## Math 60 Test 3 Preparation

- 1. The test covers chapters 7 and 8.
- 2. Use the homework, class work, and class examples as a study guide. In other words, any problem from the homework or class examples is fair-game on the exam.
- 3. Memorize the following:
  - a) Laws of exponents (pages 439-441)
  - b) Various definitions involving radicals and exponents (highlighted in purple(?) throughout chapter 7)
  - c) Pythagorean Theorem and Distance Formula
  - d) The four powers of i
  - e) quadratic formula
  - f) discriminant
  - g) vertex formula
  - h) any other property or rule you needed to successfully complete the homework
- 4. A well-prepared student should be able to...
  - a) simply radical expressions and evaluate radical functions. [7.1, 7.2]
  - b) multiply, divide, add, and subtract radical expressions. [7.2-7.5]
  - c) solve radical equations. [7.6]
  - d) solve applications involving the Pythagorean Theorem. [7.7]
  - e) find the distance between two points. [7.7]
  - f) simplify, add, subtract, multiply, and divide complex numbers. [7.8]
  - g) find the domain of rational and radical functions
  - h) solve quadratic equations by factoring, taking roots, completing the square, and applying quadratic formula. [8.1, 8.2]
  - i) solve applications of quadratics equations. [8.4]
  - j) solve formulas involving quadratics. [8.4]
  - k) use the discriminant to analyze the solution of quadratic equations. [8.3]
  - 1) solve equations that are quadratic in form. [8.5]
  - m) find the vertex, axis of symmetry, and intercepts of quadratic functions. [8.6, 8.7]
  - n) graph a quadratic function . [8.6,8.7]
  - o) solve applications of quadratic functions. [8.8]
  - p) solve polynomial and rational inequalities. [8.9]
  - q) solve homework-like problems.