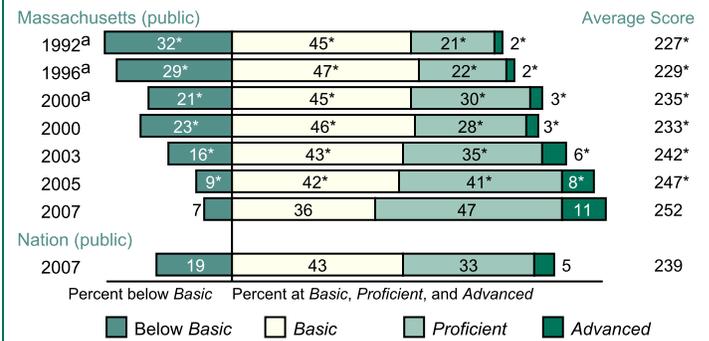


The National Assessment of Educational Progress (NAEP) assesses mathematics in five content areas: number properties and operations; measurement; geometry; data analysis and probability; and algebra. The NAEP mathematics scale ranges from 0 to 500.

**Overall Mathematics Results for Massachusetts**

- In 2007, the average scale score for fourth-grade students in Massachusetts was 252. This was higher than their average score in 2005 (247) and was higher than their average score in 1992 (227).<sup>1</sup>
- Massachusetts' average score (252) in 2007 was higher than that of the nation's public schools (239).
- Of the 52 states and other jurisdictions that participated in the 2007 fourth-grade assessment, students' average scale score in Massachusetts was higher than those in 51 jurisdictions..<sup>2</sup>
- The percentage of students in Massachusetts who performed at or above the NAEP *Proficient* level was 58 percent in 2007. This percentage was greater than that in 2005 (49 percent) and was greater than that in 1992 (23 percent).
- The percentage of students in Massachusetts who performed at or above the NAEP *Basic* level was 93 percent in 2007. This percentage was greater than that in 2005 (91 percent) and was greater than that in 1992 (68 percent).

**Percentages at NAEP Achievement Levels and Average Score**



<sup>a</sup> Accommodations were not permitted for this assessment.  
NOTE: The NAEP grade 4 mathematics achievement levels correspond to the following scale points: *Below Basic*, 213 or lower; *Basic*, 214–248; *Proficient*, 249–281; *Advanced*, 282 or above.

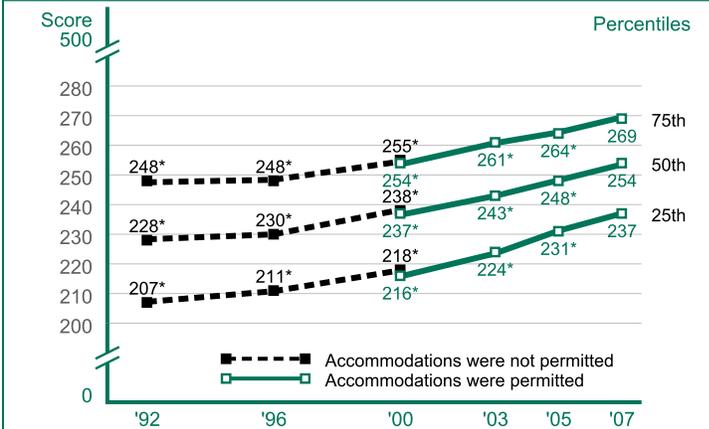
**Performance of NAEP Reporting Groups in Massachusetts: 2007**

Reporting groups	Percent of students	Average score	Percent below <i>Basic</i>	Percent of students at or above <i>Basic</i>	Percent <i>Proficient</i>	Percent <i>Advanced</i>
Male	51	254 ↑	7	93	60 ↑	13 ↑
Female	49	251 ↑	7 ↓	93 ↑	55 ↑	9
White	75	257 ↑	3 ↓	97 ↑	65 ↑	12
Black	7	232	25	75	26	2
Hispanic	11	231	23	77	23	2
Asian/Pacific Islander	6	259	5	95	66	21
American Indian/Alaska Native	#	‡	‡	‡	‡	‡
Eligible for National School Lunch Program	27	237 ↑	17	83	32 ↑	3
Not eligible for National School Lunch Program	72	258 ↑	3	97	67 ↑	14

**Average Score Gaps Between Selected Groups**

- In 2007, male students in Massachusetts had an average score that was higher than that of female students by 3 points. In 1992, there was no significant difference between the average score of male and female students.
- In 2007, Black students had an average score that was lower than that of White students by 25 points. This performance gap was narrower than that of 1992 (36 points).
- In 2007, Hispanic students had an average score that was lower than that of White students by 26 points. This performance gap was narrower than that of 1992 (34 points).
- In 2007, students who were eligible for free/reduced-price school lunch, a proxy for poverty, had an average score that was lower than that of students who were not eligible for free/reduced-price school lunch by 22 points. In 1996, the average score for students who were eligible for free/reduced-price school lunch was lower than the score of those not eligible by 21 points.
- In 2007, the score gap between students at the 75th percentile and students at the 25th percentile was 32 points. This performance gap was narrower than that of 1992 (40 points).

**Mathematics Scores at Selected Percentiles**



NOTE: Scores at selected percentiles on the NAEP mathematics scale indicate how well students at lower, middle, and higher levels performed.

# Rounds to zero.

‡ Reporting standards not met.

\* Significantly different from 2007.

↑ Significantly higher than 2005. ↓ Significantly lower than 2005.

<sup>1</sup> Comparisons (higher/lower/narrower/wider/not different) are based on statistical tests. The .05 level was used for testing statistical significance. Statistical comparisons are calculated on the basis of unrounded scale scores or percentages. Comparisons across jurisdictions and comparisons with the nation or within a jurisdiction across years may be affected by differences in exclusion rates for students with disabilities (SD) and English language learners (ELL). The exclusion rates for SD and ELL in Massachusetts were 5 percent and 1 percent in 2007, respectively. For more information on NAEP significance testing see <http://nces.ed.gov/nationsreportcard/mathematics/interpret-results.asp#statistical>.

<sup>2</sup> "Jurisdictions" refers to states and the District of Columbia and the Department of Defense Education Activity schools.

NOTE: Detail may not sum to totals because of rounding and because the "Information not available" category for the National School Lunch Program, which provides free and reduced-price lunches, and the "Unclassified" category for race/ethnicity are not displayed. Visit <http://nces.ed.gov/nationsreportcard/states/> for additional results and detailed information.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 1992–2007 Mathematics Assessments.