

## Math 125 End of Week 7 Newsletter

### UPCOMING SCHEDULE:

Friday: NO CLASS (University Holiday)  
Monday: Section 7.8 (Improper Integrals)  
Tuesday: HW Q & A and Exam Review  
Wednesday: Exam 2 Review (come to both lectures if you want and bring questions!)  
Thursday: **Midterm 2**  
Next Friday: Section 8.1 (Arc Length)

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

Worksheet 7 (Integration Techniques) Solutions: <https://www.math.washington.edu/~m125/outline7.php>

### This quarter Exam 2 covers:

6.4: Work  
6.5: Average Value  
7.1-7.5: All integration Techniques  
7.7: Approximating Integrals (Left endpoint, Right endpoint, midpoint, trapezoid, simpsons)  
7.8: Improper Integrals  
**Expect several pages on integration!!!**

### HOMEWORK:

Closing Wed: HW\_7A, 7B (covers 7.5/7.7 and 7.8)

Last year's data:

HW\_6A: median score = 100%, median time = 135 minutes

HW\_6B: median score = 100%, median time = 65 minutes

HW\_7A: median score = 98%, median time = 152 minutes

HW\_7B: median score = 98%, median time = 93 minutes

### HOMEWORK COMMENTS AND HINTS:

On HW\_7B: For ALL problems in this section:

Step 1: Rewrite as a limit. You will have a variable (I use "t") in the bounds.

Step 2: Evaluate the integral using all our integration techniques. Your answer will involve "t".

Step 3: Take the limit. See review sheets and posted lecture notes for a limits review if you need it.

### NEW POSTINGS:

Here, again, is the course website: <https://sites.math.washington.edu/~aloveles/Math125Fall2017/index.html>

**Brief 7.7 and 7.8 review sheet** (approximation and improper integrals):

<https://sites.math.washington.edu/~aloveles/Math125Fall2017/EndOfChapter7.pdf>

See my many other postings on review of integration on my course website.

## 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 (see previous newsletters for practice on previous topics):

### for practice using Section 7.7 material (Approximating):

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

Problem 4: [https://www.math.washington.edu/~m125/Quizzes/week8/win13\\_mid2.pdf](https://www.math.washington.edu/~m125/Quizzes/week8/win13_mid2.pdf)

Problem 3b: <https://www.math.washington.edu/~aloveles/Math125Spring2016/w11m125ce2.pdf>

Problem 4b: <https://www.math.washington.edu/~aloveles/Math125Spring2016/sp13m125e2.pdf>

Problem 3b: <https://www.math.washington.edu/~aloveles/Math125Spring2016/w15m125e2.pdf>

### for practice using Section 7.8 material (Improper):

*Infinity in bounds:*

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

Problem 3: <https://www.math.washington.edu/~m125/Quizzes/week8/mid2p.pdf>

Problem 4a: <https://www.math.washington.edu/~aloveles/Math125Spring2016/w11m125ce2.pdf>

Problem 3b: <https://www.math.washington.edu/~aloveles/Math125Spring2016/sp13m125e2.pdf>

*Discontinuity between bounds:*

Problem 5: [https://www.math.washington.edu/~m125/Quizzes/week8/win13\\_mid2.pdf](https://www.math.washington.edu/~m125/Quizzes/week8/win13_mid2.pdf)

Problem 4b: <https://www.math.washington.edu/~aloveles/Math125Spring2016/w11m125ce2.pdf>

Problem 4b: <https://www.math.washington.edu/~conroy/m125-general/exams/mt2-wi08.pdf>

Problem 4: <https://www.math.washington.edu/~m125/Quizzes/week10/125finalW16.pdf>

Problem 3: <https://www.math.washington.edu/~m125/Quizzes/week10/125finalSp15.pdf>

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

**Look at old midterms and old finals!** I hope some of this helps.

Dr. Andy Loveless