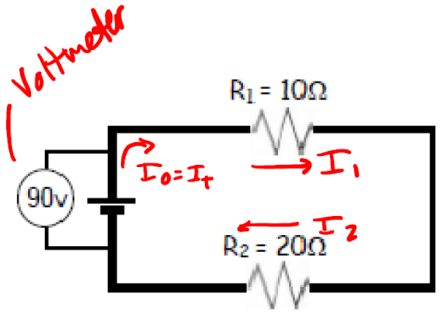
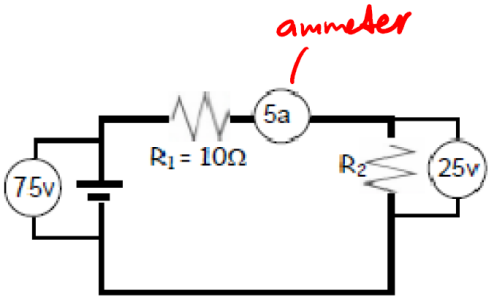
6.3 Series Circuits

1.



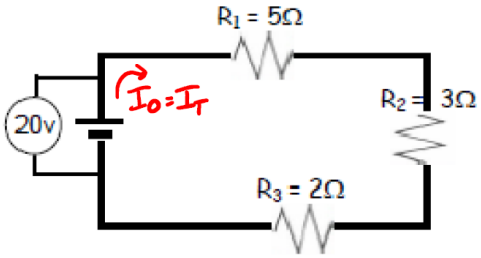
R_T= 30Ω I_T = 3A
I_1 = 3A I_2 = 3A
V_1 = 30V V_2= 60V

2.



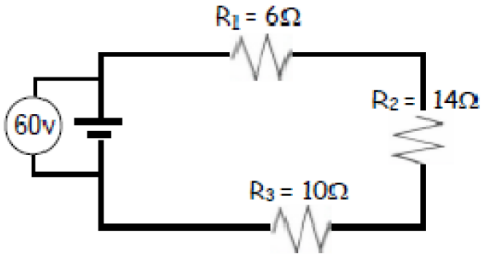
V_1 = 50V I_2 = 5A R_2 = 5Ω

3.



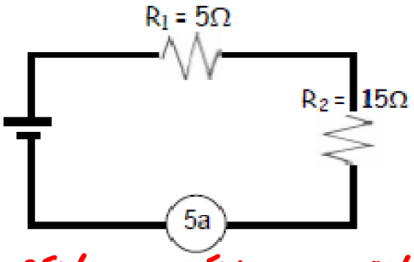
R_T = 10Ω I_T = 2A
V_1 = 10V V_2= 6V V_3 = 4V

4.



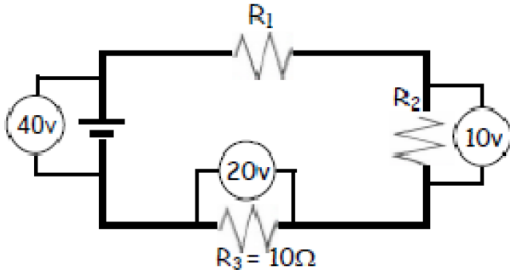
R_T= 30Ω I_T = 2A
I_1 = 2A I_2 = 2A I_3 = 2A
V_1 = 12V V_2= 28V V_3 = 20V

5.



V_1 = 25V V_2= 75V V_T = 100V

6.



I_3 = 2A I_1 = 2A V_1 = 10V
R_1 = 5Ω R_2 = 5Ω