

**Chapter 1**                      *Algebraic Expressions and Integers*

- Variables and expressions
- Order of operations
- Evaluating expressions
- Integers and absolute value
- Adding/subtracting/multiplying/dividing integers
- The coordinate plane.

**Chapter 2**                      *Solving One-Step Equations and Inequalities*

- Properties of numbers
- Distributive property
- Simplifying variable expressions
- Variables and equations
- Solving equations by adding/subtracting/multiplying/dividing
- Data and graphs
- Inequalities and their graphs
- Solving one-step inequalities by adding, subtracting, multiplying, and dividing.

**Chapter 3**                      *Decimals and Equations*

- Rounding and estimating
- Estimating decimal products and quotients
- Mean, median, and mode
- Using formulas
- Solving equations by adding/subtracting/multiplying/dividing
- Using the metric system

**Chapter 4**                      *Factors, Fractions, and Exponents*

- Divisibility and factors
- Exponents
- Prime factorization and greatest common factor
- Simplifying fractions
- Rational numbers
- Exponents and multiplication/division
- Scientific notation.

**Chapter 5**      *Operations with Fractions*

- Comparing and ordering fractions
- Fractions and decimals
- Adding/subtracting/multiplying/dividing fractions
- Units of measurement
- Solving equations by adding /subtracting/ multiplying/ dividing fractions
- Powers of products and quotients.

**Chapter 6**      *Ratios, Proportions, and Percents*

- Ratios and unit rates
- Proportions
- Similar figures and scale drawings
- Probability
- Fractions, decimals, and percents
- Proportions and percents
- Percents and equations
- Percent of change
- Markup and discount

**Chapter 7**      *Solving Equations and Inequalities*

- Solving two-step equations
- Solving multistep equations
- Multistep equations with fractions & decimals
- Solving equations with variables on both sides
- Solving two-step inequalities
- Transforming formulas

**Chapter 8**      *Linear Functions and Graphing*

- Relations & functions
- Equations with two variables
- Slope and y-intercept
- Writing rules for linear functions
- Scatter plots
- Solving and graphing systems of linear equations

**Chapter 9**      *Spatial Thinking*

- Points, lines, and planes
- Angle relationships and parallel lines
- Classifying polygons
- Congruence
- Circles
- Constructions
- Translations
- Symmetry and reflections
- Rotations

**Chapter 10**      *Area and Volume*

- Area of parallelograms, triangles, trapezoids, circles, prisms and cylinders
- Surface area of pyramids, cones, and spheres
- Volume of prisms, cylinders, pyramids, cones, and spheres

**Chapter 11**      *Right Triangles in Algebra*

- Square roots and irrational numbers
- Pythagorean theorem
- Distance and midpoint formulas
- Special right triangles
- Sine/cosine/tangent ratios

**Chapter 12**      *Data Analysis and Probability*

- Frequency tables and line plots
- Box-and-whisker plots
- Using graphs to persuade
- Counting outcomes and theoretical probability
- Independent and dependent events
- Permutations and combinations
- Experimental probability

***Scope and Sequence***  
*Prentice Hall Pre-Algebra 1.1*

***Grade 7***