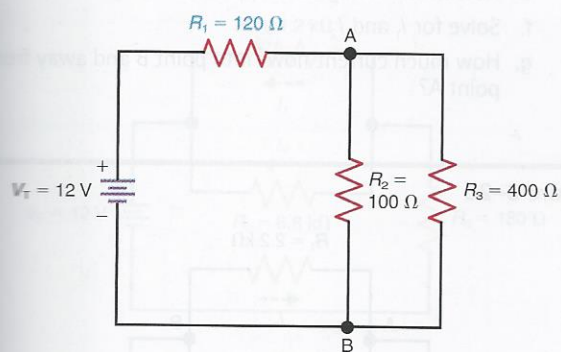


Figure 6-19

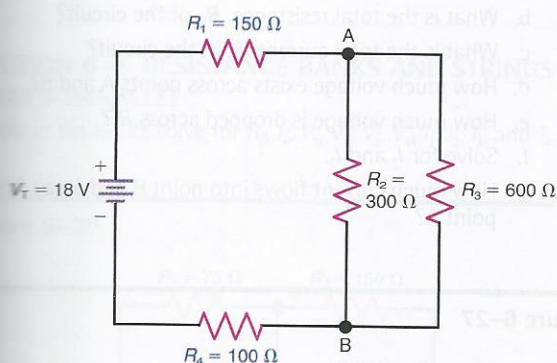


6-6 **MultiSim** In Fig. 6-19, solve for I_1 , V_1 , V_2 , V_3 , I_2 , and I_3 .

6-7 In Fig. 6-19, solve for P_1 , P_2 , P_3 , and P_T .

6-8 In Fig. 6-20, identify which components are in series and which ones are in parallel.

Figure 6-20



6-9 In Fig. 6-20,

- How much is the total resistance of just R_1 and R_4 ?
- What is the equivalent resistance of R_2 and R_3 across points A and B?
- How much is the total resistance, R_T , of the entire circuit?
- How much is the total current, I_T , in the circuit?
- How much current flows into point B and away from point A?

6-10 In Fig. 6-20, solve for the following: I_1 , V_1 , V_2 , V_3 , I_2 , I_3 , I_4 , V_4 , P_1 , P_2 , P_3 , P_4 , and P_T .

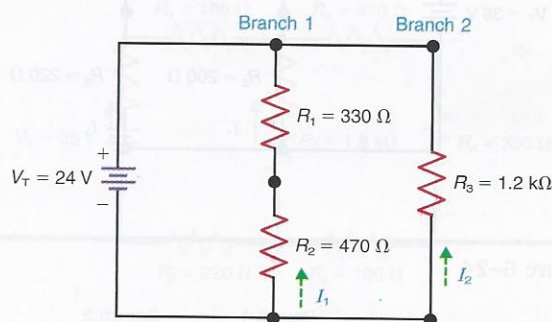
SECTION 6-2 RESISTANCE STRINGS IN PARALLEL

6-11 In Fig. 6-21,

- What is the total resistance of branch 1?
- What is the resistance of branch 2?
- How much are the branch currents I_1 and I_2 ?

- How much is the total current, I_T , in the circuit?
- How much is the total resistance, R_T , of the entire circuit?
- What are the values of V_1 , V_2 , and V_3 ?

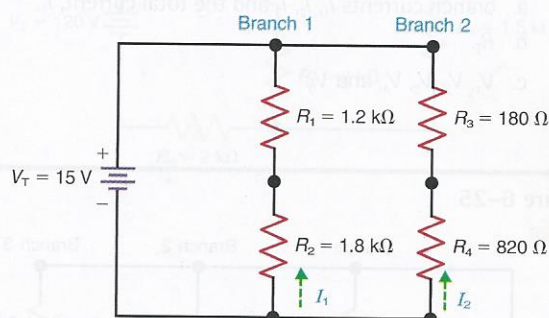
Figure 6-21



6-12 In Fig. 6-22,

- What is the total resistance of branch 1?
- What is the total resistance of branch 2?
- How much are the branch currents I_1 and I_2 ?
- How much is the total current, I_T , in the circuit?
- How much is the total resistance, R_T , of the entire circuit?
- What are the values of V_1 , V_2 , V_3 , and V_4 ?

Figure 6-22



6-13 In Fig. 6-23,

- What is the total resistance of branch 1?
- What is the total resistance of branch 2?
- How much are the branch currents I_1 and I_2 ?
- How much is the total current, I_T , in the circuit?
- How much is the total resistance, R_T , of the entire circuit?
- What are the values of V_1 , V_2 , V_3 , and V_4 ?

6-14 In Fig. 6-24, solve for

- branch currents I_1 , I_2 and the total current, I_T .
- R_T .
- V_1 , V_2 , V_3 , and V_4 .
- P_1 , P_2 , P_3 , P_4 and P_T .