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The following list shows a summary of the topics covered in this course. To see all of the course pages, visit the [Table of Contents](#).

Module 1: Whole Numbers

- Whole Number Basics
- Adding Whole Numbers
- Subtracting Whole Numbers
- Multiplying Whole Numbers
- Dividing Whole Numbers

Module 2: The Language of Algebra

- Using the Language of Algebra
- Evaluating, Simplifying, and Translating Algebraic Expressions
- Solving One-Step Equations Using Whole Numbers
- Finding Multiples and Factors
- Prime Factorization and the Least Common Multiple

Module 3: Integers

- Identifying and Writing Integers
- Adding Integers
- Subtracting Integers
- Multiplying and Dividing Integers
- Solving One-Step Equations Using Integers

Module 4: Fractions

- Representing Parts of a Whole as Fractions
- Multiplying and Dividing Fractions
- Multiplying and Dividing Mixed Numbers and Complex Fractions
- Adding and Subtracting Fractions with Common Denominators
- Adding and Subtracting Fractions with Different Denominators
- Adding and Subtracting Mixed Numbers
- Solving Equations Containing Fractions

Module 5: Decimals

- Writing and Identifying Characteristics of Decimals
- Operations on Decimals
- Exploring the Relationship Between Decimals and Fractions
- Solving Equations Containing Decimals

Module 6: Ratios, Rates, Probabilities, and Averages

- Finding Averages and Basic Probabilities
- Writing Ratios and Calculating Rates
- Simplifying and Using Square Roots

Module 7: Percents

- Writing Percents Using Words, Ratios, and Fractions
- Solving General Applications of Percents
- Solving Sales Tax, Commission, and Discount Applications
- Solving Simple Interest Applications
- Solving Applications of Proportions

Module 8: Geometry

- Using Properties of Angles, Triangles, and the Pythagorean Theorem
- Using Properties of Rectangles, Triangles, and Trapezoids
- Solving Problems With Circles and Irregular Figures
- Solving Problems Using Volume and Surface Area
- Systems of Measurement

Module 9: Real Numbers

- Classes of Real Numbers
- Using the Commutative and Associative Properties
- Using the Distributive Property
- Properties of Identity, Inverses, and Zero

Module 10: Linear Equations

- Solving Equations Using the Properties of Equality
- Problem Solving Strategies for Word Problems
- Solving Word Problems Containing Decimals
- Using Formulas to Solve Word Problems

Module 11: Linear Inequalities

- Solving Single- and Multi-Step Inequalities
- Solving Compound Inequalities

Module 12: Exponents

- Applying Exponent Rules
- Scientific Notation

Module 13: Polynomials

- Defining Polynomials
- Performing Operations on Polynomials
- Dividing Polynomials
- Polynomials in Applications

Module 14: Factoring

- Solving Simple Polynomial Equations
- Factoring Methods
- Factoring Special Cases

Module 15: Graphs

- The Coordinate Plane
- Finding Slope
- Using Intercepts to Graph Lines

- Writing Equations of Lines
- Graphing Linear Inequalities
- Applications of Graphs

Module 16: Linear Systems

- Solutions to Systems of Equations
- Algebraic Methods for Solving Systems
- Systems of Equations in Three Variables
- Problem Solving with Systems
- Systems of Linear Inequalities

Module 17: Rational Expressions and Equations

- Operations With Rational Expressions
- Rational Equations and Their Applications
- Variation

Module 18: Roots and Rational Exponents

- Simplifying Roots
- Simplifying Expressions with Radicals and Rational Exponents
- Algebraic Operations with Radical Expressions
- Solving Equations Containing Radicals

Module 19: Quadratic Equations and Complex Numbers

- Quadratic Equations
- Complex Numbers
- Quadratic Equations with Complex Solutions

Module 20: Linear Functions and Function Notation

- Functions
- Linear Functions
- Domain and Range

Module 21: Quadratic, Polynomial, and Piecewise

Functions

- Piecewise Functions
- Quadratic and Radical Functions
- Polynomial Functions
- Applications of Quadratic Functions

Module 22: Exponential and Logarithmic Functions

- Exponential Functions
- Logarithmic Functions

Module 23: Exponential and Logarithmic Equations

- Logarithmic Properties
- Exponential and Logarithmic Equations

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