

SMMUSD COURSE DESCRIPTION

MATH CORE 8:

This course is student-centered and uses the Standards-based *Connected Mathematics Project 3 (CMP3)* textbook. Mathematical concepts are embedded within engaging problems and projects. Students develop skills and understanding as they explore the problems individually, in a group, and as a whole class. The in-class development problems and the homework exercises give students practice throughout the year with valuable standards-based concepts, pre-algebra related skills, and algorithms. Students are required to write in both an analytical and evidence-based manner.

In grade 8, instructional time will focus on three critical areas: (1) formulating and reasoning about expressions and equations, including modeling and association in bivariate data with a linear equation, and solving linear equations and systems of linear equations; (2) grasping the concept of a function and using functions to describe quantitative relationships; (3) analyzing two- and three-dimensional space and figures using distance, angle, similarity, and congruence, and understanding and applying the Pythagorean Theorem. Students also work towards fluency with solving simple sets of two equations with two unknowns by inspection.

Students will develop a strong grasp of the Mathematical Practices:

1. Make Sense of problems and persevere in solving them.
 2. Reason abstractly and quantitatively.
 3. Construct viable arguments and critique the reasoning of others.
 4. Model with mathematics.
 5. Use appropriate tools strategically.
 6. Attend to precision.
 7. Look for and make use of structure.
 8. Look for and express regularity in repeated reasoning.
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