Math 125 End of Week 5 Newsletter

UPCOMING SCHEDULE:

Friday:	Section 7.1/7.2 (Integrating Trig Functions)
Monday:	Section 7.2/7.3 (Trig Substitution)
Tuesday:	HW Q & A (You should have lots of homework questions!! Integrate Away!)
Wednesday:	Section 7.3/7.4 (Partial Fractions) **- 7.1, 7.2, 7.3 HW closing**
Thursday:	Worksheet 6 – Partial Fractions
	https://www.math.washington.edu/~m125/Worksheets/PartialFractions.pdf
Next Friday:	Section 7.4/7.5 (Summary of Integration Techniques)

NEW POSTINGS: Check out the Dr. Loveless Review Materials page for lots more resources.
> Here are a few to note:
> 1. **Summary of 7.2**: (summary of trig cases we discussed in class, mostly clever substitution)
> 2. **A review trig identities and summary of main idea for 7.3**
> 3. **Updated table of basic integrals**

OLD EXAMS: Here again is the Dr. Loveless Exam Archive. Scroll down to the "Exam 2" table.
> Here are some targeted practice problems from old exams on the current material:
> **for practice using Section 7.1 material** (integration by parts):
> Problem 1(b):   https://sites.math.washington.edu/~aloveles/Math125Materials/f17m125e2.pdf
> Problem 2(a):   https://sites.math.washington.edu/~aloveles/Math125Materials/w19m125e2.pdf
> Problem 3(a):   https://sites.math.washington.edu/~aloveles/Math125Materials/w19m125e2.pdf
> **for practice using Section 7.2 material** (trig integrals):
> Problem 2(b):   https://sites.math.washington.edu/~aloveles/Math125Materials/w15m125e2.pdf
> Problem 1(b):   https://sites.math.washington.edu/~aloveles/Math125Materials/w18m125e2.pdf
> Problem 2(b):   https://sites.math.washington.edu/~aloveles/Math125Materials/w19m125e2.pdf
> **for practice using Section 7.3 material** (Trig Substitution):
> Problem 3(b):   https://sites.math.washington.edu/~aloveles/Math125Materials/w19m125e2.pdf
> Problem 1(a):   https://sites.math.washington.edu/~aloveles/Math125Materials/w19m125e2.pdf
> Problem 3(b):   https://sites.math.washington.edu/~aloveles/Math125Materials/w18m125e2.pdf

HOMEWORK COMMENTS AND HINTS:

On HW 7.1:
> **Problem 9**:   Integrate from 0 to t. (Don't forget to plug in the 0 at the end and $e^0 = 1$).
> **Problem 10**:   I think it is much easier if you wait to put in the numbers until the end and if you start by splitting up the integral, and perhaps simplify one of the integrals with a substitution. (If you are thoughtful in how you do your work, it doesn't get messy, but if you aren't careful it does get messy). Note you are asked to integrate from 0 to 60.

On HW 7.2: Get out the trig identities and follow the recipes from class!

On HW 7.3: Big Assignment, with a few long problems!
> **Problems 5, 6, 7, and 8**: You must start by *completing the square*.
> I will do at least one full example like this in lecture and there will be several more in my lecture notes, here are some similar old lecture notes (see last two pages)
> **WARNING - Problems 6 and 8 are especially long and tough**. Give yourself a full clean page to work on for each of those. These are really challenges of your organization and stamina, these two problems are the longest integration problems of the entire term. After you do the substitution, completely expand (I know it will look bad). This will split your work into three sub-problems.

I hope this helps.
- Dr. Andy Loveless