MA 182 **REVIEW SHEET FOR TEST #4 Fall 2013 (4th Edition of Textbook)**
Dr. Katiraie
Test #4 will be given in the first week of December.
(75% of test #4 will include material from Sections 8.1 - 8.7 and 8.9. In addition 25% of test #4 will include material from your test #3, so please review your test #3)

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 (240)567-8060. If I am not there, leave a message. Be sure to state your telephone number clearly and tell 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.

Topics for Test

- Determine if a sequence is convergent or divergent and if it is convergent, find its limit.
- Recognize the difference between a sequence and a series.
- Recognize if a given series is a geometric series; find the sum of a convergent geometric series.
- Use the divergence test to determine if a series is divergent.
- Use appropriate Theorems to determine if certain series are convergent.
- Know the statements of and be able to use the Divergence, Integral, Comparison, Limit Comparison, and Ratio Tests to determine whether various series are convergent.
- Use the Alternating Series Test to determine if an alternating series is convergent.
- Use the Alternating Series Estimation Theorem to determine the accuracy of an estimate for a series if the nth partial sum is used.
- Determine if a series is absolutely convergent.
- Find the radius and interval of convergence of a power series.
- Represent a function as a power series by using substitution, integration and/or differentiation of a related geometric series.
- Develop Maclaurin/Taylor Series and polynomials for a function and use them to approximate integrals and function values.

Do the following Review Problems From Chapter 8

Chapter 8 Concept Check 1 - 6, 8, 9, 10a - c, 11
Chapter 8 True-False 1, 5, 6, 7, 10, 11, 15, 16, 17
Chapter 8 Exercises 1 - 7, 9 - 15 odd, 18, 19, 25, 30, 31, 33, 34, 35 - 41 odd, 45
Also Complete Final Exam Review Packet Problems 42--57
http://myspace.montgomerycollege.edu/fred.katiraie/MA182rockville.pdf