



Frequently Asked Questions

The Common Core State Standards (CCSS) in mathematics are a set of standards 46 states have adopted outlining the learning expectations of K-12 students. The developers of CCSS researched academic standards of high performing countries and surveyed university/business/industry leaders to determine the skills high school graduates must have to “ensure students are prepared for today’s entry-level careers, freshman-level college courses, and workforce training programs”. CA CCSS Mathematics are built on the foundations of *Focus, Coherence and Rigor*, balancing conceptual understanding, procedural fluency and application. Common Core Math Content Standards include the domains of number, algebra, geometry, functions, statistics & probability. There are also Common Core Standards for Mathematical Practice. These standards are the “doing” of mathematics developing students’ skills in critical thinking, problem solving, quantitative reasoning, and mathematical modeling.

CCSS in math are internationally benchmarked and based on research on how students learn mathematics. The goal of CCSS is to prepare College and Career Ready high school graduates.

What kind of math is taught in Common Core Integrated Math I, II, III?

This table compares (in a very generic way) the Common Core Integrated Math sequence to the previous high school courses based on the 1997 California math standards. This shows how the level of math content of Common Core has increased compared to our previous math courses.

- **Common Core Math 8**
 - Statistics: Bivariate Data
 - Some “1997 High School Geometry”
 - 1st half “1997 Algebra 1”
- **Common Core Math I**
 - 2nd half “1997 Algebra 1”
 - 1st half “1997 Algebra 2”
 - Some statistics topics
 - Some “1997 High School Geometry”
- **Common Core Math II**
 - Strong emphasis on transformational geometry
 - Additional “1997 High School Geometry”
 - Some content in “1997 Algebra 2”
- **Common Core Math III**
 - 2nd half “1997 Algebra 2”
 - Trigonometry (unit circle, graphing 6 trig. functions, identities, etc.)
 - Some AP Statistics topics (normal distribution, inference, etc.)

[Specific descriptions of CHS math courses.](#)



Did CUSD have to choose an integrated high school math sequence?

The quick answer is “no”. For each grade level from Kindergarten through 8th grade there is a set of standards addressing various math domains, including number, algebra, geometry and statistics. For high school, there are 3 years worth of standards that all students will be assessed on at the end of 11th grade (not at the end of each grade level or course). Districts must determine how to arrange the high school standards into courses. The California Math Framework provides guidance by organizing the Common Core high school standards into two sequences: integrated (Math I, II, III) or traditional (Algebra, Geometry, Algebra 2). *The sequences are equivalent in rigor because they are the same set of standards...just in two different orders.* The CUSD Governing School Board came to their decision through the recommendations of CUSD secondary math department. Many California districts, as well as entire states such as North Carolina, Georgia, and Utah, are choosing the Common Core Integrated sequence for high school math.

My child completed Algebra in 8th grade. Why should my child take Common Core Integrated Math I as a 9th grader?

- The California Mathematics Framework describes the difference in rigor between the new Common Core math standards and the previous math standards. Appendix A of the Math Framework states:
- The CA CCSSM Grade 8 standards are of significantly higher rigor than the Algebra 1 course that many students have taken while in 8th grade....Because many of the topics previously included in the former Algebra I course are in the CA CCSSM for grade eight, the new Algebra I and Mathematics I courses typically start in ninth grade with more advanced topics and include more in-depth work with linear functions, exponential functions and relationships, and go beyond the previous high school standards in statistics.

I hear the SAT is changing to align with Common Core. What math classes should my high school student take to prepare for the new SAT?

- The College Board announced recently the redesigned SAT, revised to align with Common Core, to begin in spring 2016. There is a strong emphasis on data analysis, real-world application, and reasoning skills in varied contexts. There is alignment with the coursework that students will be doing in Common Core math. This [side-by-side comparison by the College Board](#) shows differences between the current SAT and redesigned SAT. All Common Core math secondary math courses (Math 6 – Integrated Math III) have a strong emphasis on statistics and probability to support students’ understanding and skill in data analysis.

I have a high school junior who completed the UC's three year A-G admission requirement for math, as well as extra math classes beyond the minimum requirement. Should she take math her senior year?

- *Taking mathematics courses through students' 12th grade year is important for academic preparation for college success no matter what major a student chooses. The University of California, California State University and California Community Colleges have released a [Statement on Competencies in Mathematics Expected of Entering College Students](#) to provide a clear and coherent message about the mathematics that students need to know and be able to do to be successful in college and is predicated on the following basic recommendation:*
- For proper preparation for baccalaureate level coursework, all students should be enrolled in a mathematics course in every semester of high school. It is particularly important that students take mathematics courses in their senior year of high school, even if they have completed three years of college preparatory mathematics by the end of their junior year. Experience has shown that students who take a hiatus from the study of mathematics in high school are very often unprepared for courses of a quantitative nature in college and are unable to continue in these courses without remediation in mathematics.