

Math 114 Test 1 Study Guide

This is a list of skills and kinds of problems you should expect on the first 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.

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

- Identify linear and nonlinear data sets (1.3 #11-14)
- Write the equation of a line given two data points (1.3 #67-70)
- Write the equation of a line given slope and one point (1.3 #61-64)
- Set up and solve a problem dealing with interest and exponential growth (1.2 #55-64)
- Set up and solve a problem dealing with cost, profit, and revenue (1.2 #17-28)
- Set up and solve a problem dealing with supply and demand (1.2 #33-42)
- Set up a system of equations given information about the problem (3.1 #25-54)
- Add and subtract matrices, take the transpose of a matrix, and multiply a matrix by a scalar (4.1 #13-21)
- Multiply matrices, and know when you cannot (4.2 #1-25, #31-34)
- Write a system of equations as a matrix equation and vice versa (4.2 #45-52)
- Solve a system of equations written as a matrix using matrix inverses. (4.3 #43-50)