

Math 8

Eric Messerli

Course Description: This course aims to ensure every student is prepared for success in Algebra 1 in high school. We are Common Core Mathematics Standards-based, which includes a focus on linear functions, solving equations, solidifying student understanding and use of the real number system and algebraic applications in geometry.

Notebooks, note-taking, practice with problems, learning & reinforcement through movement, vocabulary development, presenting mathematical thinking to peers, working in small groups to create understanding, explaining understanding in writing, and completing daily (MTWTh) homework are all part of how the students learn and share their learning in the class.

Course Essential Questions:

- What habits, attitudes and skills do I have and need to be a successful learner of mathematics?
- Why is it important for me to learn mathematics?

Math 8 Units:

Approximate Dates	Unit Title	Main Unit Topics
August 21st to September 18th	Unit 1: The Real Number System	Estimating square roots, converting repeating decimals and fractions
September 19th to October 15th	Unit 2: Exponent Properties and Scientific Notation	Performing basic operations with exponential expressions and numbers in scientific notation
October 21st to November 19th	Unit 3: Linear Relationships	Determining, interpreting and applying slope, comparing proportional and non-proportional relationships
November 20th - December 10th	Unit 4: Functions	Determining linear vs. nonlinear functions, writing linear functions from tables & graphs, writing linear equations
December 11th - January 24th	Unit 5: Linear Equations	Solving linear equations (UNIT ESSAY REQUIRED!)
January 27th - February 18th	Unit 6: Systems of Linear Equations	Solving systems of linear equations by graphing and substitution
February 19th - March 4th	Unit 7: Pythagorean Theorem	Explaining and applying the Pythagorean Theorem
March 5th - 27th	Unit 8: Transformations	Performing and describing translations, rotations, reflections and dilations
April 7th - April 14th	Math 8 Review (PARCC Prep)	Units 1-8 review, volume of prisms and cones
April 15th - April 30th	Unit 9: Angle Relationships	Determining angle measures by applying angle relationships
May 4th - May 7th	Unit 10: Scatter Plots and Data	Modeling data to make predictions

In addition to the units above, the students will be expected to demonstrate fluency with basic math skills needed to be successful in 8th grade math and beyond. They will need to demonstrate mastery of multiplication 0-12, place value, simplifying fractions, converting fractions and decimals, operations with integers, operations with fractions, operations with decimals, graphing points in the coordinate plane, solving simple algebraic equations, and using the order of operations. Students will need to demonstrate 80% proficiency on these skills by the end of the second quarter.

Honors Math 8 Option:

Students looking for more challenge can participate in the Honors Math 8 option within the Math 8 class. This option is open to *any* student, regardless of ability level. Honors students will explore Math 8 concepts at a deeper level and learn additional concepts and skills that will open up the possibility of being ready to enroll in an Honors Algebra 1 course in high school. Students who complete the entire year of Honors Math 8 will have their official transcript reflect being in an honors math class during the 2019-20 school year. Any 7th graders who are taking Math 8 will be expected to complete the honors work.

Contact Information:

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Remind app class code: @galsmath8

Tutoring days: typically Monday, Tuesday and Friday (weekly update sent out on Remind)