

Expressions and Equations

Contents

Lesson 1	Squares and Square Roots	18
	Objective: Find the square of a number and the square root of a perfect square.	
	Manipulative: Color Tiles	
Lesson 2	Cube Roots	22
	Objective: Evaluate cube roots.	
	Manipulative: Centimeter Cubes	
Lesson 3	Slope as Rate of Change	26
	Objective: Determine the slope of a line when given a set of data points.	
	Manipulative: XY Coordinate Pegboard	
Lesson 4	Problem Solving with Rates of Change	30
	Objective: Graph lines using rates of change and determine the meaning of the point of intersection.	
	Manipulative: XY Coordinate Pegboard	
Lesson 5	Lines Through $(0, 0)$ and $(0, b)$	34
	Objective: Investigate slope and relate linear equations to proportional relationships.	
	Manipulative: XY Coordinate Pegboard	
Lesson 6	One, No, or Infinitely Many Solutions	38
	Objective: Identify linear equations that have one solution, no solution, and infinitely many solutions.	
	Manipulative: Algebra Tiles™	
Lesson 7	Solving Multi-Step Equations	42
	Objective: Solve multi-step equations.	
	Manipulative: Algebra Tiles™	
Lesson 8	Solving Equations with Variables on Both Sides	46
	Objective: Solve equations with variables on both sides.	
	Manipulative: Algebra Tiles™	
Lesson 9	Solving Systems of Equations	50
	Objective: Solve systems of two linear equations in two variables.	
	Manipulative: Centimeter Cubes	