

This is a one semester course which earns $\frac{1}{2}$ math credit. This class is the first half of our Algebra 2 sequence. Successful completion of this course allows students to take Algebra 2B. Algebra 2B is considered the minimum for college readiness.

Units:

1. INTRODUCTION TO FUNCTIONS
 - 1.1. Exploring Transformations
 - 1.2. Introduction to Parent Functions (Quiz A)
 - 1.3. Transforming Linear Functions
 - 1.4. Curve Fitting with Linear Models (Quiz B), TEST

2. QUADRATIC FUNCTIONS AND COMPLEX NUMBERS
 - 2.1. Using Transformations to Graph Quadratic Functions
 - 2.2. Properties of Quadratic Functions in Standard Form
 - 2.3. Solving Quadratic Equations by Graphing and Factoring
 - 2.4. Completing the Square
 - 2.5. Complex Numbers and Roots
 - 2.6. The Quadratic Formula (Quiz A)
 - 2.7. Solving Quadratic Inequalities
 - 2.8. Curve Fitting to Quadratic Models
 - 2.9. Operations with Complex Numbers (Quiz B), TEST

3. OPERATIONS WITH POLYNOMIALS
 - 3.1. Polynomials
 - 3.2. Multiplying Polynomials
 - 3.3. Dividing Polynomials
 - 3.4. Factoring Polynomials (Quiz A)
 - 3.5. Finding Real Roots of Polynomial Functions
 - 3.6. Fundamental Theorem of Algebra
 - 3.7. Investigating Graphs of Polynomial Functions
 - 3.8. Transforming Polynomial Functions
 - 3.9. Curve Fitting with Polynomial Functions (Quiz B), TEST

4. EXPONENTIAL FUNCTIONS AND LOGARITHMS
 - 4.1. Exponential Functions, Growth, and Decay
 - 4.2. Inverses of Relations and Functions
 - 4.3. Logarithmic Functions
 - 4.4. Properties of Logarithms (Quiz A)
 - 4.5. Exponential and Logarithmic Equations and Inequalities
 - 4.6. The Natural Base, e
 - 4.7. Transforming Exponential and Logarithmic Functions
 - 4.8. Curve Fitting with Exponential and Logarithmic Models (Quiz B), TEST

5. RATIONAL FUNCTIONS
 - 5.1. Variation Functions
 - 5.2. Multiplying and Dividing Rational Expressions
 - 5.3. Adding and Subtracting Rational Expressions
 - 5.4. Rational Functions

- 5.5. Solving Rational Equations and Inequalities (Quiz A)
- 5.6. Radical Functions
- 5.7. Solving Radical Equations and Inequalities (Quiz B), Test