

Homework 5

(Due date: 2014/4/30)

This assignment covers Ch7 and Ch8 of the textbook. The full credit is 100 points. For each question, detailed derivation processes and accurate numbers are required to get full credit.

- 1) (10 points) Problem 7.17 of the textbook (p271), while the dependent source current is changed from $4v_o$ to $2.5v_o$.
- 2) (20 points) Problem 7.52 of the textbook (p276), while the middle resistor is changed from $12.5\text{ k}\Omega$ to $2.5\text{ k}\Omega$.
- 3) (10 points) Problem 7.84 of the textbook (p280), while the dependent source voltage is changed from $12 \times 10^4 i_\Delta$ to $13 \times 10^4 i_\Delta$.
- 4) (20 points) Problem 8.16 of the textbook (p321), while the voltage source is changed from -15 V to -10 V .
- 5) (10 points) Problem 8.29 of the textbook (p322), while the resistor is changed from $150\text{ }\Omega$ to $100\text{ }\Omega$.
- 6) (10 points) Problem 8.44 of the textbook (p323), while the initial capacitor voltage is changed from 15 V to 10 V .
- 7) (10 points) Problem 8.50 of the textbook (p324), while the voltage source is changed

from 60 V to 30 V.

- 8) (10 points) Problem 8.57 (a) of the textbook (p325).