

# University of Portland School of Engineering

EE 261/Fall 2011/A. Inan

## Homework # 4

(Assigned on October 5, 2011; Due date: Thursday, October 13, 2011, noon.)

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

**P 5.2-3. Source transformation.**

**P 5.2-5. Source transformation.**

**P 5.3-4. 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.**

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 2011/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.

