Math 207 Week 3 Newsletter - Dr. Loveless

UPCOMING SCHEDULE:

Friday: Finish 2.7, introduce chapter 3

Monday: Review for midterm (bring old exam and homework questions) Wednesday: **Midterm 1** (covers all material we have discussed through 2.7)

Next Friday: Section 3.1: Second order (linear constant coefficient homogenous with 2 real roots)

HOMEWORK: HW 3 Closes Tuesday (it covers 2.3, 2.5 and 2.7 please finish it well before Tuesday). Please, please check out hints and post questions on the discussion board: HW 3 discussion board.

Midterm 1 is Wednesday and covers:

1. 1st order solving methods:

Separable Equations: see 2.2 problems and in many other sections Integrating Factor: see 2.1 problems and in many other sections

2. Applications: see ch. 1 and 2.3 problems and various applications in homework

- 3. Equilibrium Analysis (Stable, Unstable, Semistable) and slope fields: see 2.5 problems
- 4. Numerical Analysis (Euler's method): see 2.7 problems

You are allowed:

- a) An 8.5 by 11 inch sheet of handwritten notes (front and back)
- b) A basic scientific calculus (no graphing calculators and no calculator that can do calculus).
- c) Something to write with.

Please feel free to post exam questions (old exam questions, rules, etc) to the Exam 1 Review Discussion Board.

NEW POSTING: Here is the link again to <u>Dr. Loveless review materials page</u>.

For this next week, some of my review sheets that might help include:

- 1. Section 2.7 (Euler Method) Review Sheet
- 2. Exam 1 One-Page Review Sheet
- 3. Exam 1 Rules and Slightly Longer Review Sheet

OLD EXAMS: Exam Archives: <u>Personal Exam Archive</u> and <u>Department Exam 1 Archive</u>

Here is some targeted practice on the current material from these archives (see previous newsletters for targeted practice on previous topics)...

Practice for 2.5 (Autonomous and Equilibrium Analysis):

Problem 3(a) from Loveless 2015 Exam 1
Problem 4(b) from Loveless 2015 Exam 1
Problem 4(b) from Loveless 2016 Exam 1
Problem 4 from Rudnick 2012 Exam 1
Problem 4 from Spicer 2014 Exam 1

Practice for 2.7 (Euler's Method):

Problem 4(a) from Loveless 2015 Exam 1
Problem 4(a) from Loveless 2016 Exam 1
Problem 3 from Spicer 2014 Exam 1

I hope this helps!

Dr. Andy Loveless