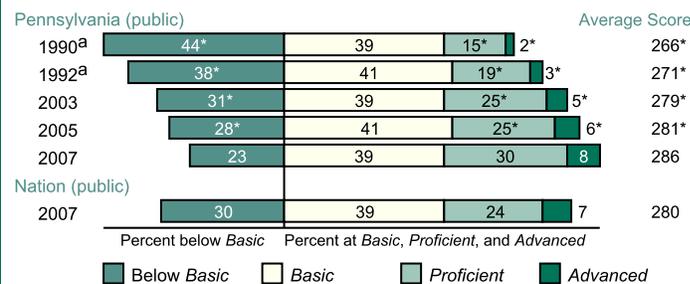


The National Assessment of Educational Progress (NAEP) assesses mathematics in five content areas: number properties and operations; measurement; geometry; data analysis and probability; and algebra. The NAEP mathematics scale ranges from 0 to 500.

Overall Mathematics Results for Pennsylvania

- In 2007, the average scale score for eighth-grade students in Pennsylvania was 286. This was higher than their average score in 2005 (281) and was higher than their average score in 1990 (266).¹
- Pennsylvania's average score (286) in 2007 was higher than that of the nation's public schools (280).
- Of the 52 states and other jurisdictions that participated in the 2007 eighth-grade assessment, students' average scale score in Pennsylvania was higher than those in 25 jurisdictions, not significantly different from those in 21 jurisdictions, and lower than those in 5 jurisdictions.²
- The percentage of students in Pennsylvania who performed at or above the NAEP *Proficient* level was 38 percent in 2007. This percentage was greater than that in 2005 (31 percent) and was greater than that in 1990 (17 percent).
- The percentage of students in Pennsylvania who performed at or above the NAEP *Basic* level was 77 percent in 2007. This percentage was greater than that in 2005 (72 percent) and was greater than that in 1990 (56 percent).

Percentages at NAEP Achievement Levels and Average Score



^a Accommodations were not permitted for this assessment.

NOTE: The NAEP grade 8 mathematics achievement levels correspond to the following scale points: *Below Basic*, 261 or lower; *Basic*, 262–298; *Proficient*, 299–332; *Advanced*, 333 or above.

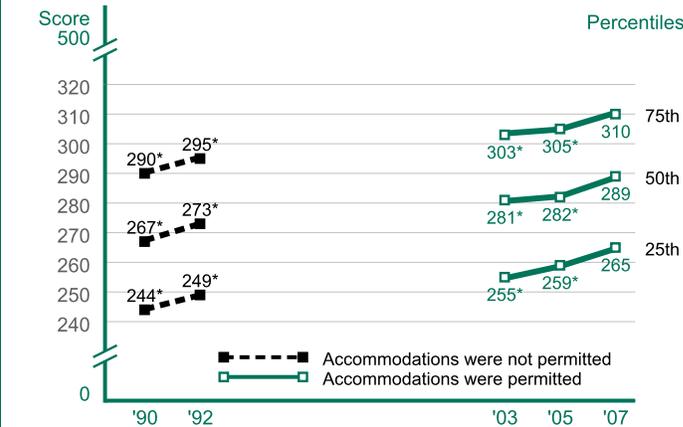
Performance of NAEP Reporting Groups in Pennsylvania: 2007

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	289 ↑	21	79	42 ↑	10 ↑
Female	49	283 ↑	25	75	35 ↑	6
White	76	293 ↑	16 ↓	84 ↑	44 ↑	9
Black	15	257	55	45	13	1
Hispanic	6	264	45	55	17	3
Asian/Pacific Islander	3	314	9	91	66	36
American Indian/Alaska Native	#	‡	‡	‡	‡	‡
Eligible for National School Lunch Program	29	267	41	59	19 ↑	2
Not eligible for National School Lunch Program	71	294 ↑	16	84	46 ↑	10

Average Score Gaps Between Selected Groups

- In 2007, male students in Pennsylvania had an average score that was higher than that of female students by 5 points. In 1990, the average score for male students was higher than that of female students by 6 points.
- In 2007, Black students had an average score that was lower than that of White students by 36 points. In 1990, the average score for Black students was lower than that of White students by 36 points.
- In 2007, Hispanic students had an average score that was lower than that of White students by 29 points. Data are not reported for Hispanic students in 1990, because reporting standards were not met.
- 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 26 points. In 2003, the average score for students who were eligible for free/reduced-price school lunch was lower than the score of those not eligible by 31 points.
- In 2007, the score gap between students at the 75th percentile and students at the 25th percentile was 46 points. In 1990, the score gap between students at the 75th percentile and students at the 25th percentile was 46 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.

¹ 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 Pennsylvania were 4 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>.

² "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, 1990–2007 Mathematics Assessments.