

University of Portland

School of Engineering

EE 261
Fall 2012
A. Inan

Homework # 4

(Assigned on October 1, 2012; Due date: October 8, 2012, 1:35p.m.)

These problems are assigned from *Introduction to Electric Circuits* by Dorf/Svoboda (John Wiley, 8th edition, 2010, ISBN# 978-0-470-52157-1, pages 192-207):

P 5.2-5. Source transformation.

P 5.3-5. Superposition principle.

P 5.3-6. Superposition principle.

P 5.3-16. Determine i_a and R .

P 5.4-2. Thévenin equivalent circuit.

P 5.4-4*. Thévenin equivalent circuit.

P 5.5-4. Norton equivalent circuit.

P 5.6-3. Maximum power transfer theorem.

P 5.6-6. Thévenin equivalent circuit.

P 5.9-3. Checking prelab calculations.

*Optional.

Please follow these guidelines for providing your homework solutions:

- 1) On the first sheet, at the top, indicate in the middle that this is EE 261/Fall 2012/HW #4 Solutions and provide your full name on the right upper corner of the sheet.
- 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.