

Math 125 End of Week 7 Newsletter

UPCOMING SCHEDULE:

Friday: Section 7.8 (Improper Integrals – dealing with asymptotes)
Monday: NO CLASS – University Holiday
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 (11/8): HW 7A (7.5/7.7), Closing **TUESDAY**: HW 7B (7.8)

COMMENTS AND HINTS:

On HW_7A: The first several problems are approximation problems. Then it is more practice with integration.

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: 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/Math125Fall2019/EndOfChapter7.pdf>
2. **Exam 2 Rules and Quick Overview (tells you exactly what will be on the exam)**
<https://sites.math.washington.edu/~aloveles/Math125Fall2019/Exam2Rules%20-%20w19.pdf>
3. **Exam 2 Review notes:**
<https://sites.math.washington.edu/~aloveles/Math125Fall2019/Exam2ReviewLecture%20-%20w19.pdf>
and **solutions** to examples from these notes:
<https://sites.math.washington.edu/~aloveles/Math125Fall2019/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/Math125Fall2019/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

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

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