Study Guide

class key_____

LANE COMMUNITY COLLEGE - Math Resource Center (MRC)

MTH 095: INTERMEDIATE ALGEBRA - MRC

I have enrolled for _____ credits:

PART A: _____ (CRN), PART B: _____ (CRN), PART C: _____ (CRN), PART D: _____ (CRN), PART E: _____ (CRN)

Textbook with On-Line Access Code:

Elementary and Intermediate Algebra, 5th Edition, by Tussy and Gustafson
Cengage Publishing Company + WebAssign On-Line Access Code

Overview of Course:

Credit		Chapter/Section and Topic	Tests
1st credit	Module 1	☐ **Review Chapter 4** ☐ **Review Chapter 5** ☐ **8.6 –** Review of Factoring Methods: GCF, Grouping, Trinomials ☐ **8.7 –** Review of Factoring Methods: The Difference of Two Squares; the Sum and Difference of Two Cubes ☐ **Module 1 Review**	**Test 1 – Calculator Allowed**
2nd credit	Module 2	☐ **Review 7.1 – 7.4 –** Rational Expressions ☐ **7.5 –** Simplifying Complex Fractions ☐ **Module 2 Review**	**Test 2 – Calculator Allowed**
	Module 3	☐ **7.6 –** Solving Rational Equations ☐ **7.7 –** Problem Solving Using Rational Equations ☐ **8.1 –** Review of Solving Linear Equations, Formulas and Linear Inequalities; Applications ☐ **8.2 –** Functions ☐ **Module 3 Review**	**Test 3 – Calculator Allowed**
3rd credit	Module 4	☐ **8.3** – Graphs of Functions (objectives 1 – 3 only) ☐ **8.4** – Solving Compound Inequalities ☐ **8.5** – Solving Absolute Value Equations and Inequalities ☐ **9.1** – Radical Expressions and Radical Functions ☐ **Module 4 Review**	**Test 4 – Calculator Allowed**
	Module 5	☐ **9.2** – Rational Exponents ☐ **9.3 –** Simplifying and Combining Radical Expressions ☐ **9.4** – Multiplying and Dividing Radical Expressions ☐ **Module 5 Review**	**Test 5 – Calculator Allowed**
4th credit	Module 6	☐ **9.5** – Solving Radical Equations ☐ **9.6** – Geometric Applications of Radicals (objectives 1, 4, and 5 only) ☐ **9.7 –** Complex Numbers ☐ **Module 6 Review**	**Test 6 – Calculator Allowed**
	Module 7	☐ **10.1** – The Square Root Property and Completing the Square ☐ **10.2** – The Quadratic Formula ☐ **10.3 –** The Discriminant and Equations That Can Be Written in Quadratic Form ☐ **10.4 –** Quadratic Functions and Their Graphs ☐ **Module 7 Review**	**Test 7 – Calculator Allowed**
5th credit	Module 8	☐ **11.3 –** Exponential Functions ☐ **11.4 –** Logarithmic Functions ☐ **11.5 –** Base-e Exponential and Logarithmic Functions ☐ **Module 8 Review**	**Test 8 – Calculator Allowed**

CALCULATOR: A scientific calculator is required and useful in this course. However, **we encourage you to do most of your numeric work in this course by hand (to reinforce basic skills)** THEN use a calculator to check your work. You are to provide your own calculator. Some tests do not allow use of calculators with the intention of helping you to maintain computational skills.

Homework – Hints and Suggestions

1. Use your suggested "On Schedule" test dates to establish a regular daily schedule for doing your math homework and **stick with it**.

2. Before starting on the homework assignments, read and study the section. Work through the examples and use videos and tutorials as necessary.

3. Consider doing your work in the Math Resource Center where tutor help is available when you need it.

4. When doing your homework, work the problems on your own paper, showing each step. Try to do them without looking at examples. If your score for an assignment is not 80% or higher, identify your mistakes. Then review examples, use assistance features the WebAssign system and get tutor help.

5. Refer back to previously completed homework as a reference when studying for a test.

Tests – Preparation and Taking

1. After all the assigned work has been completed with a score of 80% or higher, you will be ready to prepare for taking a test. It is important to study for the tests as it is your test scores that determine your overall grade.

2. Go to the Reception Counter to check in for a test. Since the only difference between practice and graded tests is that your score on the practice test will not count, taking a practice test gives you a realistic and objective check of your skill level without affecting your grade for the course. Work each question on the test like you did in your homework, showing each step. You are allowed to take more than one practice test. When your practice test score is above 80%, you should be ready to take the graded test.

3. Once you have completed Steps 1 and 2 you are ready to take the *Graded Module Test*. Go to the Reception Counter and ask for a *Graded Module Test.* Relax, take your time, show your work, and demonstrate what you have learned.

Other Helpful Resources:

1. Get help from the tutors that are available in the MRC Tutoring Room 163.
2. Use the quiet study room if Room 163 is too noisy.
3. Use on-line WebAssign resources.
4. Check out individual math topic Video Tapes from the Reception Counter staff.
5. Take practice tests before the graded tests. Go to the MRC Reception Counter, Room 169.