Math 70 Study Guide for Test 4 Fall 2015
Sections 5.8, 7.1, 6.1-6.7, 10.1-10.6

MAIN TOPICS:

1. Function Notation and Concepts (7.1, 10.1)
2. Simplifying and Evaluating Rational Expressions (6.1-6.5)
3. Solving Rational Equations (6.6, 6.7)
4. Simplifying and Evaluating Radical Expressions (10.1-10.5)
5. Solving Radical Equations (10.6)
6. Solving Word Problems (involving Rational Equations and Involving Quadratic Equations) (5.8, 6.7)

DETAILS:

- Be able to use function notation $f(x)$ and to determine the domain and/or range of a function if you are given a graph or a set of ordered pairs.

- Be able to reduce rational expressions and to be able to perform operations on them $(+, -, \times, \div)$.

- Be able to simplify complex fractions.

- Be able to solve equations involving rational expressions.

- Be able to evaluate and simplify radical expressions.

- Be able to determine whether a radical expression is irrational or not real.

- Be able to use absolute value bars appropriately when dealing with radical expressions.

- Be able to solve equations involving radicals.

- For both rational and radical equations be sure you know when to eliminate an answer if necessary.

- Be able to solve word problems involving rational expressions and/or quadratic equations (this include but are not limited to problems regarding the current in a stream, how long two people have worked on a job, what the length of a right triangle is, etc.)