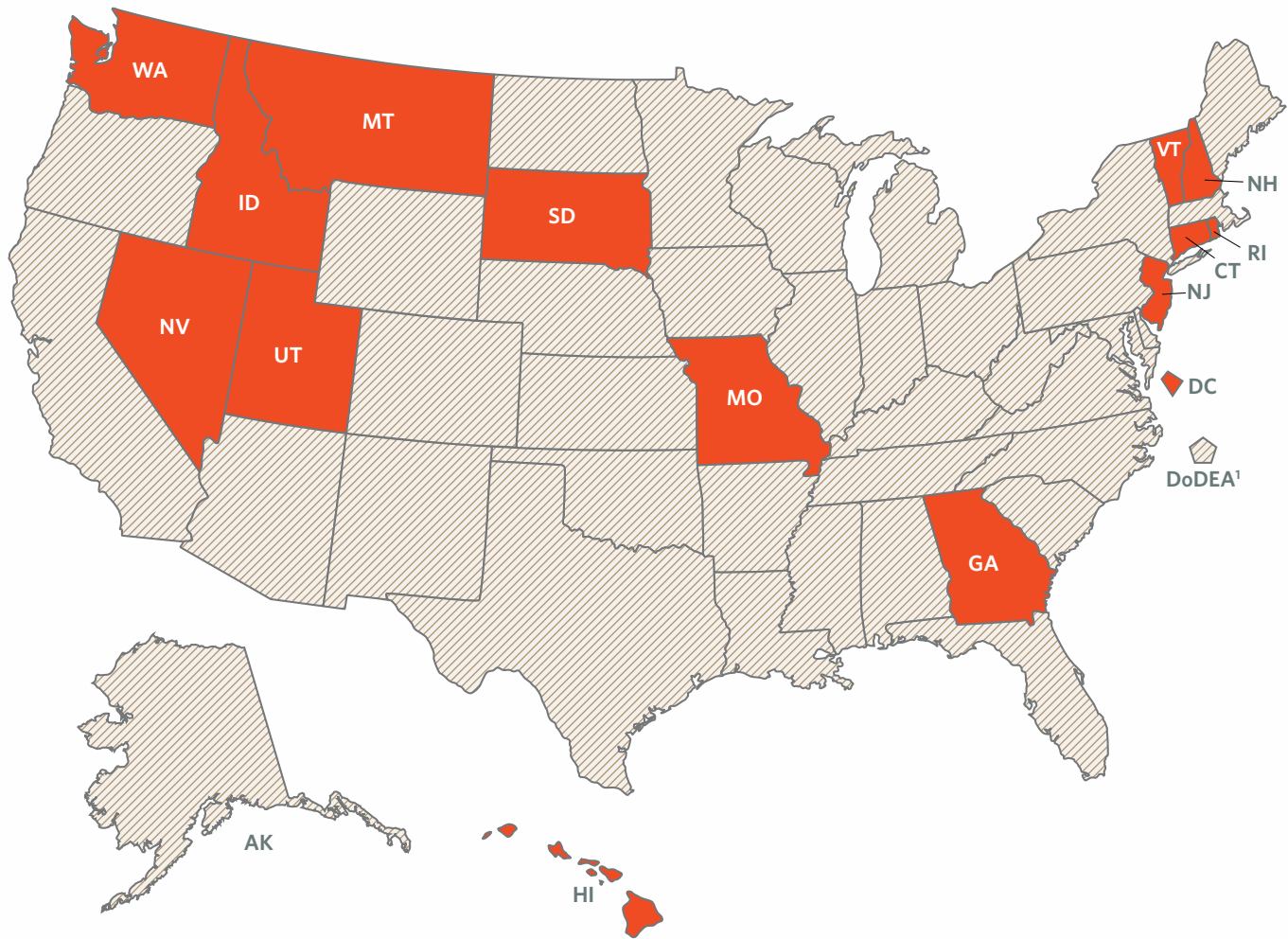


\* Significantly different ( $p < .05$ ) from 2009.

NOTE: Black includes African American, and Hispanic includes Latino. Race categories exclude Hispanic origin. Score gaps are calculated based on differences between unrounded average scores.

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.

