

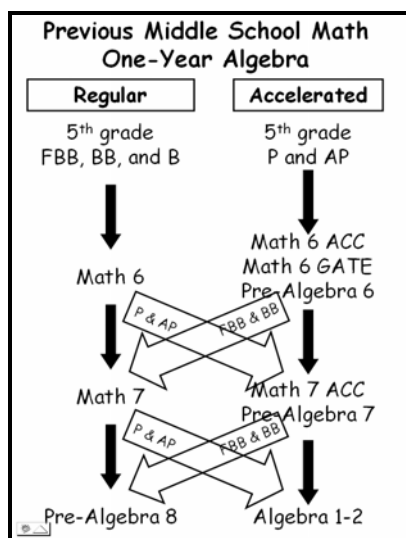


# Middle School Math Sequence

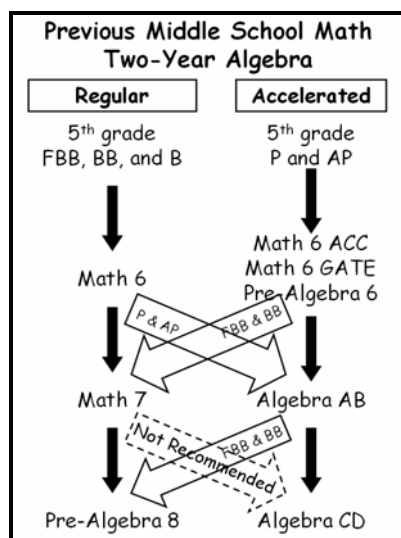
Aligning the Math Program 2008-2009

## What do our middle schools currently offer in math?

Our district has two programs for accelerated students in middle school math: a one-year Algebra program, and a two-year Algebra program. In both programs, accelerated students complete Algebra in the 8th grade and take Geometry in the 9th grade. Students in both programs have similar proficiency levels on the state math exam, the California Standards Test (CST).

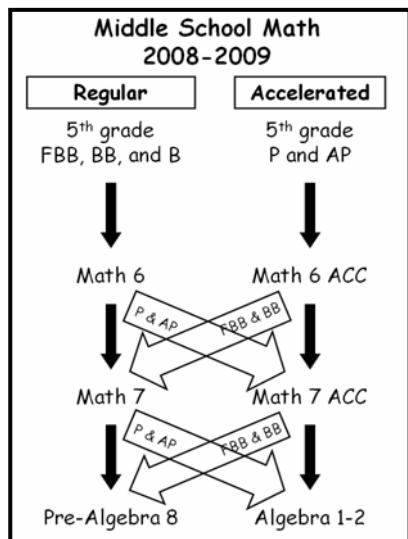


The one-year program places accelerated students into a more-rigorous 7th grade (pre-algebra) curriculum and supplements with some of the Algebra standards. In 8th grade, these students take a one-year Algebra course, and take the Algebra CST.



The two-year program divides the Algebra curriculum into two halves. In 7th grade, students learn the first half of the Algebra curriculum and teachers supplement the curriculum with 7th grade standards in order to prepare students for the grade 7 CST. In 8th grade, these students complete the second half of the Algebra curriculum, and take the Algebra CST.

## What is the middle school math program next year?



In order to create uniformity and alignment within the district, state and nation, we will begin using the one-year program at all middle schools next year. Beginning next year, the two-year sequence for proficient and advanced proficient students will be Math 7 Accelerated (ACC), and Algebra 1-2 in grade 8. To prepare students for the one-year Algebra course, the Math 7 ACC curriculum must be more rigorous than the regular 7th grade course. This program will merge the best qualities of the one-year Algebra program and the two-year Algebra program into a sequence of courses that will best prepare students for the rigor and pace of Geometry and Intermediate Algebra in high school.

### **Why choose a 1-year program?**

- Neither program was "broken." Both programs allowed our highest achieving students to finish Algebra in grade 8 with almost the same percent of students scoring Proficient or Advanced Proficient on the Algebra CST.
- We have found that proficient students do not need 2 years to complete Algebra. A one-year Algebra course will better prepare these proficient students for the one-year Geometry and Intermediate Algebra courses in high school.
- The one-year program is better aligned to the state tests our students take. Seventh grade students take a 7th grade CST as part of the state STAR assessment. Algebra AB teachers had to supplement the curriculum with the 7th grade standards found on the 7<sup>th</sup> grade CST. These state standards were not found in the Algebra textbook used with the Algebra AB course. All of the grade 7 standards and many Algebra standards are in the new text which will be used for the Math 7 ACC course.
- The one year program allows greater flexibility for students to move between the regular and accelerated paths. Students who become proficient in the 7th grade will be able to enter and finish Algebra in the 8th grade. In schools with a two-year program, students who became proficient in Math 7 could not take Algebra CD in 8th grade because they had not learned the material in the first half of the Algebra course.

### **How do the new courses compare to Algebra AB and CD?**

- We have compared the Math 7 ACC course to the Algebra AB course, and 90% of the content is the same. Teachers will receive a pacing guide which emphasizes key grade level standards and the sections in the book that extend into Algebra standards. Sections of the book that address pre-course content are omitted.
- The 8th grade Algebra 1-2 course is also similar to the school's previous Algebra CD course. In the new Algebra 1-2 course, 8th grade students will complete 5 of the 11 chapters by the end of the first quarter. The majority of the year is spent on the more difficult content found in the latter half of the Algebra course.

### **Will this affect the number of students completing the A-G college entrance requirements?**

- Students who take Algebra in middle school are far more likely to complete the A-G college entrance requirements in high school.
- The A to G Subject Matter Requirements are the 15 high school courses designated by the University of California (UC) and the California State University (CSU) systems which are required in order for students to be eligible for admission. In math, the UC and CSU systems require students to complete Algebra I, Geometry and Intermediate Algebra (Algebra II) with a grade of "C" or higher.
- The new course sequence of Math 7 ACC and Algebra 1-2 allows students to complete Algebra in the 8th grade.
- We hope that the Algebra 1-2 course will allow for more proficient students to enter Algebra in the 8th grade if they become proficient in the 7th grade.

### **What if my child is not proficient in math?**

The Math 6, Math 7 and Pre-Algebra 8 courses build in additional time for review of pre-course math content. The new course sequence allows students two opportunities to enter the accelerated path. If a student becomes proficient in Math 6, he or she can enter Math 7 ACC in 7<sup>th</sup> grade. If a student becomes proficient in Math 7, he or she can enter Algebra 1-2 in 8<sup>th</sup> grade.

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