



California SAT9 Results for CPM High Schools

1998-2002 Test Results Summary

California began using the SAT9 test as the primary measure of student achievement in 1998. The test has been used for the past five years and will be replaced with another device, the CAT6, in 2003. Each year CPM prepared a county by county report comparing the average mathematics scores for 9th, 10th, and 11th grades in CPM high schools to the county high school averages. The reports also included a comparison of the average score for all CPM high schools to both the county average and the state average. A summary of the results is in the table below.

- In all five years in all three grades the CPM high schools had higher average scores, ranging between 5.8 to 10.2%, than the averages of all high schools (per county and the entire state) in California.
- Since 1998, the number of CPM high schools that score more than 10 points below the California NPR average has decreased from 25 to 11; the number that score more than ten points above the average has increased from 48 to 64.

COUNTY	9th Grade		10th Grade		11th Grade	
	CPM Avg.	County Avg.	CPM Avg.	County Avg.	CPM Avg.	County Avg.
1998 TOTALS	52.9	52.3	46.9	44.6	49.2	47.1
California 1998 avg.	50		43		46	
CPM % above state avg.	5.8%		9%		7%	
1999 TOTALS	54.7	54.0	49.4	47.7	51.6	49.7
California 1999 avg.	51		45		48	
CPM % above state avg.	7.3%		9.8%		7.5%	
2000 TOTALS	57.6	56	51.6	48.4	53.2	50.8
California 2000 avg.	54		47		50	
CPM % above state avg.	6.7%		9.8%		6.4%	
2001 TOTALS	58.7	56.9	51	47.7	53.5	50.1
California 2001 avg.	54		47		50	
CPM % above state avg.	8.7%		8.5%		7%	
2002 TOTALS	59.2	57.7	52.9	49.6	54.5	51
California 2002 avg.	54		48		50	
CPM % above state avg.	9.6%		10.2%		9%	

Totals for CPM schools are the weighted average for the 42 (of 58) counties where CPM is used. The scores are for all students, including LEP (not proficient in English) students. Data for this report, including the County and California averages, are the scores reported by the California Department of Education as posted on its web site. Each score reported is the national percentile rank (NPR) of the "average" student, which estimates the individual percentile rank of the hypothetical "average" student in each group. The SAT9 is a nationally normed test. Its norming sample was representative of the nation (with respect to geographical, ethnic, socio-economic, and urban factors), but not necessarily of California.

Another measure of the CPM high schools' performance is the number of schools that scored more than ten points above or below the state average NPR. These results are based on a comparison of each school's 9th, 10th, and 11th grade scores to the state NPR. A school is considered ten points above or below the state average NPR when two of the three grades meet this criteria. The five year results appear in the table below.

Test Year	1998	1999	2000	2001	2002
Number of CPM High Schools	214	200	174	178	178
Number of schools more than 10 points below the CA NPR avg.	25	24	22	16	11
Number of schools more than 10 points above the CA NPR avg.	48	55	57	58	64

These results are consistent with every study CPM has previously reported for student performance on multiple choice tests measuring basic mathematics for a course or grade level. CPM students do from somewhat better to significantly better than their peers who use other curriculum materials on these kinds of tests. They do much better on tests that use written response items. Taken as a whole, especially in light of increasing SAT9 scores each year, teachers who choose the CPM curriculum can rest assured that the expected mathematics content and skills are in the courses. The SAT9 test does not measure the added benefits of using CPM: problem solving strategies, concept development, and contextual applications.

Over the past several years there have been heated debates about the best way to teach K-12 mathematics. Some traditionalists denigrate all programs that have been created in the past 15 years that attempt to teach the basics in a problem solving context that emphasizes understanding mathematical concepts. The results summarized in this report clearly show that the CPM mathematics program contains the expected mathematical content. Students who use the CPM program learn basic skills and elementary applications of concepts.

Complete 1998-2002 results are available at www.cpm.org.