

Graphs, Functions and Models

- Graphs and Graphing Utilities
- Lines and Slopes
- Distance and Midpoint Formulas; Circles
- Basics of Functions
- Graphs of Functions
- Transformations of Functions
- Combinations of Functions; Composite Functions
- Inverse Functions
- Modeling with Functions

Polynomials and Rational Functions

- Complex Numbers
- Quadratic Functions
- Polynomial Functions and Their Graphs
- Dividing Polynomials; Remainder and Factor Theorems
- Zeros of Polynomials Functions
- Rational Functions and Their Graphs
- Polynomial and Rational Inequalities
- Modeling Using Variation

Exponential and Logarithmic Functions

- Exponential Functions
- Logarithmic Functions
- Properties of Logarithms
- Exponential and Logarithmic Equations
- Modeling with Exponential and Logarithmic Equations

System of Equations and Inequalities

- Systems of Linear Equations in Two Variables
- Systems of Linear Equations in Three Variables
- Partial Fractions
- System of Nonlinear Equations in Two Variables
- Systems of Inequalities
- Linear Programming

Suggested textbook:

Robert Blitzer. *Precalculus*. Prentice Hall, 2nd Edition, 1991. ISBN 0131013645.