

Pre-Algebra 1

MTHH021256

Credits: 0.5 units / 5 hours

Course Description

Pre-Algebra 1 is the first course of a two-semester Pre-Algebra series. The course provides a "bridge" between the skills learned in General Math and those more advanced concepts students will learn in First Year Algebra and Geometry. This course provides an introduction to algebraic expressions and integers, decimals, factors, exponents, fractions, ratios and percents. The course is designed to build upon what students already know, and provide them the background and readiness for Algebra and Geometry. Students are encouraged to print the activities and complete them on paper or to buy the print syllabus.

Graded Assessments

7 Unit Evaluations, 3 Proctored Progress Tests

Course Objectives

When you have completed the materials in this course, you should be able to:

1. Write a variable expression and perform all operations with integers.
2. Recognize the difference between an equation and an inequality and be able to write and solve both.
3. Understand what a decimal is and how to estimate and solve equations with decimals.
4. Simplify expressions containing exponents and fractions and calculate scientific notation.
5. Perform all the necessary operations with fractions to solve equations.
6. Compare and contrast ratios, proportions, and percents, and be able to use all of them effectively.
7. Solve equations and inequalities with more than one step.

Course Outline

Unit 1: Algebraic Expressions and Integers

Lesson 1: Algebraic Expressions

Lesson 2: Integers

Unit 2: Solving One-step Equations and Inequalities

Lesson 3: Number Properties

Lesson 4: Solving Equations

Lesson 5: Inequalities

Unit 3: Decimals and Equations

Lesson 6: Estimating with Decimals

Lesson 7: Using Decimals and the Metric System

Unit 4: Factors, Fractions, and Exponents

Lesson 8: Factors, Exponents and Fractions

Lesson 9: Rational Numbers, Exponents, and Scientific Notation

Unit 5: Operations with Fractions

Lesson 10: Rational Numbers, Fractions, and Decimals

Lesson 11: Measurements and Problem Solving

Unit 6: Rations, Proportions, and Percents

Lesson 12: Ratios, Proportions, and Probabilities

Lesson 13: Percents and Discounts

Unit 7: Solving Equations and Inequalities

Lesson 14: Solving Equations

Lesson 15: Solving Inequalities

Required Textbook

(available through Follett virtual bookstore at <http://highschool.nebraska.bkstr.com>)

No specific kit or additional textbook are required, pencils (with erasers), notebook paper, and some standard graph paper are recommended.