



Semester 1

Term 1

- **Foundations of Functions**
 - Inverse Functions and Compositions of Functions
 - Attributes of Functions
 - Transformation of Function Graphs
 - **Absolute Value Functions, Equations, and Inequalities**
 - Absolute Value Functions/Transformations
 - Solve Absolute Value Equations/Inequalities
 - **Quadratic Functions**
 - Graphing Quadratic Functions and Transformations
 - Write Quadratic Equations/Key Attributes/Converting Forms
 - **Quadratic Equations**
 - Complex numbers
 - Solve Quadratic Equations (Factoring, Sq Rt, Graphing, Completing the Square, Quad Formula)
 - Solve Quadratic Inequalities
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Term 2

- **System of Equations**
 - Linear and Quadratic Systems
 - Linear Systems in 3 Variables
 - Gaussian Elimination and Matrices
 - Solve Systems of Linear Inequalities
- **Cubic Functions**
 - Graphing Cubic Functions
 - Graphing using End Behavior and Multiplicity
- **Polynomials**
 - Add, Subtract, and Multiply Polynomials
 - Factor Polynomials & Polynomial Division
 - Solving Polynomials
- **Rational Expressions and Equations**
 - Simplify Rational Expressions
 - Add, Subtract, Multiply, and Divide Rational Expressions
 - Solve Rational Equations

Semester Review and Exam



Semester 2

Term 3

- **Rational Functions**
 - Graphs of Rational Functions
 - Transformations
 - Asymptotes and Domain/Range Restrictions
 - Inverse Variation
 - **Radical Functions**
 - Inverses of Quadratic and Cubic Functions
 - Graphing Square Root Functions/Transformations
 - Graphing Cube Root Functions/Transformations
 - Simplifying Radical Expressions and Rational Exponents
 - Solving Radical Equations
 - **Exponential Functions**
 - Geometric Sequences
 - Graphing/Transforming Exponential Functions
 - Writing Exponential Equations
 - **Logarithmic Functions**
 - Evaluating Logs
 - Properties of Logs
 - Graphing/Transforming Logarithmic Functions
 - **Logarithmic & Exponential Functions**
 - Solving Logarithmic and Exponential Equations
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Term 4

- **Data**
 - Choosing Appropriate Regression
 - Using Regressions Models (Linear, Quadratic, Exponential)
- **Conics**
 - Graph & Write Equations of Circles
 - Graph & Write Equations of Ellipses
 - Graph & Write Equations of Parabolas
 - Graph & Write Equations of Hyperbolas
 - Writing Equations from Graphs
- **Preparation for Future Math Courses**

Semester Review and Exam