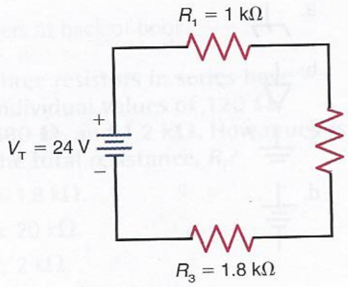
Figure 4–25

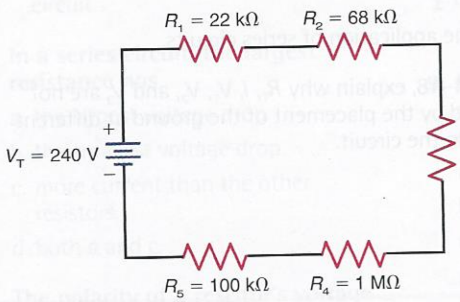


4-6 MultiSim In Fig. 4–25, solve for R_T and I.

4-7 MultiSim What are the new values for R_T and I in Fig. 4–25 if a 2-kΩ resistor, R_4, is added to the series circuit?

4-8 In Fig. 4–26, solve for R_T and I.

Figure 4–26



4-9 Recalculate the values for R_T and I in Fig. 4–26 if R_4 is changed to 100 kΩ.

SECTION 4–3 SERIES *IR* VOLTAGE DROPS

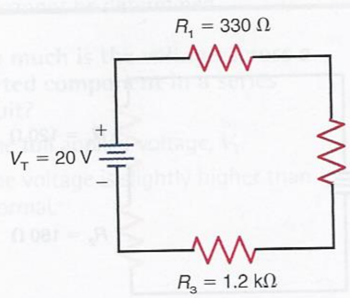
4-10 MultiSim In Fig. 4–24, find the voltage drops across R_1 and R_2.

4-11 MultiSim In Fig. 4–25, find the voltage drops across R_1, R_2, and R_3.

4-12 In Fig. 4–26, find the voltage drops across R_1, R_2, R_3, R_4, and R_5.

4-13 In Fig. 4–27, solve for R_T, I, V_1, V_2, and V_3.

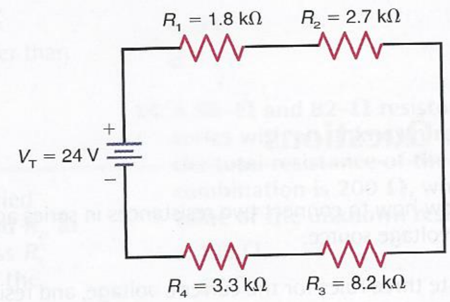
Figure 4–27



4-14 In Fig. 4–27, recalculate the values for R_T, I, V_1, V_2, and V_3 if V_T is increased to 60 V.

4-15 In Fig. 4–28, solve for R_T, I, V_1, V_2, V_3, and V_4.

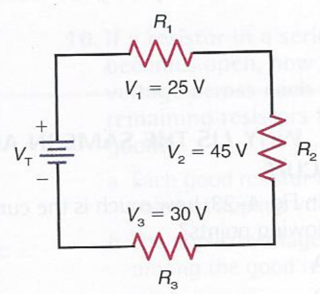
Figure 4–28



SECTION 4–4 KIRCHHOFF'S VOLTAGE LAW (KVL)

4-16 Using Kirchhoff's voltage law, determine the value of the applied voltage, V_T, in Fig. 4–29.

Figure 4–29



4-17 If $V_1 = 2$ V, $V_2 = 6$ V, and $V_3 = 7$ V in Fig. 4–29, how much is V_T?

4-18 Determine the voltage, V_2, in Fig. 4–30.

Figure 4–30