## Algebra 2 Lessons

- Unit 1- Equations \& Inequalities
- 1.1- Expressions \& Operations
- 1.2-Solving Equations
- 1.3- Absolute Value Equations
- 1.4- Solving Inequalities
- 1.5- Absolute Value Inequalities
- Unit 2- Systems of Linear Equations
2.1- Solving Systems by Graphing \& Substitution
- 2.2- Solving Systems by Elimination \& Solving Applications
- Unit 3-Solving Quadratics
- 3.1- Multiplying Polynomials
- 3.2- Factoring Review
- 3.3- Solving Quadratics by Graphing
- 3.4- Solving Quadratics by Factoring
- Unit 4-Complex Numbers \& Solving Quadratics
- 4.1- Simplifying Radicals \& Solving by Square Roots
- 4.2-Imaginary Numbers \& Power of $i$
- 4.3-Complex Numbers
- 4.4- Solving Quadratics by Completing the Square
- 4.5- The Quadratic Formula
- 4.6-The Discriminant
- Unit 5- Polynomial Functions
5.1- Monomial \& Polynomial Review
- 5.2-Graphing Polynomial Functions
- 5.3- Roots/ Zeros of a Polynomial Function
- 5.4- Factoring Polynomials
- 5.5- Solving Polynomials by Factoring
- 5.6- Dividing Polynomials
- 5.7- Function Operations \& Composition Functions
- Unit 6- Radical Functions
- 6.1- nth Roots \& Simplifying
- 6.2- Adding, Subtracting, and Multiplying Radicals
- 6.3-Rational Exponents
- 6.4-Solving Radical Equations
- Unit 7-Exponential and Logarithmic Functions
- 7.1- Solving Exponential Functions
- 7.2- Intro to Logarithms
- 7.3- Properties of Logs
- 7.4- Solving Log Equations
- 7.5- Solving Exponential Equations with Logs
- 7.6- Base e, Natural Logs
- Unit 8-Rational Functions
- 8.1- Simplifying, Multiplying, and Dividing Rational Functions
- 8.2- Adding and Subtracting Rational Functions
- Unit 9- Probability \& Statistics
- 9.1- Fundamental Counting Principle, Permutations, \& Combinations
- 9.2-Theoretical Probability
- 9.3- Measures of Central Tendency
- 9.4-Data Distribution
- 9.5- Z-scores

