## Basic Algebra

Overview & Intro 1, 2

## Review

- 3.1 a-d Solving Equations +-\*/ and Applications
  - a) Solving Linear Equations Using Addition and Subtraction
  - b) Applications of Linear Equations: Addition and Subtraction
  - c) Solving Linear Equations Using Multiplication and Division
  - d) Applications of Linear Equations: Multiplication and Division
- 3.2 Solving Linear Equations
- 3.3 More Linear Equations: ax + b = dx + c
- 3.4 Solving Linear Inequalities and Applications
- 3.5 Working with Formulas
  - a) Solving Formulas
  - b) Working with Formulas
- 3.6 Applications: Number Problems and Consecutive Integers
- 3.7 Percents and Applications
- 3.8 Formulas in Geometry

**Test Review** 

Ch 3 Test

- 4.1 The Cartesian Coordinate System and Reading Graphs
- 4.2 Graphing Linear Equations by plotting points: Ax+By=C
- 4.3 The Slope-Intercept Form: y=mx+b
- 4.4 Finding the Equation of a Line: The Point-Slope Form:  $y-y_1=m(x-x_1)$
- 4.5 Introduction to Functions and Function Notation
- 4.6 Graphing Linear Inequalities: y<mx+b

**Test Review** 

Ch 4 Test

- 6.1 Simplifying Integer Exponents I
- 6.2 Exponents and Scientific Notation
  - a) Simplifying Integer Exponents II
  - b) Scientific Notation
- 6.3 Introduction to Polynomials
  - a) Identifying Polynomials
  - b) Evaluating Polynomials
- 6.4 Addition and Subtraction with Polynomials
- 6.5 Multiplication with Polynomials
  - a) Multiplying a Polynomial by a Monomial
  - b) Multiplying Two Polynomials
- 6.6 Special Products of Binomials
  - a) FOIL Method
  - b) Special Products
- 6.7 Division with Polynomials
  - a) Division by a Monomial
  - b)The Division Algorithm

Ch 6 Test

- 7.1 Greatest Common Factor and Factoring by Grouping
  - a) GCF of Two or More Terms
  - b) GCF of a Polynomial
  - c) Factoring Expressions by Grouping
- 7.2 Factoring Trinomials:  $x^2+bx+c$  (Leading Coefficient 1)
- 7.3 More on Factoring Trinomials: ax<sup>2</sup>+bx+c
  - a) Factoring Trinomials by Grouping
  - b) Factoring Trinomials by Trial and Error
- 7.4 Factoring Special Products: DOTS and Perfect Square Trinomials

A.1 Difference and Sum of Two Cubes

Factoring reinforcement

- 7.5 Solving Quadratic Equations by Factoring
- 7.6 Applications of Quadratic Equations
- 8.1 Reducing Rational Expressions
  - a) Defining Rational Expressions
  - b) Reducing Rational Expressions
- 8.2 Multiplication and Division with Rational Expressions
- 8.3 Addition and Subtraction with Rational Expressions

**Test Review** 

Ch 7 Test

- 9.1 Real Numbers and Evaluating Radicals
- 9.2 Simplifying Radicals
- 9.3 Additions, Subtraction, and Multiplication with Radicals
  - a) Addition and Subtraction of Radicals
  - b) Multiplications of Radicals
- 10.3 Quadratic Equations: The Quadratic Formula

**Test Review** 

Ch 9/10 Test

Final Review

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Final

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