## Math 114 Test 2 Study Guide

This is a list of skills and kinds of problems you should expect on the second test. Next to each bullet point I have listed a few practice problems from the textbook that are applicable.

Non-Graphing Calculators will be allowed during the test, but you should not need anything more than a standard 4 function calculator. Graphing Calculators are not allowed.

To be successful on the test you should be able to:

- Turn a system of equations into an augmented matrix for the system  $(3.2 \ \#1\text{-}50)$
- Create a system of equations from information given in a word problem (3.3 #1-48)
- Given a matrix that has already been row-reduced, interpret it as a solution to a given problem or system of equations (see previous problems in last two above, but use technology to find row reduced form)
- Given a set of linear inequalities in two variables and a sketch of the region they describe, find the corner points of the region (5.1 #1-26)
- Given a word problem, set up a system of linear inequalities to describe it  $(5.1 \ \# 33-44)$
- Given a linear programming problem (either as a set of inequalities and a function to maximize or minimize or as a word problem), graph the (bounded or unbounded) feasible region, and find the max/min requested  $(5.2 \ \#1-34)$