

## 115NetMath Course Topics

- (1) Functions
  - Functions
  - Graphing Functions
  - Transformations of Functions
  - Quadratic Functions
  - Operations on Functions; Composition
  - Inverse Functions
- (2) Polynomial and Rational Functions
  - Polynomial Functions and Models
  - Real Zeros and Polynomial Inequalities
  - Complex Zeros and Rational Zeros of Polynomials
  - Rational Functions and Inequalities
  - Variation and Modeling
- (3) Exponential and Logarithmic Functions
  - Exponential Functions
  - Exponential Modeling
  - Logarithmic Functions
  - Logarithmic Modeling
  - Exponential and Logarithmic Equations
- (4) Trigonometric Functions
  - Angles and Their Measure
  - Trigonometric Functions: Unit Circle Approach
  - Solving Right Triangles
  - Properties of Trigonometric Functions
  - General Trigonometric Functions and Models
  - Inverse Trigonometric Functions
- (5) Trigonometric Identities and Conditional Equations
  - Basic Identities
  - Sum, Difference, and Cofunction Identities
  - Double-Angle and Half-Angle Identities
  - Product-Sum and Sum-Product Identities
  - Trigonometric Equations
- (6) Additional Topics in Trigonometry
  - Law of Sines
  - Law of Cosines