

## Math 111 End of Week 5 Newsletter

### UPCOMING SCHEDULE:

Friday (Today): Section 2.2: Quadratic Vertex, then we'll discuss algebraic functions and rates  
Monday: Section 2.2/2.3: Algebraic Rates and Algebraic Business Applications.  
Tuesday: Exam 1 Return and Homework Q & A (Ask lots of 2.2 homework questions!!!)  
Wednesday: Section 2.3: Algebraic Business Applications  
Thursday: Activity 5 (Maximizing Profit in Three Ways)  
Friday: Section 2.3/1.5: Solving Linear Systems and Graphing Inequalities

### NEXT WEEK HW SCHEDULE:

Closing Tuesday: Section 2.1  
Closing next Thursday: Section 2.2 and Section 2.3 (part 1) (Big Assignments!)

**Homework Warning:** The section 2.2 and 2.3 homework assignments require a lot of algebra skills. I find that about half of the class gets through this assignment quickly and tells me they like this assignment, but the other half tells me it is one of the hardest assignments all quarter. If your algebra is weak, then you will be in this second group. The only agenda on Tuesday in quiz section is returning the exams and discussing homework. Use this time to discuss lots of 2.2 and 2.3 homework questions. Come ready with questions!

**START THE 2.2 AND 2.3 HOMEWORK EARLY: *Your goal should be to be nearly done with 2.2 by the end of this weekend, then you should get your last minute questions on 2.2 answered on Monday and Tuesday.*** If you follow this advice, then you will be in good shape to only need to worry about a few problems from 2.3 on Tuesday, Wednesday and Thursday. If you wait until Wednesday or Thursday to start 2.2 and 2.3, then you most likely won't finish. Spread out your work!!!

### WEEK 4 HOMEWORK STATS:

Section 1.6 HW: Median Score = 100%, Median Time Browser Open = 1 hour 26 minutes

### QUICK EXAM 1 NOTES:

We will return the exam on Tuesday and I will give statistics and grade information on Wednesday (and I will post midterm grades by next Friday). As I said in class, even if the first exam went poorly you still can do well in this course. BUT, if you indeed did poorly on the first exam, then that means you don't understand the material well, or you don't know how to show your understanding, and that will need to be remedied before the second midterm if you want to bring your grade up.

### MATERIAL NOTES:

We are discussing Chapter 2 (Quadratics) over the next week. I noticed that attendance was down a bit yesterday. If you missed yesterday's lecture, then you missed my important introduction on the algebra skills that are essential for working with quadratics. You also missed hearing me singing the quadratic formula and you missed hearing me talk about 'monkey facing'!! Ask a classmate about what you missed. The material we discussed Wednesday will be at the heart of everything we do for the next week. Make sure you get the notes from a classmate. And, in the future, don't skip the day after an exam, that is often the start of new material and you don't want to miss that. Also check out my new postings and summaries.

### ACTIVITIES:

Activity 4 gave an introduction to quadratic functions. I hope you found that helpful.

The Activity 4 Solutions are online here:

<http://www.math.washington.edu/~aloveles/Math111Fall2015/Activity04key.pdf>

## NEW POSTINGS:

Here are some new postings that should help you now:

1. **Section 2.1 Review with practice problems (Quadratic Equation and Vertex Function):**

<http://www.math.washington.edu/~aloveles/Math111Fall2015/Section2.1Review.pdf>

2. **Section 2.2 Review with practice problems (Functional Notation and applied problems):**

<http://www.math.washington.edu/~aloveles/Math111Fall2015/Section2.2Review.pdf>

3. **Section 2.3 Review with LOTS of practice problems (Applied problem review):**

<http://www.math.washington.edu/~aloveles/Math111Fall2015/Section2.3Review.pdf>

4. If are finding functional notation challenging, here is an additional general review that I posted at the beginning of the term:

<http://www.math.washington.edu/~aloveles/Math111Fall2015/FunctionalNotation.pdf>

### **A STUDY PLAN for the next 5 days**

If algebra or general problem solving is challenging for you, then I strongly suggested the following program of study for the next week:

STEP 1 (This should take about 10-15 minutes):

Open the 2.1 review sheet then read the first page.

Attempt all problems on page two on your own. These should be quick exercises for you.

Then, carefully read the full detailed solutions to understand your mistakes.

STEP 2: Do the 2.1 homework. You should try to complete this today or tomorrow.

It is a quick assignment.

STEP 3 (This should take about 10-15 minutes):

Open the 2.2 review sheet, read the first two pages (lots of step-by-step detailed examples).

Attempt the practice problems on page two on your own. These should also be quick.

Then carefully read the detailed solutions on the following pages.

STEP 4: Work on the functional notation problems from homework (these are like the 2.2 review sheet).

That is:

Attempt HW Section 2.2 / Problems 1-6, 8(c)(f), 9(a)(c)

Attempt HW Section 2.3 / Problems 7(c), 8(a)

You should be done with these before Sunday.

STEP 5 (This should take about 10-15 minutes):

Open the 2.3 review sheet, read carefully (it contains advice about how to do applied problems).

Scan through the problems on the second page. These are six different old exam questions.

(Many of these are identical to homework).

See if you know how you would start each problem.

On the following pages of this review, I provide extremely detailed step-by-step solutions.

STEP 6: Do the rest of the homework from 2.2 and 2.3 (these are all like problems from the 2.3 review).

Complete all these steps before quiz section on Tuesday (use that time to ask questions).

## **OLD EXAMS:**

Here are some old exam questions that have to do with supply and demand from this last week:

Problem 2 from:

<http://www.math.washington.edu/~m111/Midterm2/win14ExamIlostroff.pdf>

Problem 2 from:

<http://www.math.washington.edu/~m111/Midterm2/aut13ExamIbkyel.pdf>

Problem 1 from:

<http://www.math.washington.edu/~m111/Midterm2/aut13ExamInichifor.pdf>

Okay, if you find something helpful here, please advertise to your classmates. I want these materials to be used.

Dr. Andy Loveless