

*University of Portland*  
*School of Engineering*

EE 262  
Spring 2012  
A. Inan

**Homework # 6**

(Assigned: Monday, March 26, 2012)  
(Due Friday, April 13, 2012, 1:35p.m.)

These problems are assigned from Introduction to Signal and System Analysis by Gopalan (pages 303-313):

- 5.17. Fourier Transform (FT) of basic signals.**
- 5.18. Properties of FT.**
- 5.19. Convolution property of FT.**
- 5.20. Properties of FT.**
- 5.21. Properties of FT.**
- 5.22. Properties of FT.**
- 5.23. Properties of FT.**
- 5.25. An AM radio transmitter-receiver system.**

Please use the following guidelines for your homework solutions:

- 1) On the first sheet, at the top, indicate that this is EE 262/Spring 2012/HW #6 Solutions and provide your name somewhere on that sheet where the grader can easily see it.
- 2) Solve each problem on a separate sheet unless there is a solution which is very short.
- 3) Do not use the back of the sheets unless you have to.
- 4) Staple your solutions in the above order before you turn them in.

Please turn in your homework on time. The solutions for each homework assignment will be provided as a separate handout on the due date.

***Important Reminder Note:***

**EE 262—Midterm Exam # 3 is scheduled for Friday, April 20, 2012!  
(It is a closed-book exam, however, formula sheets will be allowed.)**