MA 180 **REVIEW SHEET FOR TEST #3 - FALL, 2004**
Riseberg

Test #3 will be given on Friday, November 5. It will include material from Sections 4.1 – 4.5, 4.7, 5.1 – 5.4. Using the regression feature of your calculator will not be on the test.

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

- For a one-to-one function f, find the inverse function f^{-1} and write the domain and range of f and of f^{-1}.
- Obtain the graph of the inverse function from the graph of the function.
- Evaluate exponential and logarithmic functions.
- Convert from an exponential to a logarithmic expression and vice-versa.
- Solve equations involving exponential and/or logarithmic expressions algebraically or graphically.
- Graph exponential and logarithmic functions and determine their domain and range.
- Work with properties of logarithms and use them to solve logarithmic and exponential equations.
- Solve applied problems involving exponential growth and decay.
- Convert from degree to radian measure and vice-versa.
- Find the exact values of the trigonometric functions using a point on the unit circle.
- Find the exact values of the trigonometric functions of the quadrantal angles, of the angles $\frac{\pi}{6} = 30^\circ$, $\frac{\pi}{4} = 45^\circ$, $\frac{\pi}{3} = 60^\circ$, and of integral multiples of these angles.
- Use a calculator to approximate the values of a trigonometric function.
- Determine the domain, range, period, and amplitude of the sine and cosine functions.

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- Find the values of all of the trigonometric functions of an angle using fundamental identities (see p. 406), even-odd properties, and/or information about one or more of the trigonometric functions and the quadrant of the angle.
- Graph transformations of the sine and cosine functions.
- Graph sinusoidal functions of the type $y = A\sin(\omega x)$, $y = A\cos(\omega x)$.
- Find an equation for a sinusoidal graph.

Suggested Review Exercises

Chapter 4 Review (p. 360)/ # 3, 5, 9 - 23 odd, 26, 29 - 33 odd, 36, 43, 50, 53, 59, 63, 67, 75, 76, 81, 83, 84

Chapter 5 Review (p. 451)/ # 1 - 23 odd, 31 - 37 odd, 47, 48, 59, 60, 61, 62, amplitude, period and graph (not phase shift) for 63 and 64, 71 - 80 all, 89