

BRANDYWINE HEIGHTS AREA SCHOOL DISTRICT
Middle School
200 West Weis Street
Topton, PA
Course Syllabus for Algebra

Overview: This course will provide students with the information and tools necessary to be active in their learning of algebra and related topics. Students will develop an understanding of algebra through applying previous knowledge of arithmetic and other mathematical concepts to real world applications.

Textbook: *Algebra I* – Pearson 2012

Outline of Content:

First Quarter

Introduction to Algebra – variables, equations, problem solving
Working with Real Numbers - integers
Solving Equations and Problems – multi-step equations and application problems

Assessments: Tests, quizzes, projects, group and independent practice.

Second Quarter

Continue Solving Equations and Problems
Polynomials – operations with exponents and polynomials
Inequalities – ordering real numbers and solving inequalities

Assessments: Tests, quizzes, projects, group and independent practice.

Third Quarter

Fractions – operations with algebraic fractions
Applying Fractions – ratios, rates, proportions and percents

Assessments: Tests, quizzes, projects, group and independent practice.

Fourth Quarter

Introduction to Functions – coordinate plane and equations of lines
Factoring Polynomials – using mental math, problem solving and patterns
Rational and Irrational Square Roots

Assessments: Tests, quizzes, projects, group and independent practice.

Grading: Grades will be based on the school district grading policy.