

Math 307 Week 8 Newsletter – Dr. Loveless

UPCOMING SCHEDULE:

Monday: Section 6.1: Intro to Laplace Transform
Wednesday: Section 6.2: Solving 2nd order equations with Laplace Transforms
Friday: Section 6.3: Step Functions
Next Monday: Section 6.4: Mass-Spring Systems with Discontinuous Forcing

HOMEWORK: HW 8 (6.1 and 6.2): Closes Friday

NEW POSTING:

Here, again, is the course website: <http://www.math.washington.edu/~aloveles/Math307Fall2019/index.html>
These are all original review sheets written by me.

1. Full Reference Sheet for Chapter 6 (I suggest you carry this around for reference):

This also contains four full examples of the method we will be using in 6.2, 6.3, and 6.4.

<http://www.math.washington.edu/~aloveles/Math307Fall2019/m307LaplaceFactSheet.pdf>

2. Brief one-page intro and preview to Chapter 6:

<http://www.math.washington.edu/~aloveles/Math307Fall2019/m307Chapter6Intro.pdf>

3. Integration by Parts Skills Review (READ all of this before reading and attempting the 6.1 homework!):

<http://www.math.washington.edu/~aloveles/Math307Fall2019/m307LaplaceIntegrationFacts.pdf>

4. Review and examples from 6.1:

<http://www.math.washington.edu/~aloveles/Math307Fall2019/m307Review6-1.pdf>

5. Partial Fractions Skills Review (READ all of this before reading and attempting the 6.2 homework!):

<http://www.math.washington.edu/~aloveles/Math307Fall2019/m307PartialFractions.pdf>

6. Review and examples from 6.2:

<http://www.math.washington.edu/~aloveles/Math307Fall2019/m307Review6-2.pdf>

OLD EXAMS:

Here, again, is my personal Math 307 exam archive:

<http://www.math.washington.edu/~aloveles/Math307Fall2019/examarchive.html>

And here is some targeted practice on the current material.

Practice for 6.1 (Definition of LaPlace Transform):

Problem 7: http://www.math.washington.edu/~aloveles/Math307Fall2019/final-practice_McMurdie.pdf

Problem 3a: http://www.math.washington.edu/~aloveles/Math307Fall2019/au_14_e_spicer.pdf

Problem 6: http://www.math.washington.edu/~aloveles/Math307Fall2019/wi_13_practice_caday.pdf

Problem 5a: http://www.math.washington.edu/~aloveles/Math307Fall2019/wi_14_practice_spicer.pdf

Practice for 6.2 (Inverse LaPlace Transform):

Problem 8: http://www.math.washington.edu/~aloveles/Math307Fall2019/final_riley.pdf

Problem 5: http://www.math.washington.edu/~aloveles/Math307Fall2019/wi_14_spicer.pdf

Problem 7: <http://www.math.washington.edu/~aloveles/Math307Fall2019/sp15m307finalA.pdf>

I hope this helps!

Dr. Andy Loveless