Math 124 End of Week 5 Newsletter

On Wednesday, of next week we will finish our derivative rules, then we will start to move into the main applications. So next week I will be giving you lots and lots of derivative practice problems with all our derivative rules. I have posted several review sheets if you want to read ahead about the derivative rules we will be learning. We need to know the rules well before we get into applied problem solving (students often have difficulty in problem set up in applied problems which we will practice, but things will be much harder if you don't know the basic derivative rules).

UPCOMING SCHEDULE:

Friday:	Section 10.2/3.5 (Parametric Equations, horizontal and vertical velocity, motion applications)
Monday:	Section 3.5 (Implicit Differentiation)
Tuesday:	Exam 1 Return and Worksheet on Implicit Differentiation: https://sites.math.washington.edu/~m124/source/worksheets/aut_ws6.pdf
Wednesday:	Section 3.6 (Logarithmic Differentiation)
Thursday:	Homework discussion (bring lots of homework questions!)
Next Friday:	Section 3.9 (Related Rates)

Exam 1 Reviewing, Reflection and Regrades Information:

Early next week, I will be emailing you exam information and statistics. I also will be emailing information about an exam reflection survey. So be looking for that email. Briefly, here are some important things I will say:

1. When you get your exam back, quickly review it and immediately report any miscalculations or tallying to your TA.
2. Then take your exam home and review the questions, carefully read and consider the posted solutions. Also fill out the exam reflection survey (more information to come).
3. If you have carefully considered the exam and the solutions and you have a complaint about grading, then you must bring me your exam by Friday of next week (at lecture or office hours). I will take your exam and consider the issue and add comments. You can NOT bring me regrade questions after Friday.

HOMEWORK:	Closing Friday:	hw11S3.4 and hw12S3.4
	Closing Tues:	hw13S10.2
	Closing Next Friday:	hw14S3.5, hw15S3.5
PREVIOUS HOMEWORK STATS:	hw10S3.3:	median score = 100%, median time = 116 minutes

NEW POSTINGS

Remember the course website is here: https://sites.math.washington.edu/~aloveles/Math124Fall2017/index.html

(3.3/4) Trig and Chain Rules: https://sites.math.washington.edu/~aloveles/Math124Fall2017/m124week4review.pdf

(10.2) Parametric Rules: https://sites.math.washington.edu/~aloveles/Math124Fall2017/m124ParametricEquations.pdf

(3.5/6) Implicit and Log Rules: https://sites.math.washington.edu/~aloveles/Math124Fall2017/m124week5review.pdf

Basic Derivatives Reference: https://sites.math.washington.edu/~aloveles/Math124Fall2017/m124Derivatives.pdf

Tangent Lines Note

I am seeing quite a few mistakes on finding tangent lines on first exam. We had many similar problems in homework (actually the problem I asked was word-for-word from the homework) and every old exam in my archive asked the same type of question, so if we studied, then we should not have been surprised that this questions was on the exam. But still quite a few students are missing it. If that is you and you want more practice with finding tangent lines, then I created these additional practice problems:

Five applied tangent line problems with full detailed solutions (and pictures):
https://sites.math.washington.edu/~aloveles/Math124Fall2017/m124%20Tangent%20Review1.pdf

Four more applied tangent line problems including parametric equations with full detailed solutions (and pictures):
https://sites.math.washington.edu/~aloveles/Math126Winter2016/m124%20Tangent%20Review.pdf

There are going to continue to be problems like these on homework and exams. So now would be a good time to attempt these practice problems and make sure you know how to do them.

OLD EXAMS:
The departmental exam archive for **midterm 2** is here: https://www.math.washington.edu/~m124/SampleMid2.php
and my exam archive is here: https://sites.math.washington.edu/~aloveles/Math124Fall2017/LovelessExamArchive.html

Students have told me they are worried about parametric equation problems. So I provide lots and lots of examples below from the exam archive. Check them out!

Here are parametric derivative problems from old exams (10.2) from old midterms:
Problem 3 from: https://www.math.washington.edu/~m124/source/Exams/Midterm2/2015aut/pezzoli.pdf
Problem 4 from: https://www.math.washington.edu/~aloveles/Math124Winter2016/m124w13e2.pdf
Problem 2 from: https://www.math.washington.edu/~m124/source/Exams/Midterm2/mid2w09/alexMidterm2.pdf
Problem 3 from: https://www.math.washington.edu/~m124/source/Exams/Midterm2/mid2_a12_perkins/Mid2.pdf
Problem 4 from: https://www.math.washington.edu/~m124/source/Exams/Midterm2/mid2w11/midterm2.pdf
Problem 5 from: https://www.math.washington.edu/~m124/source/Exams/Midterm2/2015aut/sylvester.pdf
Problem 2b from: https://www.math.washington.edu/~aloveles/Math124Winter2016/m124w13e2.pdf
Problem 7 from: https://www.math.washington.edu/~conroy/m124-general/exams/mt1-aut2007.pdf

Here are chain rule practice problems (3.4) from old midterms (and truthfully we use these skills on almost every problem for the rest of the term, so I could point to almost any questions on any old midterm and it is likely a chain rule problem):
Problem 3 from: https://www.math.washington.edu/~aloveles/Math124Winter2016/m124f10exam1.pdf
Problem 1a from: https://www.math.washington.edu/~m124/source/Exams/Midterm2/mid2w11/midterm2.pdf
Problem 4 from: https://www.math.washington.edu/~aloveles/Math124Winter2016/m124f10exam1.pdf

I hope some of this helps.

Dr. Andy Loveless