

Algebra I

Course Outline

Add, Subtract, Multiply and Divide Rational Numbers (Review of Pre-Algebra)

Order of Operations

Evaluate Expressions

Ratio and Proportion

 Direct Variation

 Similar Triangles

 Percent

Probability

Relations

Coordinate Plane

Scatter Plots

Domain and Range

Independent/Dependent Variables

Introduction to Functions

Associative, Commutative and Distributive Properties

Solving Equations (one-step with addition, subtraction, multiplication, division)

Solving Equations (multi-step)

Solving Equations with variables on Both Sides

Patterns

Writing Equations

 Word Problem Equations

Graphing Linear Equations

Writing Equations from facts

Slope and Intercept

Changing Parameters

Solve Formulas for an Indicated Variable

Writing Linear Equations

Parallel and Perpendicular Lines

Solving Inequalities

 With Addition and Subtraction

 With Multiplication and Division

 Multi-step

Solve Compound Inequalities

Graphing Inequalities

Systems of Equations

 By Graphing

 By Substitution

 By Elimination

Multiply, Divide Monomials

Scientific Notation

Add, Subtract Polynomials

Multiplying a Polynomial by Monomials

Multiplying Polynomials (including area problems)

Special Products

Factoring

Using Distributive Property

Trinomials

Difference of Squares

Perfect Squares

Mixed types of factoring

Solving Equations by Factoring and/or Graphing

Graphing Quadratic Equations

Pythagorean Theorem

Simplifying Radicals