

University of Portland

School of Engineering

EE 262
Spring 2017
A. Inan

Homework # 5-Laplace Transform & its Applications

(Assigned: Friday, March 3, 2017)

(Due: Wednesday, March 22, 2017, 9:15a.m.)

These problems are assigned from Engineering Signals and Systems in Continuous and Discrete Time Second Edition by Ulaby/Yeagle (2016) (pages 124-130):

- 3.15. Parts (a) & (c). Inverse Laplace transform.**
- 3.16. Part (a). Inverse Laplace transform.**
- 3.17. Part (c). Inverse Laplace transform.**
- 3.18. Parts (b) & (c). Inverse Laplace transform.**
- 3.23⁺. Laplace transform applied to electric circuits.**
- 3.25 or 3.26. Transfer function and impulse response of an LTI system.**
- 3.28. Transfer function and impulse response of an LTI system.**
- 3.31. Transfer function and impulse response of an LTI system.**
- 3.32. Laplace transform applied to electric circuits.**
- 3.49*. Laplace transform applied to electric circuits.**

⁺Optional Mini Project due Friday, March 24, 2017.

*Optional.

Please use the following guidelines for your homework solutions:

- 1) On the first sheet, at the top center, write: Homework #5-Solutions.
- 2) Provide your full name on the upper right corner of the first sheet.
- 3) Also write: EE 262/Spring 2017 on the upper left corner of the first sheet.
- 4) Solve each problem on a separate sheet unless your solution is very short.
- 5) Box all of your answers.
- 6) Staple your solutions in the above order before you turn them in.

Please turn in your homework on time.

Important reminder:

EE 262-Midterm Exam # 2 is on Friday, April 7, 2017, 9:15-10:10a.m.

Closed book exam, only 2 to 3 formula sheets are allowed.