## Scores increase since 2007 in 15 states



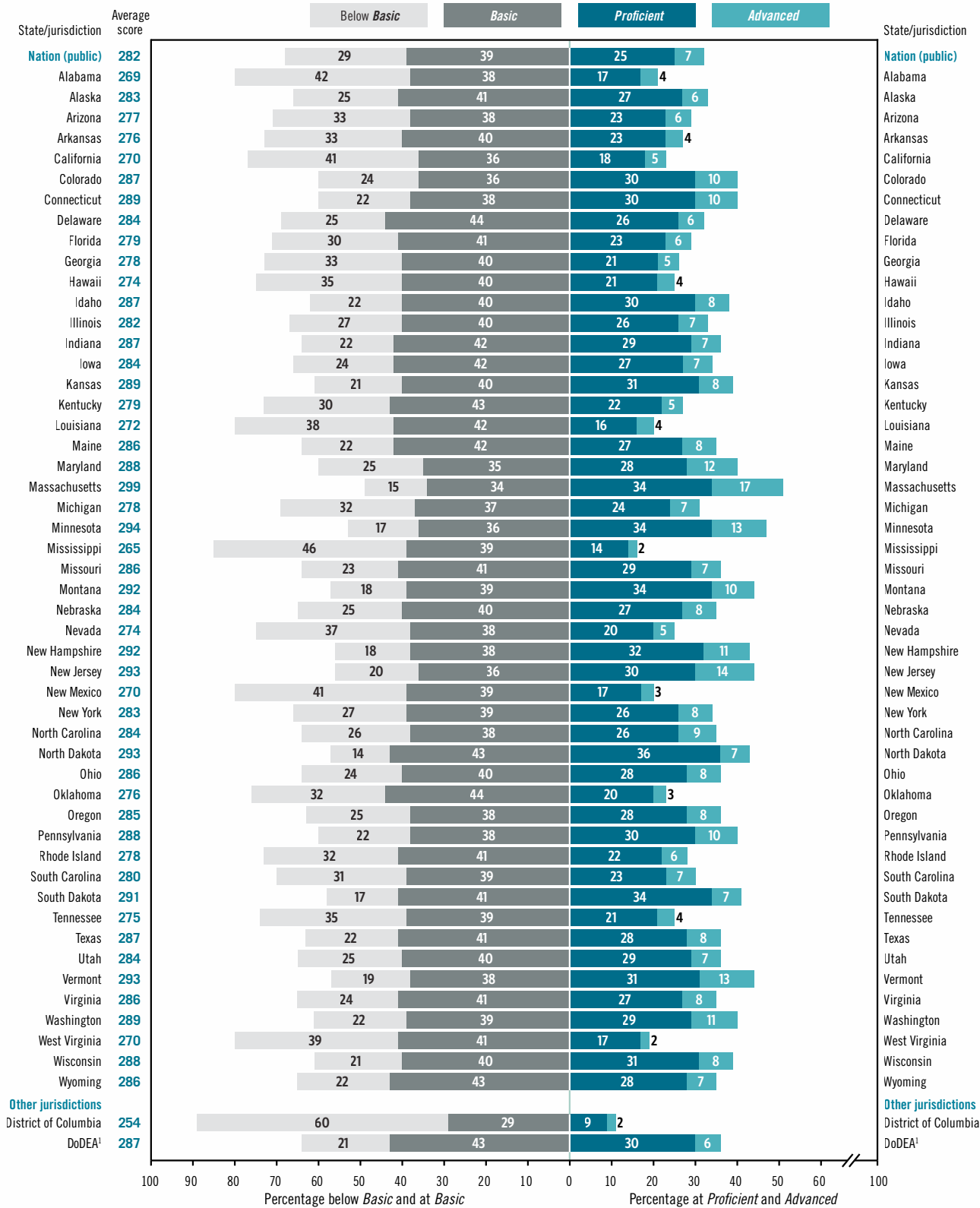
■ Scores increased in Connecticut, District of Columbia, Georgia, Hawaii, Idaho, Missouri, Montana, New Hampshire, New Jersey, Nevada, Rhode Island, South Dakota, Utah, Vermont, and Washington

▨ No significant change

<sup>1</sup>Department of Defense Education Activity (overseas and domestic schools).

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

# State Scores and Achievement-Level Results



<sup>1</sup> Department of Defense Education Activity (overseas and domestic schools).

NOTE: The shaded bars are graphed using unrounded numbers. 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.

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