

## Math 1241, Fall 2011 Review for Test #1 (Secs. 1.1 – 1.6)

### **Suggestions for studying:**

- Review the topics listed below and look up anything that seems unfamiliar
- Work the listed review problems
- Since the review problems do not cover all topics, spend some time reviewing your notes and the MyMathLab assignments
- Spend as much time as you can actually working out problems – practice, practice, practice!
- Seek help. Come to my office hours and/or check on tutoring in the Center for Academic Success

### **Topics**

- Determine the slope of a line from two points or from the equation
- Find the equation of a line
- Know the point-slope and slope-intercept forms of the equation of a line
- Find derivatives using the Power Rule
- Find the slope of a curve at a given point
- Find the equation of the tangent to a curve at a given value of  $x$
- Find the point on a curve where the slope is equal to a given value
- Find limits
- Use a graph to determine at what values of  $x$  a function is not continuous
- Use a graph to determine at what values of  $x$  a function is not differentiable
- Find derivatives using the General Power Rule (Chain Rule)

### **Suggested Review Problems**

Chapter One Supplemental Exercises (Pg. 127): 1 – 30, 32 – 37, 39 – 42, 45 – 50, 59 – 65, 77 - 80