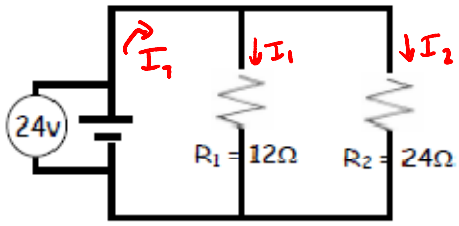
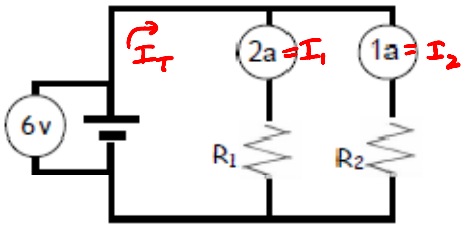
6.4 Parallel Circuits

1.



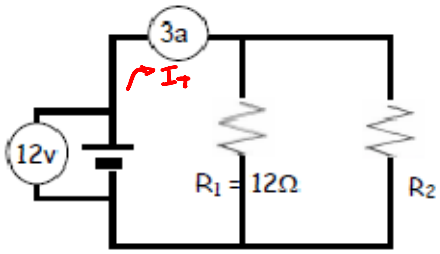
R_p: R_{eq} = 8Ω I_T = 3A V_1 = 24V
V_2 = 24V I_1 = 2A I_2 = 1A

2.



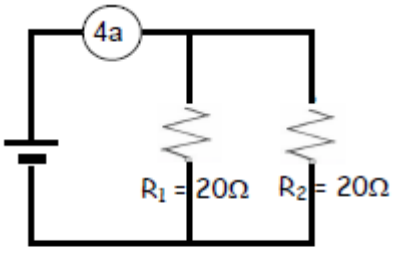
V_1 = 6V V_2 = 6V
R_1 = 3Ω R_2 = 6Ω R_{eq} = 2Ω
I_1 = 2A I_2 = 1A I_T = 3A

3.



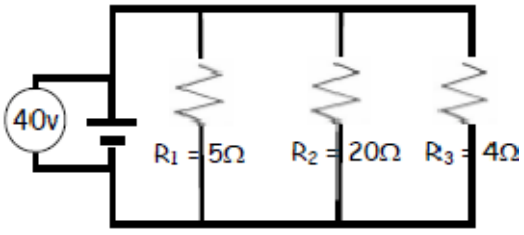
V_1 = 12V V_2 = 12V
I_T = 3A I_1 = 1A I_2 = 2A
R_2 = 6Ω R_{eq} = 2Ω

4.



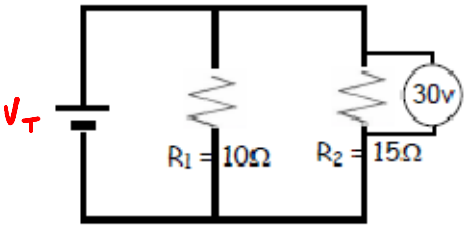
R_{eq} = 10Ω I_T = 4A V_T = 40V
V_1 = 40V I_1 = 2A I_2 = 2A

5.



R_{eq} = 2Ω I_T = 20A
V_1 = 40V V_2 = 40V V_3 = 40V
I_1 = 8Ω I_2 = 2A I_3 = 10A

6.



V_1 = 30V V_T = 30V
I_1 = 3A I_2 = 2A
R_{eq} = 6Ω I_T = 5A