

Algebra 1 Grade 8

Concepts and Principles of Measurement

1. Identify the slope and y-intercept
2. Determine distance on a coordinate plane

Data Analysis, Probability, and Statistics

1. Solve problems: proportions, percents, and set up linear equations.
2. Use stem and leaf plots
3. Identify mean, median, and mode
4. Graph and interpret linear relations
5. Solve probability problems
6. Graph exponential growth and decay (problem solving and graphing)
7. Graph inequalities

Number and Operation

1. Order of operations
2. Scientific notation
3. Associative, commutative, and distributive properties

Concepts and Language of Algebra and Functions

1. Solution of a linear system
2. Solve compound inequalities
3. Properties of exponents
4. Multiply polynomials and binomials (FOIL)
5. Solve Quadratic equations
6. Simplify radicals
7. Linear equations
8. Function notation
9. Factoring and prime factorization
10. Differentiate between different forms of linear equations
11. Solve equations
12. Properties of quadratic functions: vertex, minimum, maximum, intercepts
13. Combining like terms
14. Polynomials

Concepts and Principles of Geometry

1. Pythagorean Theorem
2. Perpendicular and parallel lines