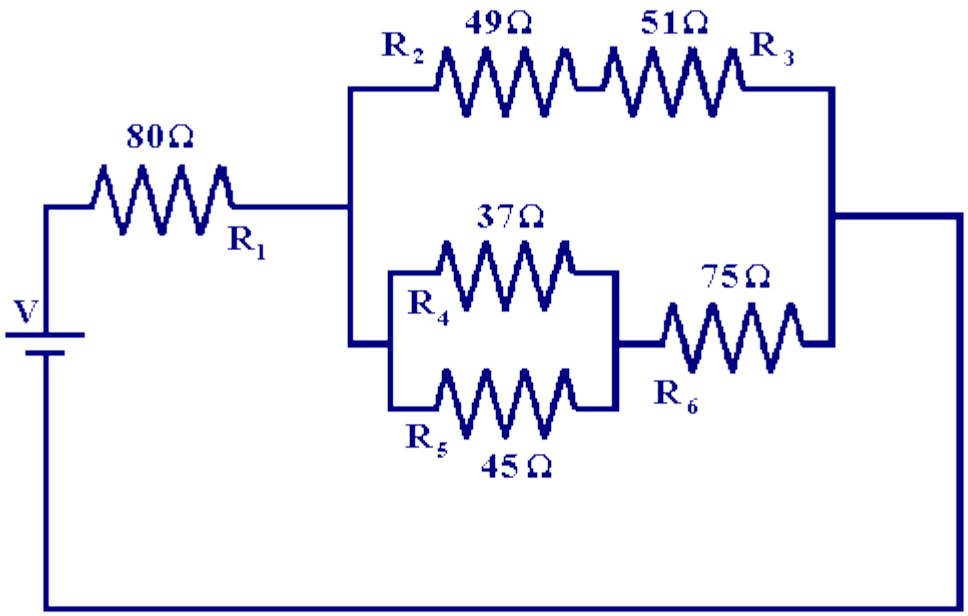
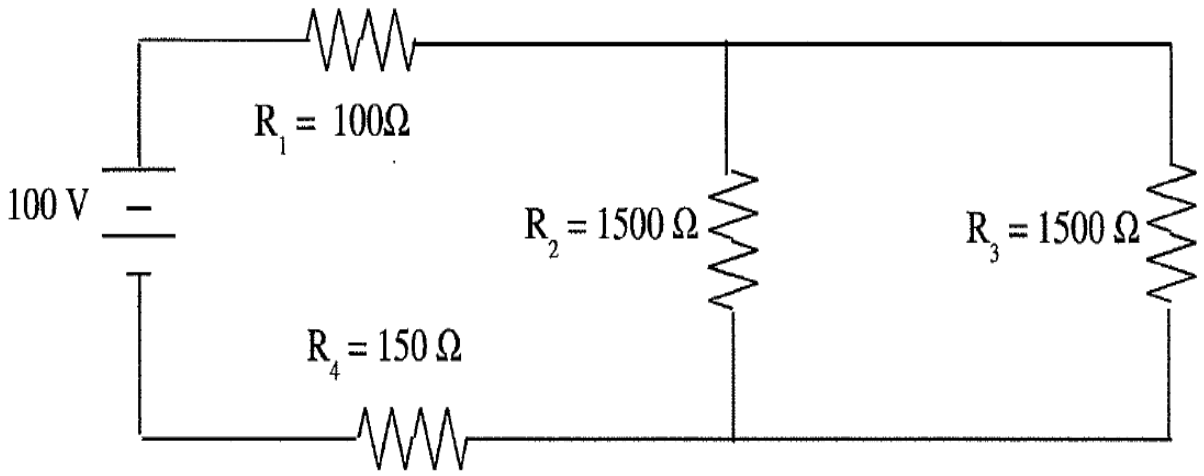
13.9
Combination Circuits Worksheet



Circuit #1



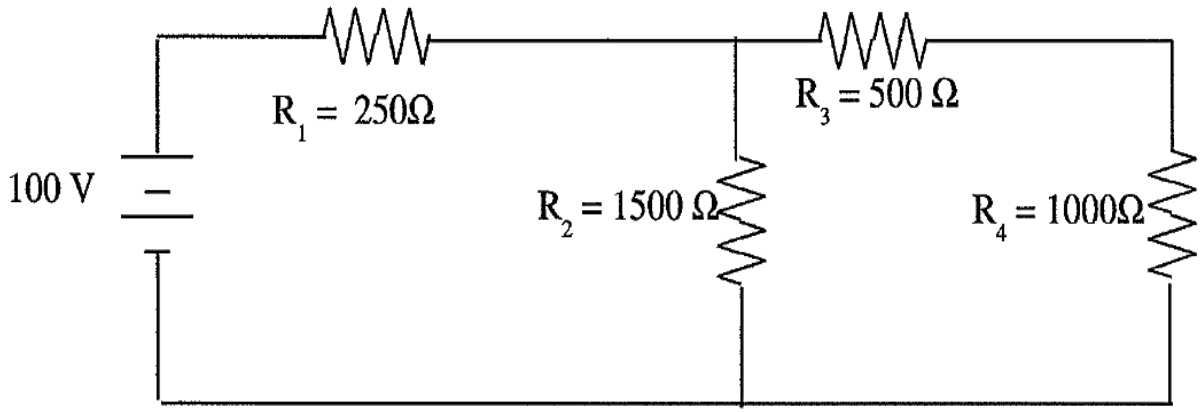
Find the following:

R_T = 1 KΩ

V_T = 100 V V_1 = 10 V V_2 = 75 V V_3 = 75 V V_4 = 15 V

I_T = 100 mA I_1 = 100 mA I_2 = 50 mA I_3 = 50 mA I_4 = 100 mA

Circuit #2



Find the following:

R_T = 1 KΩ

V_T = 100 V V_1 = 25 V V_2 = 75 V V_3 = 25 V V_4 = 50 V

I_T = 100 mA I_1 = 100 mA I_2 = 50 mA I_3 = 50 mA I_4 = 50 mA

Circuit #3

R_T = 4 kΩ

V_T = 400 V

I_T = 100 mA

V_1 = 50 V

I_1 = 100 mA

V_2 = 200 V

I_2 = 33 mA

V_3 = 33.3 V

I_3 = 67 mA

V_4 = 66.7 V

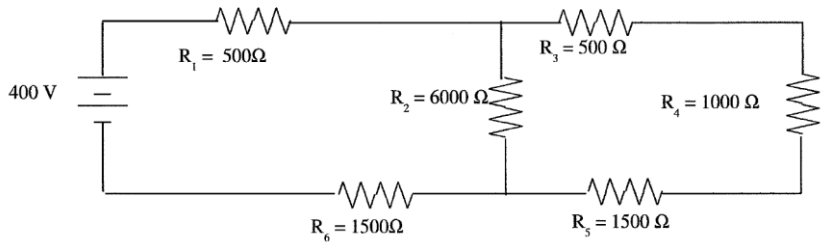
I_4 = 67 mA

V_5 = 100 V

I_5 = 67 mA

V_6 = 150 V

I_6 = 100 mA



Circuit #4

R_T = 5 kΩ V_T = 100 V I_T = 20 mA

V_1 = 50 V I_1 = 20 mA

V_2 = 40 V I_2 = 4 mA

V_3 = 16 V I_3 = 16 mA

V_4 = 24 V I_4 = 16 mA

V_5 = 10 V I_5 = 20 mA