## 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]
l) 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.
