

Fig. P1.30

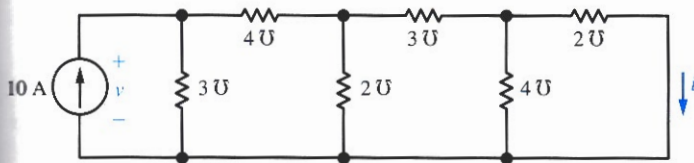


Fig. P1.31

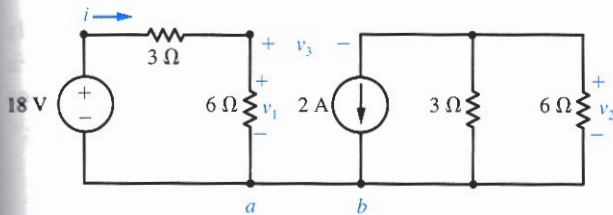


Fig. P1.32

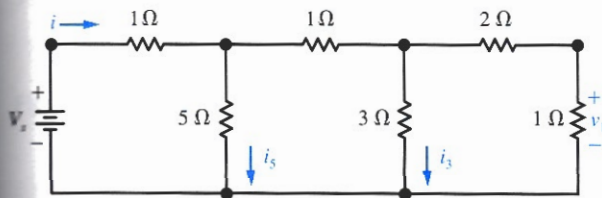


Fig. P1.33

1.34 Consider the nonseries-parallel circuit shown in Fig. P1.34. (a) When $R = \frac{1}{2} \Omega$, then $v_1 = 6 \text{ V}$. Determine the resistance $R_{\text{eq}} = V_s/i$ loading the battery.

1.35 Consider the nonseries-parallel circuit shown in Fig. P1.34. When $R = 4 \Omega$, then $v_1 = 4 \text{ V}$. Determine the resistance $R_{\text{eq}} = V_s/i$ loading the battery.

1.36 Consider the nonseries-parallel circuit shown in Fig. P1.34. Determine R and the resistance $R_{\text{eq}} = V_s/i$ loading the battery when $v_1 = 3 \text{ V}$.

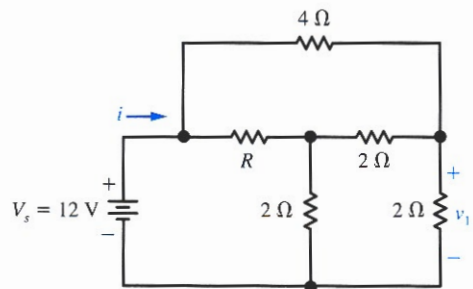


Fig. P1.34

1.44 Consider the circuit shown in Fig. P1.44. Find v when (a) $K = 2$, and (b) $K = 4$.

1.45 Consider the circuit shown in Fig. P1.45. Find i when (a) $K = 2$, and (b) $K = 4$.

1.46 Consider the circuit shown in Fig. P1.46. (a) Find the resistance $R_{eq} = v_1/i_1$. (b) Find the voltage v_2 in terms of the applied voltage v_1 .

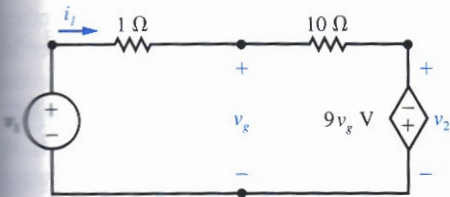


Fig. P1.46

1.47 Consider the circuit shown in Fig. P1.47. (a) Find the resistance $R_{eq} = v_1/i_1$. (b) Use voltage division to find v in terms of v_g . (c) Find the voltage v_2 in terms of the applied voltage v_1 .

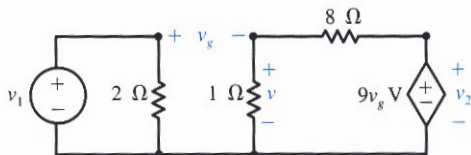


Fig. P1.47

1.48 For the circuit shown in Fig. P1.48, suppose that $R = 10 \Omega$. Determine (a) v_s , and (b) $R_{eq} = v_s/i_s$.

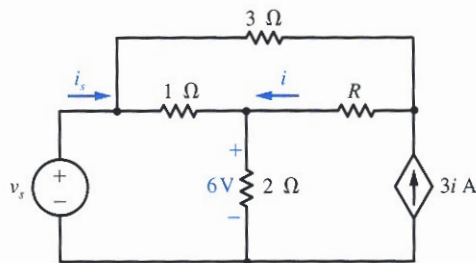


Fig. P1.48

1.49 For the circuit shown in Fig. P1.48, suppose that $R = 8 \Omega$. Determine (a) v_s , and (b) $R_{eq} = v_s/i_s$.

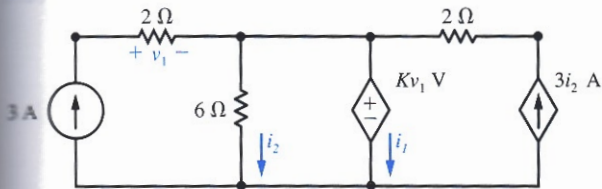


Fig. P1.43

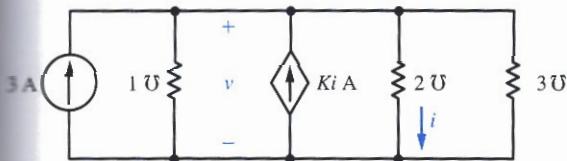


Fig. P1.44

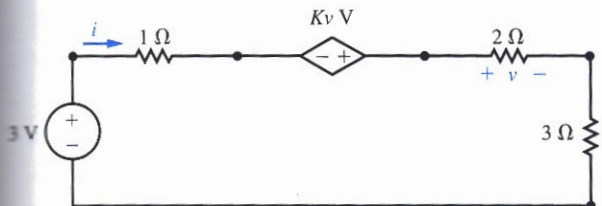


Fig. P1.45