

Santa Rosa Middle School
Course Syllabus – Math 1

Course Information

Course: Math 1
Textbook: Big Ideas Math 1
Class Location: Room 6

Teacher Information

Name: Scott Paine
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Course Description:

Math 1 in the eighth grade at SRMS is an advanced math course for those students who have completed the seventh grade advanced math course. Students who complete the course are eligible for Math 2 as in their first year of high school. This means that students will be held to a high academic standard while they are in this class and will be given the same workload they would receive at the high school level. This is necessary in preparing students for future high school mathematics.

This course places an emphasis on synthesis and application of the mathematics studied, rather than just the procedure. In order for students to be successful in college and careers, they need to know how to use the math they are learning and why. To support this, students are exposed to a wide range of sources providing a more diverse mathematical experience and promoting problem solving skills.

Math 1 Concepts

- Algebra
 - Seeing Structure in Expressions
 - Creating Equations
 - Reasoning with Equations and Inequalities
 - Understand solving equations as a process of reasoning and explain the reasoning.
 - Solve equations and inequalities in one variable.
 - Solve systems of equations.
 - Represent and solve equations and inequalities graphically.
 - Functions
 - Understand the concept of a function and use function notation.
 - Interpret functions that arise in applications in terms of the context.
 - Analyze functions using different representations.
 - Build a function that models a relationship between two quantities.
 - Build new functions from existing functions.
 - Construct and compare linear, quadratic, and exponential models and solve problems.
 - Interpret expressions for functions in terms of the situation they model.
- Geometry
 - Congruence
 - Experiment with transformations in the plane.
 - Understand congruence in terms of rigid motions.
 - Make geometric constructions.
 - Expressing Geometric Properties with Equations
 - Use coordinates to prove simple geometric theorems algebraically.
- Statistics and Probability
 - Interpreting Categorical and Quantitative Data
 - Summarize, represent, and interpret data on a single count or measurement variable.
 - Summarize, represent, and interpret data on two categorical and quantitative variables.
 - Interpret linear models.

Student Evaluation

The grading breakdown for this course places more emphasis on assessments. It is imperative that students can demonstrate their understanding of the concepts learned.

Assessments (individual, group, and presentations)	-	70%
Assignments (classwork, homework, and presentations)	-	20%

Attendance

Regular and prompt class attendance is an essential part of the educational experience. Students will accept full responsibility for ensuring their work does not suffer because of absences. It is up to the student to get the necessary help outside of class when absent.

Classroom Expectations

1. Arrive to class on time
2. Be prepared
3. Respect your classmates and teacher
4. Give your all, all the time
5. Be responsible for your actions
6. No eating, drinking, cell phones, or unauthorized electronics permitted in the classroom

Materials

It is expected that all students come to class prepared with the necessary materials. Failure to do so will result in detentions and disciplinary actions. The following school supplies are highly suggested in order to have a successful math year. If you and your family are unable to get some items, please talk to your math teacher privately as soon as possible.

- 1) Pencils
- 2) Binder Paper
- 3) 1 inch binder for math or larger binder if you wish to use the binder with another class

Methodology

A combination of lecture, class discussion, presentations, videos, cooperative learning, and problem-based learning will be used in this course. Grades will be determined by the satisfactory and timely completion of assignments. The grade of each assignment is based on proficiency, mastery, and completion of the assignment.

General Information:

If you are having trouble with this class, come to me immediately and I can work with you. If you wait till the end of the quarter, it will be TOO LATE.

***Late work will only be accepted the day of the respective chapter test. ***