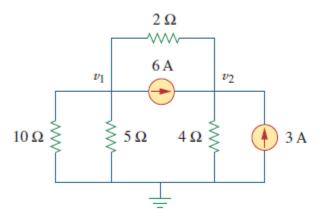
## 3.2 For the circuit in Fig. 3.51, obtain $v_1$ and $v_2$ .



## Figure 3.51

For Prob. 3.2.

## **3.10** Find $I_o$ in the circuit of Fig. 3.59.

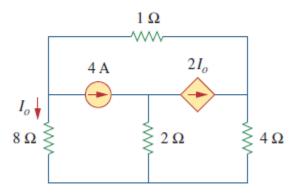
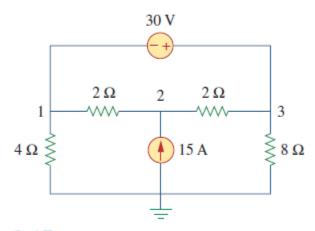


Figure 3.59 For Prob. 3.10.

**3.18** Determine the node voltages in the circuit in Fig. 3.67 using nodal analysis.



**Figure 3.67** For Prob. 3.18.

**3.36** Use mesh analysis to obtain  $i_1$ ,  $i_2$ , and  $i_3$  in the circuit in Fig. 3.84.

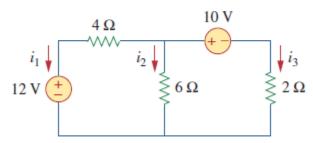


Figure 3.84 For Prob. 3.36.

3.38 Apply mesh analysis to the circuit in Fig. 3.85 and obtain  $I_o$ .

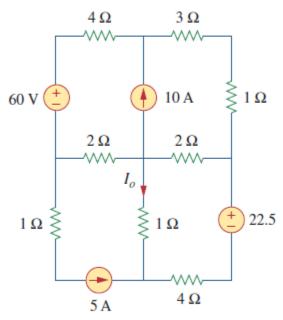
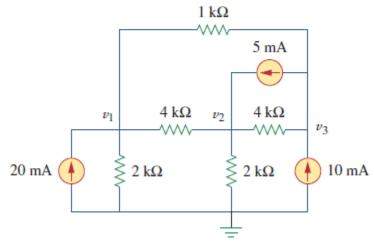


Figure 3.85 For Prob. 3.38.

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**3.69** For the circuit shown in Fig. 3.113, write the nodevoltage equations by inspection.



**Figure 3.113** For Prob. 3.69.

3.70 Write the node-voltage equations by inspection and then determine values of  $V_1$  and  $V_2$  in the circuit of Fig. 3.114.

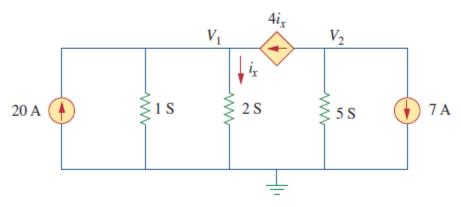
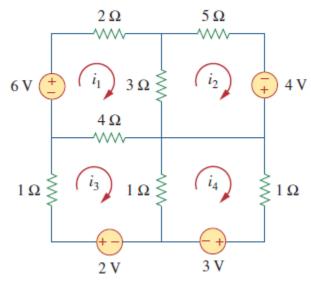


Figure 3.114

For Prob. 3.70.

3.73 Write the mesh-current equations for the circuit in Fig. 3.117.



**Figure 3.117** For Prob. 3.73.