Foundations 110
Final Exam Outline

Linear Optimization (Chapter 5)

- Graphing SystemLinear Inequalities
    - Shading vs Stippling, Solid vs Dashed Line
- Linear Optimization
    - Restrictions, Constraints, Objective Function,
    - Graphing and finding Vertices, Max/Min values

Trigonometry (Chapter 3/4)

- Primary Trigonometric ratios
- Pythagorean Theorem
- Soh Cah Toa
- Law of Sines
- Law of Sines(ambiguous case)
- Law of Cosines
- Bearings

Textbook questions to Practice
Ch 5:   page 265 #1-4
Page 267 #1-11
Ch 3/4: page 206 #1-10
Ch 1/2: page 110 #1-13
Ch 8/9: page 576 #1-14
Ch 6:   page 286 #1-11
Page 335 #1-7

Logic (Chapter 1/2)

- Inductive/Deductive Reasoning
- Conjectures and Counterexamples
- Invalid Proofs
- Reasoning to solve problems
- Angle and Triangle Properties
- Geometry proofs
- Sum of the angles in a Polygon

Finance (Chapter 8/9)

- Simple Interest
- Compound Interest
- Present Value
- Annuities using TVM solver
- Savings, Loans, Financing Options
- Rule of 72
- Rate of Return

Quadratics (Chapter 6)

- Properties of Quadratics a, h, k , vertex, range, AOS, y-intercept, sketching
- Vertex to Standard Form (expanding)
- Standard to Vertex Form (completing the square)

- Writing the equation in vertex form by looking at a graph or given vertex and a point.