

Pre-Algebra, Prep

Course Description

The students entering the prep year have differing ranges of exposure to and skill with mathematics. By covering a wide range of topics, this course ensures that all students in the prep year have the skills necessary to succeed in Algebra I.

The course begins with a review of the fundamentals of working with numbers. Students learn about powers, divisibility, fractions, decimals, analyzing graphs, finding roots, converting measurements, percents, and ratios, and signed numbers. Geometry is also introduced. Students learn how to compute area of geometric shapes and volume and surface area of geometric solids. As algebraic techniques are introduced, students learn to apply those techniques to solve problems including distance/rate/time problems, area/volume/surface area problems, and various word problems.

Calculators are not allowed in this course.

Course Goals

- Provide the students with a solid foundation in working with numbers (powers, roots, percents, ratios, fractions, decimals, signed numbers, etc.)
- Students will learn to solve basic algebraic equations
- Students will be able to create a formula for and compute: the area of geometric shapes, the volume of three-dimensional solids, and the surface area of three-dimensional solids
- Students will learn to translate word problems into algebraic equations and solve the algebraic equation
- Ensure that all students are prepared for Algebra I