

University of Portland School of Engineering

EE 261
Fall 2016
A. Inan

Homework # 3

(Assigned on September 19, 2016; Due date: September 26, 2016, 1:35p.m.)

These problems are assigned from *Introduction to Electric Circuits* by Svoboda/Dorf (John Wiley, 9th edition, 2014, ISBN# 978-1-118-47750-2, pages 204-218):

P 5.2-4. Source transformation.

P 5.2-6. Source transformation.

P 5.3-4. Superposition principle.

P 5.3-6. Superposition principle.

P 5.3-14. 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 5.6-5. Thévenin equivalent circuit.

P 5.9-3. Checking prelab calculations.

P 5.9-4. Is your lab partner correct?

*Optional.

Please use the following guidelines for your homework solutions:

- 1) On the first sheet, at the top center, write: Homework #3-Solutions.
- 2) Provide your full name on the upper right corner of the first sheet.
- 3) Also write: EE 261/Fall 2016 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 261-Midterm Exam # 1 is on Friday, October 7, 2016, 1:35-2:30p.m.
Closed book exam, only 1 formula sheet is allowed.