

- Section 2.1 - Complex numbers
  1. Definition: solution to quadratic, standard form.
  2. Complex arithmetic: addition, subtraction, multiplication, division.
- Section 2.2 - Quadratic functions
  1. Definition, graphing: standard form, vertex, axis of symmetry.
  2. Vertex: maximum, minimum, as the solution to a problem.
- Section 2.3 - Basics of polynomials, graphs
  1. Definition: degree, leading coefficient, end behavior.
  2. Factoring: zeroes and their multiplicities.
  3. Intermediate Value Theorem: implications.
  4. Graphing: page 326.
- Section 2.4 - Polynomial division & two theorems
  1. Long division of polynomials.
  2. Remainder theorem, factor theorem: statement, use.
- Section 2.5 - Zeroes of polynomials
  1. Rational zero theorem: applying it to find all zeroes of a polynomial.
  2. Linear factorization theorem: page 353.
  3. Expressing a polynomial given its roots and a single value.
- Section 2.6 - Rational functions, graphs
  1. Graphing: p.369
- Section 2.7 - Polynomial and rational inequalities
  1. Solving polynomial and rational inequalities and expressing their solution sets.