

# *University of Portland*

## *School of Engineering*

EE 262  
Spring 2017  
A. Inan

### **Homework # 4-Laplace Transform**

(Assigned: Friday, February 17, 2017)

(Due: Monday, February 27, 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):

- 3.2. Parts (b) & (d). Laplace transform of periodic waveforms.**
  - 3.4. Laplace transform of special signals.**
  - 3.5. Parts (a), (b) & (c). Properties of Laplace transform.**
  - 3.6. Properties of Laplace transform.**
  - 3.7. Parts (c) & (d). Laplace transform of special signals.**
  - 3.8. Parts (a) & (c). Laplace transform of special signals.**
  - 3.10. Initial and final values of a signal.**
  - 3.12. Initial and final values of a signal.**
  - 3.13. Parts (a) & (b). Inverse Laplace transform using PFE\*.**
  - 3.14. Parts (b) & (c). Inverse Laplace transform using PFE\*.**
- \*Partial Fraction Expansion.

Please use the following guidelines for your homework solutions:

- 1) On the first sheet, at the top center, write: Homework #4-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 # 1 is on Wednesday, March 1, 2017, 9:15-10:10a.m.  
Closed book exam, only 1 formula sheet is allowed.