

Lesson	Title	Primary Topics and Assessments
1	Foundations of Algebra	Sets, Intersections, and Unions Real Number System Operations on Real Numbers Exponential Expressions Square Roots Order of Operations Properties of Real Numbers Problem Solving Assignment 1 Lesson 1 Quiz Digging Deeper activity (optional)
2	Solving Linear Equations	Algebraic Expressions Equations Properties of Equality Solving Equations, including Literal Equations Formulas Introduction to Word Problems Problem Solving Assignment 2 Lesson 2 Quiz Digging Deeper activity (optional)
3	Introduction to Graphing	Using the Cartesian System Rate of Change and Slope Finding the Slope Graphing Lines Writing Equations of a Line Graphing Various Linear Equations Parallel and Perpendicular Lines Consecutive Numbers Finding an Average Problem Solving Assignment 3 Lesson 3 Quiz Unit 3 Exam Digging Deeper activity (optional)

Lesson	Title	Primary Topics and Assessments
4	<b>Inequalities and Systems of Equations</b>	Introduction to Inequalities Solving Word Problems with Inequalities Solving Compound Inequalities Graphing Linear Inequalities Systems of Equations Word Problems, including Mixture, Constant Velocity, and Investments Graphing a System of Inequalities Problem Solving Assignment 4 Lesson 4 Quiz Digging Deeper activity (optional)
5	<b>Functions and Exponents</b>	Relations and Functions Vertical-Line Test Function Notation Domain and Range Rules of Exponents Exponential Functions Graphing Exponential Functions Growth and Decay Problem Solving Assignment 5 Lesson 5 Quiz Digging Deeper activity (optional)
6	<b>Polynomials and Factoring</b>	Degree of Polynomials Operations on Polynomials Factoring Polynomials Zero-Factor Property Problem Solving Assignment 6 Lesson 6 Quiz Unit 2 Exam Digging Deeper activity (optional)

Lesson	Title	Primary Topics and Assessments
7	<b>Rational Expressions</b>	Simplifying Rational Expressions Operations on Rational Expressions Complex Fractions Solving Equations with Rational Expressions Solving Rational Inequalities Word Problems, including Work, Average Speed, and Resistors in Parallel Problem Solving Assignment 7 Lesson 7 Quiz Digging Deeper activity (optional)
8	<b>Roots and Radicals</b>	Radical Notation Properties of Roots Simplifying Radicals Operations on Radical Expressions Rationalizing Denominators Extraneous Roots Solving Equations with Radicals Pythagorean Theorem Word Problems, including Diagonal of a Cube and Applications in Meteorology Problem Solving Assignment 8 Lesson 8 Quiz Digging Deeper activity (optional)
9	<b>Quadratic Equations</b>	Solving Quadratic Equations Completing the Square Quadratic Formula Discriminant Building a Polynomial Equation from Solutions Word problems, including Geometry, Motion, and Projectile Problem Solving Assignment 9 Lesson 9 Quiz Unit 3 Exam Digging Deeper activity (optional)

Lesson	Title	Primary Topics and Assessments
10	<b>Nonlinear Functions</b>	Domain of a Function Graphing Important Functions, including Piecewise-Defined Finding Intercepts Graphing Parabolas Finding the Vertex of a Parabola Graphing Circles Solving Nonlinear Systems Problem Solving Assignment 10 Lesson 10 Quiz Digging Deeper activity (optional)
11	<b>Functions, Inverses and Translations</b>	Operations on Functions Composite Functions Inverse Functions Horizontal-Line Test Graphing the Inverse Finding the Inverse of a Function Shifting or Translating Curves along Axes Problem Solving Assignment 11 Lesson 11 Quiz Digging Deeper activity (optional)
12	<b>Modeling and Statistics</b>	Arithmetic Sequences Geometric Sequences Central Tendency and Variation Scatter Plots Curve Fitting with Linear Models Choosing the Best Representation of Data Problem Solving Assignment 12 Lesson 12 Quiz Unit 4 Exam Problem Solving Assignment Final Digging Deeper activity (optional) Final Exam