

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	Student Percentage at NAEP Achievement Levels																																			
<ul style="list-style-type: none"> In 2005, the average scale score for fourth-grade students in Pennsylvania was 241. This was higher¹ than their average score in 2003 (236), and was higher than their average score in 1992 (224). Pennsylvania's average score (241) in 2005 was higher than that of the Nation's public schools (237). Of the 52 states and other jurisdictions² that participated in the 2005 fourth-grade assessment, students' average scale scores in Pennsylvania were higher than those in 19 jurisdictions, not significantly different from those in 27 jurisdictions, and lower than those in 5 jurisdictions. The percentage of students in Pennsylvania who performed at or above the NAEP <i>Proficient</i> level was 41 percent in 2005. This percentage was greater than that in 2003 (36 percent), and was greater than that in 1992 (22 percent). The percentage of students in Pennsylvania who performed at or above the NAEP <i>Basic</i> level was 82 percent in 2005. This percentage was greater than that in 2003 (78 percent), and was greater than that in 1992 (65 percent). 	<p>Student Percentage at NAEP Achievement Levels</p> <p>Pennsylvania (public)</p> <table border="1"> <thead> <tr> <th>Year</th> <th>Below Basic</th> <th>Basic</th> <th>Proficient</th> <th>Advanced</th> </tr> </thead> <tbody> <tr> <td>1992¹</td> <td>35*</td> <td>43</td> <td>20*</td> <td>2*</td> </tr> <tr> <td>1996¹</td> <td>32*</td> <td>48*</td> <td>19*</td> <td>1*</td> </tr> <tr> <td>2003</td> <td>22*</td> <td>42</td> <td>32</td> <td>4*</td> </tr> <tr> <td>2005</td> <td>18</td> <td>41</td> <td>35</td> <td>6</td> </tr> </tbody> </table> <p>Nation (public)</p> <table border="1"> <thead> <tr> <th>Year</th> <th>Below Basic</th> <th>Basic</th> <th>Proficient</th> <th>Advanced</th> </tr> </thead> <tbody> <tr> <td>2005</td> <td>21</td> <td>44</td> <td>30</td> <td>5</td> </tr> </tbody> </table> <p>Percent below Basic Percent at Basic, Proficient, and Advanced</p> <p>■ Below Basic □ Basic ■ Proficient ■ Advanced</p> <p>¹ Accommodations were not permitted for this assessment.</p> <p>NOTE: The NAEP mathematics achievement levels correspond to the following scale points: Below Basic, 213 or lower; Basic, 214–248; Proficient, 249–281; Advanced, 282 or above.</p>	Year	Below Basic	Basic	Proficient	Advanced	1992 ¹	35*	43	20*	2*	1996 ¹	32*	48*	19*	1*	2003	22*	42	32	4*	2005	18	41	35	6	Year	Below Basic	Basic	Proficient	Advanced	2005	21	44	30	5
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Performance of NAEP Reporting Groups in Pennsylvania						
Reporting groups	Percent of students	Average score	Percent below Basic	Percent of students at or above Basic	Percent Proficient	Percent Advanced
Male	51	241	18	82	44	7
Female	49	240↑	18↓	82↑	39↑	5↑
White	74	247↑	11	89	50↑	7↑
Black	17	219↑	40↓	60↑	13	1
Hispanic	7	220	40	60	16	2
Asian/Pacific Islander	2	‡	‡	‡	‡	‡
American Indian/Alaska Native	#	‡	‡	‡	‡	‡
Eligible for free/reduced-price school lunch	37	225↑	34	66	21↑	2
Not eligible for free/reduced-price school lunch	62	250↑	8↓	92↑	54↑	9

Average Score Gaps Between Selected Groups	Mathematics Scale Scores at Selected Percentiles																																			
<ul style="list-style-type: none"> In 2005, male students in Pennsylvania had an average score that was not found to be significantly different from that of female students. In 1992, there was no significant difference between the average score of male and female students. In 2005, Black students had an average score that was lower than that of White students by 27 points. This performance gap was narrower than that of 1992 (36 points). In 2005, Hispanic students had an average score that was lower than that of White students by 27 points. Data are not reported for Hispanic students in 1992, because reporting standards were not met. Therefore, the performance gap data are not reported. In 2005, students who were eligible for free/reduced-price school lunch, an indicator of poverty, had an average score that was lower than that of students who were not eligible for free/reduced-price school lunch by 25 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 24 points. In 2005, the score gap between students at the 75th percentile and students at the 25th percentile was 38 points. In 1992, the score gap between students at the 75th percentile and students at the 25th percentile was 42 points. 	<table border="1"> <thead> <tr> <th>Year</th> <th>25th Percentile (Accommodations not permitted)</th> <th>25th Percentile (Accommodations permitted)</th> <th>50th Percentile (Accommodations not permitted)</th> <th>50th Percentile (Accommodations permitted)</th> <th>75th Percentile (Accommodations not permitted)</th> <th>75th Percentile (Accommodations permitted)</th> </tr> </thead> <tbody> <tr> <td>'92</td> <td>204*</td> <td>226*</td> <td>246*</td> <td>246*</td> <td>246*</td> <td>246*</td> </tr> <tr> <td>'96</td> <td>209*</td> <td>228*</td> <td>245*</td> <td>245*</td> <td>245*</td> <td>245*</td> </tr> <tr> <td>'03</td> <td>217*</td> <td>239*</td> <td>257*</td> <td>257*</td> <td>257*</td> <td>257*</td> </tr> <tr> <td>'05</td> <td>223</td> <td>243</td> <td>261</td> <td>261</td> <td>261</td> <td>261</td> </tr> </tbody> </table> <p>Scores at selected percentiles on the NAEP mathematics scale indicate how well students at lower, middle, and higher levels of the distribution performed.</p>	Year	25th Percentile (Accommodations not permitted)	25th Percentile (Accommodations permitted)	50th Percentile (Accommodations not permitted)	50th Percentile (Accommodations permitted)	75th Percentile (Accommodations not permitted)	75th Percentile (Accommodations permitted)	'92	204*	226*	246*	246*	246*	246*	'96	209*	228*	245*	245*	245*	245*	'03	217*	239*	257*	257*	257*	257*	'05	223	243	261	261	261	261
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The estimate rounds to zero.

‡ Reporting standards not met.

* Significantly different from 2005.

↑ Significantly higher than 2003. ↓ Significantly lower than 2003.

¹ Comparisons (higher/lower/not different) are based on statistical tests. The .05 level was used for testing statistical significance. Performance comparisons may be affected by differences in exclusion rates across years for students with disabilities (2% nationally in 2005) and English language learners (1% nationally in 2005) in the NAEP samples. Statistical comparisons are calculated on the basis of unrounded scale scores or percentages.

² "Other Jurisdictions" refers to 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 free/reduced-price lunch 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), selected years, 1992–2005 Mathematics Assessments.