MA 103 **REVIEW SHEET FOR TEST #4 – FALL, 2010**
Riseberg

Test #4 will be given on Monday, December 6. It will include material from Sections 9.3 – 9.7 and 6.1 – 6.4. Be sure to bring your calculator to the test. If you forget your calculator or if your calculator is not working, go to the Math/Science Center in Room 02 Macklin Tower to get a short-term calculator loan.

IMPORTANT REMINDERS

MAKEUP POLICY: 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

- Do not have more than one unexcused absence during the time period covered on the test.
- Contact me on or before the scheduled test date.
- Can prove that you have a legitimate excuse.
- Have completed the MML 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.

ACADEMIC HONESTY: All students are expected to do their own work on quizzes and tests. Students are expected to observe the following rules during any test or quiz.

- Students may not use or even hold a cell phone or any other electronic device.
- Students may not speak to or share materials with other students.
- Students should have all materials ready at the beginning of the quiz or test.
- Students should remain in the room during the entire test or quiz.

Appropriate penalties will be imposed for breaches of academic honesty.

MAKE SURE YOU HAVE MASTERED THE FOLLOWING TOPICS AND SKILLS FOR THIS TEST:

Rational Functions and Expressions

- State the domain of a rational function.
- Evaluate rational functions.
- Simplify, multiply, divide, add and subtract rational expressions.
- Simplify complex fractions.
- Solve equations involving rational expressions.

Exponential and Logarithmic Functions and Equations

- Sketch by hand and recognize a general graph of an exponential function $f(x) = a^x$ and of a logarithmic function $g(x) = \log_a x$; state the domain and range of such functions.
- Know the meaning of a logarithm and a logarithmic function.
- Evaluate expressions involving logarithms.
- Use the power property of logarithms to solve exponential equations.

OVER →

- Solve equations involving logarithms by converting to exponential form.
- Use exponential and logarithmic models to solve applied problems.

TO PREPARE FOR THIS TEST:

- ✶ Make sure that you can do all homework and worksheet problems.
- ✶ Read your textbook, paying special attention to the Chapter Summary and Review at the end of each chapter
- ✶ Make sure you know all the important formulas and properties.
- ✶ Do the following review exercises for each chapter, using your book and/or notes to help if you have any difficulties.

Suggested Review Exercises
Chapter 6 (p. 521)/ 11 - 15, 17 - 34
Chapter 9 (p.783)/ 1, 7, 8, 19 - 27, 35, 36, 37, 44 - 47, 50 – 58, 60 - 63, 67, 68, 72

- ✶ Check your answers for the review exercises and when you feel you have mastered the material, you should be ready to do the following problems in the Chapter Tests ***without looking at your book or notes***.

Chapter 6 Test (p. 523)/ 1 - 6, 8 - 16
Chapter 9 Test (p. 785)/ 6 - 14, 17, 18, 19, 23 - 26, 28, 30 - 36, 38, 39

- ✶ Check your answers and be sure to go over problems on which you made any errors. Remember that you can get extra help from me or by going to the **Math/Science Center.**

Additional Review Problems:

1. State the domain of the function $f(x) = \dfrac{x+2}{x^2+2x-15}$.

Answers:
1. $\{x \mid x \neq 3,\ x \neq -5\}$