University of Portland School of Engineering

EE 261 Fall 2016 A. Inan

Homework #8

(Assigned: Friday, December 2, 2016) (Due: Friday, December 9, 2016)

These problems are assigned from <u>Introduction to Electric Circuits</u> (Ninth Edition, 2014) by Svoboda/Dorf (pages 551-567):

P 11.3-1*. Instantaneous power.

P 11.3-2. Time-average power.

P 11.3-4. Time-average power (optional, extra credit).

P 11.3-7. Time-average power.

P 11.5-3. Complex power.

P 11.5-5. Complex power (optional, extra credit).

P 11.5-10. Impedance and complex power (optional, extra credit).

*Also provide in your solution the time-domain voltage and current expressions for the inductor.

Please use the following guidelines for your homework solutions:

- 1) On the first sheet, at the top center, write: Homework #8-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 Note!

The final exam for EE 261 is scheduled for Monday, December 12, 2016, 10:30-12:30. It is a closed book exam, however, you are allowed to use three formula sheets.