



Curriculum Map

Unit 1 – The Foundations of Algebra

- 1-1 The Real Number System
- 1-2 Operations on Integers
- 1-3 Simplifying Numerical Expressions (Order of Operations)
- 1-4 Rational Numbers
- 1-5 Approximating Square Roots
- 1-6 Constants, Variables and Expressions
- 1-7 Evaluating Expressions
- 1-8 Equivalent Expressions
- 1-9 Operations on Polynomials: Addition and Subtraction
- 1-10 Operations on Polynomials: Multiplication and Division

Unit 2 – Special Products and Factoring

- 2-1 Multiplying Binomials
- 2-2 Square of a Binomial
- 2-3 Square of a Trinomial
- 2-4 Sum and Difference of Two Terms
- 2-5 Cube of a Binomial



- 2-6 Factoring the Common Monomial Factor
- 2-7 Factoring the Difference of Two Squares
- 2-8 Factoring a Perfect Square Trinomial
- 2-9 Factoring a General Trinomial
- 2-10 Factoring the Sum and Difference of Two Cubes
- 2-11 Factoring by Grouping

Unit 3 – Solving Equations and Inequalities in One Variable

- 3-1 Solving Equations Using Properties of Equality
- 3-2 Solving Equations Involving Factored Expressions
- 3-3 Solving Equations Involving Variables in the Denominator
- 3-4 Literal Equations and Formulas
- 3-5 Inequalities and Their Graphs
- 3-6 Solving Inequalities Using Addition and Subtraction
- 3-7 Solving Inequalities Using Multiplication and Division
- 3-8 Solving and Graphing Compound Inequalities

Unit 4 – Relations and Functions

- 4-1 Relations: Definition and Representation



4-2 Functions: Definition and Representation

4-3 The Function Notation

4-4 The Composition of Functions

4-5 Writing a Function Rule

4-6 Graph of a Function

Unit 5 - Linear Functions and Equations

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5-2 Domain and Range of Linear Functions

5-3 Standard Form and Slope-Intercept Form of Linear Equations

5-4 Slope and Intercepts of a Line

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5-6 Graphing Linear Equations

5-7 Finding the Equation of the Line

Unit 6 – Linear Inequalities and Their Graphs

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Unit 7 - Systems of Linear Equations and Inequalities

- 7-1 Solving Systems by Graphing**
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Unit 8 - Quadratic Functions and Equations

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- 8-2 The Graph of Quadratic Functions**
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- 8-5 Solving Quadratic Equations by Completing the Square**
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- 8-8 Systems of Linear and Quadratic Equations**

Unit 9 - Exponents and Exponential Functions

- 9-1 Positive Integral Exponents**



- 9-2 Zero and Negative Exponents
- 9-3 Simplifying Exponential Expressions
- 9-4 Rational Exponents and Radicals
- 9-5 Exponential Functions Defined
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Unit 10 – Rational and Radical Expressions and Equations

- 10-1 Simplifying Rational Expressions
- 10-2 Multiplying and Dividing Rational Expressions
- 10-3 Adding and Subtracting Rational Expressions
- 10-4 Solving Rational Expressions
- 10-5 Simplifying Radicals
- 10-6 Operations with Radical Expressions
- 10-7 Solving Radical Equations
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- 11-1 Sequences Defined**
- 11-2 Recursive Formula for Sequences**
- 11-3 Arithmetic Sequence**
- 11-4 Geometric Sequence**
- 11-5 Other Types of Sequences**
- 11-6 The Binomial Theorem**

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- 12-2 The Center of Data Distributions**
- 12-3 Measure of Variability for Symmetrical and Skewed Distribution**
- 12-4 Categorical Data on Two Variables**
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- 12-6 Permutations and Combinations**
- 12-7 Probability of Compound Events**
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