

Appendix table 1-19

**U.S. students who took mathematics and science Advanced Placement tests and percentage with passing scores, by sex and race/ethnicity: 1997 and 2004**

Subject	Sex				Race/ethnicity							
	1997		2004		1997				2004			
	Male	Female	Male	Female	White	Black	Hispanic	Asian	White	Black	Hispanic	Asian
<b>Students taking AP tests</b>												
<b>Mathematics</b>												
Calculus AB .....	57,255	51,182	88,809	81,521	73,219	4,019	5,144	16,183	116,704	6,930	12,184	25,111
Calculus BC .....	14,022	8,327	29,567	19,765	13,032	394	630	6,027	31,069	1,024	2,232	12,127
Statistics .....	4,163	3,388	32,538	32,525	4,849	313	390	1,334	43,946	2,641	4,293	10,416
<b>Science</b>												
Biology .....	30,387	39,081	45,237	63,651	44,508	2,860	3,280	11,255	69,606	5,373	7,672	18,754
Chemistry .....	23,517	17,286	37,208	31,824	25,548	1,394	1,550	8,269	43,688	2,585	4,271	14,202
Computer science A .....	5,584	1,408	11,620	2,252	4,301	320	337	1,350	8,735	483	856	2,849
Computer science AB .....	3,841	526	5,291	628	2,798	65	124	934	3,737	101	225	1,453
Physics B .....	13,471	7,139	27,200	14,644	13,328	541	902	3,667	27,171	1,396	2,766	7,705
Physics C: electricity and magnetism .....	4,407	1,310	8,178	2,325	3,421	125	183	1,388	6,693	178	365	2,620
Physics C: mechanics .....	8,591	3,149	15,986	5,555	7,164	291	485	2,580	14,062	490	1,016	4,640
<b>Passing scores<sup>a</sup> (%)</b>												
<b>Mathematics</b>												
Calculus AB .....	63.2	55.0	62.6	55.1	60.5	31.7	42.2	64.3	62.3	30.1	36.8	62.9
Calculus BC .....	81.1	75.2	81.0	77.1	79.8	59.6	70.3	78.7	80.6	58.1	62.1	81.7
Statistics .....	70.4	51.8	65.4	54.2	64.7	28.8	31.8	67.5	63.7	26.8	34.2	63.5
<b>Science</b>												
Biology .....	73.4	62.6	66.9	56.4	68.9	35.9	46.5	72.3	64.5	29.6	35.9	66.9
Chemistry .....	63.1	51.2	60.6	51.5	58.7	29.1	35.3	63.9	58.1	27.7	31.0	64.5
Computer science A .....	49.7	36.6	59.3	46.1	50.3	13.4	30.9	47.0	61.0	26.9	33.1	59.3
Computer science AB .....	71.6	72.2	63.4	62.1	72.7	52.3	52.4	72.7	64.1	39.6	43.6	65.9
Physics B .....	64.8	50.3	62.2	47.2	61.1	33.1	41.8	61.1	61.4	23.1	30.7	57.1
Physics C: electricity and magnetism .....	68.2	58.2	66.7	58.3	67.5	27.2	41.0	67.8	65.8	47.8	43.3	66.8
Physics C: mechanics .....	75.1	59.0	72.6	61.1	72.1	40.2	49.1	73.1	71.6	43.1	47.4	72.5

AP = Advanced Placement

<sup>a</sup>Most U.S. colleges and universities grant college credit or advanced placement for scores of 3, 4, or 5 on Advanced Placement tests (on a scale of 1–5).

NOTES: Subjects with more than one AP course/test distinguished as follows: calculus AB and calculus BC are both yearlong courses and cover some of same material at similar level of depth. However, calculus BC extends to additional topics and aims to substitute for additional college course beyond course(s) calculus AB replaces. Computer science A includes subset of the topics addressed in computer science AB and covers some in less depth (e.g., algorithms, data structures, design, and abstraction). Physics B and physics C differ primarily in depth and level of mathematics required. Physics B rarely uses calculus but requires knowledge of algebra and trigonometry. Equivalent to 1-year terminal college course often taken by students majoring in fields such as life sciences, certain applied sciences, or premedicine. Physics C requires extensive use of calculus methods and is equivalent to college courses of up to 2 years' duration designed for students majoring in physical sciences or engineering. Students take one physics C exam, but components scored separately for electricity/magnetism and for mechanics.

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