Homework 1

(Due date: 2014/3/3)

This assignment covers <u>Ch1 and Ch2</u> of the textbook. The full credit is <u>100 points</u>. For each question, <u>detailed derivation processes</u> and <u>accurate numbers</u> are required to get full credit.

1)   (15 points) <u>Problem 1.13</u> of the textbook (p41), while the current is changed from 9 mA to 12 mA.

2)   (15 points) <u>Problem 2.7</u> of the textbook (p71), while the left and middle independent voltage sources are changed from 50 V and 80 V to 100 V and 200 V, respectively.

3)   (20 points) <u>Problem 2.17</u> of the textbook (p73), while the resistor in (c) is changed from 400 Ω to 100 Ω.

4)   (10 points) <u>Problem 2.20</u> of the textbook (p73), while the current i_a is changed from 2 mA to 5 mA.

5)   (15 points) <u>Problem 2.25</u> of the textbook (p74), while the voltage source is changed from 240 V to 300 V and the 45-Ω to 180-Ω resistances are changed to 50 Ω and 170 Ω, respectively.

6)   (15 points) <u>Problem 2.30</u> of the textbook (p75), while the left voltage source is changed from 100 V to 125 V.

7) (10 points) <u>Problem 2.34</u> of the textbook (p76), while the resistance of the trunk is changed from 50 Ω to 150 Ω.