

**REVIEW SHEET FOR TEST #1 - FALL, 2004**

Test #1 will be given on Monday, September 27. It will include material from Sections 1.1 - 1.5, 2.1, and 2.3 – 2.7.

**MAKEUP POLICY REMINDER:**

If you know in advance that you have to miss a quiz or test, you can make arrangements with me to take the quiz or test **before** it is given in class. Otherwise, no makeup quizzes will be given.

If you miss an hour test, it may be made up only if you

1. Contact me on or before the scheduled test date. My office telephone number is 301-279-5215. If I am not there, leave a message stating your telephone number clearly and telling me when I can reach you.
2. Can prove that you have a legitimate excuse.
3. Show me all homework on the relevant material.

**If you do not meet these conditions, you will not be permitted to take a makeup test and the percentage equivalent of your final exam grade will be substituted for the grade of the missed test. No student will be permitted to take more than one makeup test.**

**If you require extended time for tests, you must discuss this with me at least two days before the scheduled test date.**

To be prepared for this test, you should be able to

- Use the distance formula
- Graph equations by plotting points
- Graph and solve equations using a graphing utility
- Find intercepts
- Test for symmetry
- Write the standard form of the equation of a circle and find the circle's center and radius
- Solve linear, quadratic, radical and absolute value equations algebraically
- Use interval notation
- Solve linear, combined, and absolute value inequalities
- Determine whether a relation represents a function
- Evaluate functions
- Use the graph of a function to determine domain and range, function values, values of  $x$  for which the function value is given, intercepts, local maximum/minimum, intervals of increase/decrease
- Find the domain of a function from the algebraic representation of a function
- Find the average rate of change of a function and write the equation of a secant line through two given points
- Determine if a function is odd, even or neither from the graph or from the equation

**OVER** →

- Graph linear, constant, identity, square, cube, absolute value, square root, reciprocal and piecewise functions
- Graph functions using horizontal and vertical shifts, vertical compressions and stretches, and reflections about the x-axis or y-axis
- Form the sum, difference, product, quotient and composition of functions and find the domain
- Construct functions and use them to solve applied problems

### Suggested Review Exercises

Chapter 1 (p. 77)/ #3, 9, 15, 17, 21, 31, 35, 39, 43, 48, 53, 55, 69, 73

Chapter 2 (p. 167)/ #3, 5, 6, 7, 9, 13, 15, 17, 19, 21, 25, 29, 32, 35, 37, 39, 41, 45, 47, 49, 53, 57, 61, 63, 67, 69, 73 ( $f \circ g$  and  $g \circ f$  only), 77 ( $f \circ g$  and  $g \circ f$  only), 79 (a) - (f)

Read your textbook and make sure you know any important formulas, such as the formula for slope and for finding the equation of a line. Then do the review exercises for each chapter, using your book and/or notes to help if you have any difficulties. Check your answers and when you feel you have mastered the material, you should be ready to do the problems listed below in the Cumulative Review ***without looking at your book or notes***. Check your answers and be sure to go over any problems on which you made any errors. Remember that you can get extra help from me or by going to the Math/Science Center.

Cumulative Review (p. 172)/ #2, 3, 4, 6 - 18