

University of Portland
School of Engineering

EE 261
Fall 2012
A. Inan

Homework # 6

(Assigned: Friday, October 26, 2012)
(Due Wednesday, November 7, 2012, 1:35p.m.)

These problems are assigned from Introduction to Electric Circuits by Dorf/Svoboda (8th edition, pp. 294-310 and 353-367, except Exercise 8.3-1, p. 326):

- P 7.2-8. Voltage-current relationship of a capacitor.**
 - P 7.2-12. First-order capacitive circuit.**
 - P 7.2-14. First-order capacitive circuit.**
 - P 7.4-7. Capacitors connected in parallel and in series.**
 - P 7.5-13. First-order inductive circuit.**
 - P 7.7-5. Inductors connected in parallel and in series.**
 - Exercise 8.3-1. A first-order *RC* switching circuit. (p. 326)**
 - P 8.3-12. A first-order *RL* switching circuit.**
 - P 8.6-8. Step response of a first-order *RC* op-amp circuit.**
 - P 8.6-9. Step response of a first-order *RC* circuit.**
 - P 8.6-22*. Step response of a first-order *RC* circuit.**
 - P 8.6-24. Step response of a first-order *RL* circuit.**
 - P 8.6-26*. Step response of a first-order *RL* circuit.**
- *Optional.

Please use the following guidelines for your homework solutions:

- 1) On the first sheet, at the top, indicate that this is EE 261/Fall 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.

An Important Reminder Note:

**EE 261—Midterm Exam # 2 is rescheduled for Monday, October 29, 2012!
(It is a closed book exam, however, two formula sheets are allowed.)**