

Math 125 End of Week 6 Newsletter

UPCOMING SCHEDULE:

Friday: Section 7.4 (Partial Fractions)
Monday: Section 7.5 (Summary of Integration)
Tuesday: HW Q & A (You should have lots of homework questions!)
Wednesday: Section 7.7 (Approximating Integrals)
Thursday: Worksheet 7 – Integration Techniques Practice
<https://www.math.washington.edu/~m125/Worksheets/IntegrationTechniques.pdf>
Next Friday: NO CLASS – (Holiday)

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

Worksheet 6 (Partial Fractions) Solutions: <https://www.math.washington.edu/~m125/outline6.php>

HOMEWORK:

Closing Friday: HW_5C (covers 7.3)

Closing next *Thursday*: HW_6A, 6B (covers 7.4, 7.5)

HOMEWORK COMMENTS AND HINTS:

On HW_6A, 6B: Lots of practice with integration. Get to work and find where you are still having trouble!

NEW POSTINGS (course website: <https://sites.math.washington.edu/~aloveles/Math125Fall2017/index.html>)

You need to practice, practice, practice integrating. To help you do this, I have made several lists of practice problems:

1. Flowchart I created to organize the integration methods (ONE OF MY MOST POPULAR REVIEW SHEETS):

<https://sites.math.washington.edu/~aloveles/Math125Fall2017/Integration%20Methods%20Flowchart.pdf>

2. A full review of all integration methods (ANOTHER POPULAR REVIEW SHEET):

<https://sites.math.washington.edu/~aloveles/Math125Fall2017/IntegrationTechniques.pdf>

Look at old exams for practice. In addition, I compiled a bunch of practice problems as follows. So there are lots of chances to practice integration, use them!!! The second test will be primarily about integration techniques.

a) 30 Random Integrals **Directly** from Old Exams (for these practice quickly identifying how to start)

<https://sites.math.washington.edu/~aloveles/Math125Fall2017/30RandomIntegralsFromOldSecondMidterms.pdf>

Comments and answers (I tell you how to start and I give the answer)

<https://sites.math.washington.edu/~aloveles/Math125Fall2017/30RandomIntegralsSolns.pdf>

b) 11 Practice Problems from one of my old lecture reviews

<https://sites.math.washington.edu/~aloveles/Math125Fall2017/7-5IntegralsReview.pdf>

Here are my full solutions:

<https://sites.math.washington.edu/~aloveles/Math125Fall2017/7-5IntegralsReviewSolns.pdf>

c) 12 Practice Problems that I wrote up a few years ago:

<https://sites.math.washington.edu/~aloveles/Math125Fall2017/12IntegraleexamplesFirstPage.pdf>

Here are my full solutions:

<https://sites.math.washington.edu/~aloveles/Math125Fall2017/12integraleexamplesSolns.pdf>

OLD EXAMS:

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

My personal exam archive is here:

<https://sites.math.washington.edu/~aloveles/Math125Fall2017/LovelessExamArchive.html>

Here are some targeted practice problems from old exams on the current material (Some of these were in my last newsletter, but I wanted to put all the integration techniques targeted practice in one place):

for practice using Section 7.1 material (Integration by Parts):

Problem 1(b): https://www.math.washington.edu/~m125/Quizzes/week8/win16_bekyel_2.pdf

Problem 2(b): https://www.math.washington.edu/~m125/Quizzes/week8/win16_pollack_2.pdf

Problem 5(b): https://www.math.washington.edu/~m125/Quizzes/week8/win16_pollack_2.pdf

Problem 2(b): https://www.math.washington.edu/~m125/Quizzes/week8/win13_mid2.pdf

Problem 1(c): https://www.math.washington.edu/~m125/Quizzes/week8/win16_ostroff_2.pdf

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

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

for practice using Section 7.2 material (Trig Integrals):

Problem 1(a): https://www.math.washington.edu/~m125/Quizzes/week8/win13_mid2.pdf

Problem 2: https://www.math.washington.edu/~m125/Quizzes/week8/win16_ostroff_2.pdf

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

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

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

for practice using Section 7.3 material (Trig Substitution):

Problem 3: <https://www.math.washington.edu/~m125/Quizzes/week8/mid2a.pdf>

Problem 2: <https://www.math.washington.edu/~aloveles/Math125Spring2016/w15m125e2.pdf>

Problem 1b: https://www.math.washington.edu/~m125/Quizzes/week8/win13_mid2.pdf

Problem 2b: <https://www.math.washington.edu/~aloveles/Math125Spring2016/sp13m125e2.pdf>

Problem 3: https://www.math.washington.edu/~m125/Quizzes/week8/aut15_burdzy_2.pdf

Problem 1a: https://www.math.washington.edu/~m125/Quizzes/week8/win16_bekyel_2.pdf

for practice using Section 7.4 material (Partial Fractions):

Problem 2a: https://www.math.washington.edu/~m125/Quizzes/week8/win13_mid2.pdf

Problem 1a, 2a: <https://www.math.washington.edu/~aloveles/Math125Spring2016/sp13m125e2.pdf>

Problem 2a: https://www.math.washington.edu/~m125/Quizzes/week8/win16_bekyel_2.pdf

Problem 2: <https://www.math.washington.edu/~aloveles/Math125Spring2016/w15m125e2.pdf>

Problem 2a: https://www.math.washington.edu/~m125/Quizzes/week8/win16_pollack_2.pdf

for practice using Section 7.5 material (Combining Integration Techniques):

Problem 1: <https://www.math.washington.edu/~m125/Quizzes/week8/mid2a.pdf>

Problem 1: https://www.math.washington.edu/~m125/Quizzes/week8/win16_pollack_2.pdf

Problem 1b: <https://www.math.washington.edu/~aloveles/Math125Spring2016/w11m125ce2.pdf>

Problem 2a: <https://www.math.washington.edu/~aloveles/Math125Spring2016/m125sp07e2.pdf>

And there is plenty more practice in the exam archive and elsewhere on my website!!!

I hope some of this helps.

Dr. Andy Loveless