

## Math 125 End of Week 7 Newsletter

### UPCOMING SCHEDULE:

Friday: Section 7.5/7.7 (Summary of Techniques and Approximation Techniques (Simpson/Trapezoid Rules)  
Monday: Section 7.8 (Improper Integrals – dealing with asymptotes)  
Tuesday: HW Q & A and Exam Review  
Wednesday: Exam 2 Review (bring questions!)  
Thursday: **Midterm 2**  
Next Friday: Section 8.1 (Arc Length)

WS 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 (**Expect several pages on integration!!!**)  
7.7: Approximating Integrals (Left, right, midpoint, trapezoid, Simpsons rules)  
7.8: Improper Integrals

**HOMEWORK:** Closing **NOW** - Fri (2/22): HW 6A, 6B (7.4, 7.5), Closing **Tue**: HW 6C, 7A (7.7, 7.8)

### COMMENTS AND HINTS:

On HW\_6C: The first several problems are approximation problems. Then it is more practice with integration.

On HW\_7A: 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:** I already posted most of my integration technique review sheets last week, and here are new things:

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

<https://sites.math.washington.edu/~aloveles/Math125Winter2019/EndOfChapter7.pdf>

2. **Exam 2 Rules and Quick Overview (tells you exactly what will be on the exam)**

<https://sites.math.washington.edu/~aloveles/Math125Winter2019/Exam2Rules%20-%20w19.pdf>

3. **Exam 2 Review notes:**

<https://sites.math.washington.edu/~aloveles/Math125Winter2019/Exam2ReviewLecture%20-%20w19.pdf>

and **solutions** to examples from these notes:

<https://sites.math.washington.edu/~aloveles/Math125Winter2019/Exam2ReviewNotes%20-%20w19.pdf>

### OLD EXAMS:

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

My exam archive is here: <https://sites.math.washington.edu/~aloveles/Math125Winter2019/LovelessExamArchive.html>

Here are some targeted practice problems on current topics:

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

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 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/~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