

Ch 1. Foundations of Linear Equations

- ♥ Lesson 1 - What are the Different Types of Numbers?
- ♥ Lesson 2 - What Are the Different Parts of a Graph?
- ♥ Lesson 3 - What is a Linear Equation?
- ♥ Lesson 4 - Linear Equations: Intercepts, Standard Form and Graphing
- ♥ Lesson 5 - Abstract Algebraic Examples and Going from a Graph to a Rule
- ♥ Lesson 6 - Graphing Undefined Slope, Zero Slope and More
- ♥ Lesson 7 - How to Write a Linear Equation
- ♥ Lesson 8 - What is a System of Equations?
- ♥ Lesson 9 - How Do I Use a System of Equations?

Ch 2. Matrices and Absolute Value

- ♥ Lesson 1 - What is a Matrix?
- ♥ Lesson 2 - How to Take a Determinant of a Matrix
- ♥ Lesson 3 - What is an Absolute Value?
- ♥ Lesson 4 - How to Evaluate Absolute Value Expressions
- ♥ Lesson 5 - How to Solve an Absolute Value Equation
- ♥ Lesson 6 - Solving Absolute Value Practice Problems
- ♥ Lesson 7 - How to Graph an Absolute Value and Do Transformations
- ♥ Lesson 8 - Graphing Absolute Value Equations: Dilations & Reflections

Ch 3. Inequalities

- ♥ Lesson 1 - What is an Inequality?
- ♥ Lesson 2 - How to Graph 1- and 2-Variable Inequalities
- ♥ Lesson 3 - Set Notation, Compound Inequalities, and Systems of Inequalities
- ♥ Lesson 4 - Graphing Inequalities: Practice Problems
- ♥ Lesson 5 - How to Solve and Graph an Absolute Value Inequality
- ♥ Lesson 6 - Solving and Graphing Absolute Value Inequalities: Practice Problems

Ch 4. Factoring with FOIL, Graphing Parabolas and Solving Quadratics

- ♥ Lesson 1 - What is a Parabola?
- ♥ Lesson 2 - Parabolas in Standard, Intercept, and Vertex Form
- ♥ Lesson 3 - Multiplying Binomials Using FOIL and the Area Method
- ♥ Lesson 4 - Multiplying Binomials Using FOIL & the Area Method: Practice Problems
- ♥ Lesson 5 - How to Factor Quadratic Equations: FOIL in Reverse
- ♥ Lesson 6 - Factoring Quadratic Equations: Polynomial Problems with a Non-1 Leading Coefficient
- ♥ Lesson 7 - How to Complete the Square
- ♥ Lesson 8 - Completing the Square Practice Problems
- ♥ Lesson 9 - How to Solve a Quadratic Equation by Factoring
- ♥ Lesson 10 - How to Use the Quadratic Formula to Solve a Quadratic Equation
- ♥ Lesson 11 - How to Solve Quadratics That Are Not in Standard Form

Ch 5. Complex Numbers

- ♥ Lesson 1 - What is an Imaginary Number?
- ♥ Lesson 2 - How to Add, Subtract and Multiply Complex Numbers
- ♥ Lesson 3 - How to Divide Complex Numbers
- ♥ Lesson 4 - How to Graph a Complex Number on the Complex Plane
- ♥ Lesson 5 - How to Solve Quadratics with Complex Numbers as the Solution

Ch 6. Exponents and Polynomials

- ♥ Lesson 1 - What Are the Five Main Exponent Properties?
- ♥ Lesson 2 - How to Define a Zero and Negative Exponent
- ♥ Lesson 3 - How to Simplify Expressions with Exponents
- ♥ Lesson 4 - Rational Exponents
- ♥ Lesson 5 - Simplifying Expressions with Rational Exponents
- ♥ Lesson 6 - How to Graph Cubics, Quartics, Quintics and Beyond
- ♥ Lesson 7 - How to Add, Subtract and Multiply Polynomials
- ♥ Lesson 8 - How to Divide Polynomials with Long Division
- ♥ Lesson 9 - How to Use Synthetic Division to Divide Polynomials
- ♥ Lesson 10 - Dividing Polynomials with Long and Synthetic Division: Practice Problems

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- ♥ Lesson 1 - Functions: Identification, Notation & Practice Problems
- ♥ Lesson 2 - Transformations: How to Shift Graphs on a Plane
- ♥ Lesson 3 - What Is Domain and Range in a Function?
- ♥ Lesson 4 - How to Add, Subtract, Multiply and Divide Functions
- ♥ Lesson 5 - How to Compose Functions
- ♥ Lesson 6 - Inverse Functions
- ♥ Lesson 7 - Applying Function Operations Practice Problems

Ch 8. Rational Expressions

- ♥ Lesson 1 - How to Multiply and Divide Rational Expressions
- ♥ Lesson 2 - Multiplying and Dividing Rational Expressions: Practice Problems
- ♥ Lesson 3 - How to Add and Subtract Rational Expressions
- ♥ Lesson 4 - Practice Adding and Subtracting Rational Expressions
- ♥ Lesson 5 - How to Solve a Rational Equation
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- ♥ Lesson 2 - Exponential Growth vs. Decay
- ♥ Lesson 3 - What is a Logarithm?
- ♥ Lesson 4 - How to Evaluate Logarithms
- ♥ Lesson 5 - Logarithmic Properties
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- ♥ Lesson 8 - How to Solve Logarithmic Equations

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- ♥ Lesson 1 - What Is a Factorial?
- ♥ Lesson 2 - Factorial Practice Problems
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- ♥ Lesson 4 - Binomial Theorem Practice Problems

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- ♥ Lesson 1 - What is a Mathematical Sequence?
- ♥ Lesson 2 - How to Find and Classify an Arithmetic Sequence
- ♥ Lesson 3 - Finding and Classifying Geometric Sequences
- ♥ Lesson 4 - Summation Notation and Mathematical Series
- ♥ Lesson 5 - How to Calculate an Arithmetic Series
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- ♥ Lesson 7 - Arithmetic and Geometric Series: Practice Problems