

Chapter One: Exponents

The Big Idea: You can use exponential notation to represent repeated multiplication of the same factor.

Chapter Two: Scientific Notation

The Big Idea: Scientific notation is a way of writing numbers that makes it easier to work with very big or very small numbers.

Chapter Three: Algebraic Linear Equations

The Big Idea: Linear equations can be used to solve mathematical and real-world problems. A linear equation with one variable can have one solution, no solution, or infinitely many solutions.

Chapter Four: Lines and Linear Equations

The Big Idea: The graph of a linear equation in two variables is a line, and you can write the equation of the line in slope-intercept form.

Chapter Five: System of Linear Equations

The Big Idea: A system of linear equations may have a unique solution. It can be solved using the elimination, substitution, or graphical methods.

Chapter Six: Functions

The Big Idea: A function is a relation between a set of inputs, and a set of outputs, in which every input has exactly one output. You can use tables, graphs and equations to represent many functions.

Chapter Seven: The Pythagorean Theorem

The Big Idea: The Pythagorean theorem describes the relationship among the three sides of a right triangle.

Chapter Eight: Geometric Transformation

The Big Idea: Geometric transformations move figures about on a plane. Each type of transformation changes some properties of a figure, but leaves other properties unchanged.

Chapter Nine: Congruence and Similarity

The Big Idea: Congruent figures have the same shape and size. Similar figures have the same shape but need not be the same size. Two congruent figures or two similar figures are related by a series of geometric transformations.

Chapter Ten: Statistics

The Big Idea: A line of best fit can be used to model the linear association of bivariate quantitative data. A two-way table displays the relative frequencies of categorical data.

Chapter Eleven: Probability

The Big Idea: Compound events consist of simple events that can be dependent or independent.