

## Math 125 End of Week 5 Newsletter

### UPCOMING SCHEDULE:

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

Worksheet 5 (Integration by parts) Solutions: <http://www.math.washington.edu/~m125/outline5.php>

### HOMEWORK:

Closing Wednesday at 11:00pm: HW\_5A, HW\_5B, HW\_5C (These cover 7.1, 7.2 and 7.3)  
HW\_4A: median score = 100%, median time students had browser open to assignment = 116 minutes  
HW\_4B: median score = 100%, median time students had browser open to assignment = 55 minutes  
HW\_4C: median score = 100%, median time students had browser open to assignment = 40 minutes

### HOMEWORK COMMENTS AND HINTS:

*On HW\_5A: 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, 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).

*On HW\_5B:* Get out the trig identities and follow the recipes from class!

*On HW\_5C:* Again, you'll need all those trig identities and follow the recipe from class.

### NEW POSTINGS

Here, again, is the course website: <http://www.math.washington.edu/~aloveles/Math125Spring2016/index.html>

There are several new postings:

1. **More Examples of Integration by Parts** (This contains 7 standard problems and 5 extremely challenging problem):

<http://www.math.washington.edu/~aloveles/Math125Spring2016/IntegrationByPartsPractice.pdf>

**Fully worked out solutions to the 7 standard problems:**

<http://www.math.washington.edu/~aloveles/Math125Spring2016/m125bypartspracticesolutions.pdf>

**Fully worked out solutions to the 5 extremely challenging problems (harder than homework and old exams):**

<http://www.math.washington.edu/~aloveles/Math125Spring2016/m125IntegrationByPartsChallenge.pdf>

2. **List of all the basic integrals you need to know for homework in 7.1-7.5:**

<http://www.math.washington.edu/~aloveles/Math125Spring2016/7-5IntegralsWeKnow.pdf>

3. **A review and list of all the trig identities you will need for this course:**

<http://www.math.washington.edu/~aloveles/Math125Spring2016/7-2EssentialTrigIdentities.pdf>

4. **Summary of 7.2:**

<http://www.math.washington.edu/~aloveles/Math125Spring2016/7-2SummaryOfCases.pdf>

**OLD EXAMS:**

The math departmental exam 2 archive is here: <http://www.math.washington.edu/~m125/Quizzes/Q8.php>

My personal exam archive is here:

<http://www.math.washington.edu/~aloveles/Math125Spring2016/LovelessExamArchive.html>

Here are some targeted practice problems from old exams on the current material:

**for practice using Section 6.5 material (Average value):**

Problem 4: <http://www.math.washington.edu/~aloveles/Math125Spring2016/f09m125e2.pdf>

Problem 1(b): <http://www.math.washington.edu/~m125/Quizzes/week8/mid2p.pdf>

Problem 5: <http://www.math.washington.edu/~aloveles/Math125Spring2016/m125sp06e2.pdf>

**for practice using Section 7.1 material (integration by parts):**

Problem 1(b): [http://www.math.washington.edu/~m125/Quizzes/week8/win16\\_bekyel\\_2.pdf](http://www.math.washington.edu/~m125/Quizzes/week8/win16_bekyel_2.pdf)

Problem 2(b): [http://www.math.washington.edu/~m125/Quizzes/week8/win16\\_pollack\\_2.pdf](http://www.math.washington.edu/~m125/Quizzes/week8/win16_pollack_2.pdf)

Problem 5(b): [http://www.math.washington.edu/~m125/Quizzes/week8/win16\\_pollack\\_2.pdf](http://www.math.washington.edu/~m125/Quizzes/week8/win16_pollack_2.pdf)

Problem 2(b): [http://www.math.washington.edu/~m125/Quizzes/week8/win13\\_mid2.pdf](http://www.math.washington.edu/~m125/Quizzes/week8/win13_mid2.pdf)

Problem 1(c): [http://www.math.washington.edu/~m125/Quizzes/week8/win16\\_ostroff\\_2.pdf](http://www.math.washington.edu/~m125/Quizzes/week8/win16_ostroff_2.pdf)

Problem 1(b): <http://www.math.washington.edu/~aloveles/Math125Spring2016/f09m125e2.pdf>

Problem 3(a): <http://www.math.washington.edu/~aloveles/Math125Spring2016/f09m125e2.pdf>

**for practice using Section 7.2 material (trig integrals):**

Problem 1(a): [http://www.math.washington.edu/~m125/Quizzes/week8/win13\\_mid2.pdf](http://www.math.washington.edu/~m125/Quizzes/week8/win13_mid2.pdf)

Problem 2: [http://www.math.washington.edu/~m125/Quizzes/week8/win16\\_ostroff\\_2.pdf](http://www.math.washington.edu/~m125/Quizzes/week8/win16_ostroff_2.pdf)

Problem 1(b): <http://www.math.washington.edu/~aloveles/Math125Spring2016/m125sp06e2.pdf>

Problem 3(a): <http://www.math.washington.edu/~aloveles/Math125Spring2016/m125sp06e2.pdf>

Problem 2(a): <http://www.math.washington.edu/~aloveles/Math125Spring2016/f09m125e2.pdf>

I hope some of this helps.

Dr. Andy Loveless