1. For the Circuit given below, Find the values of $v_1, v_2, v_{ab}, v_{bc},$ and v_{ca}.
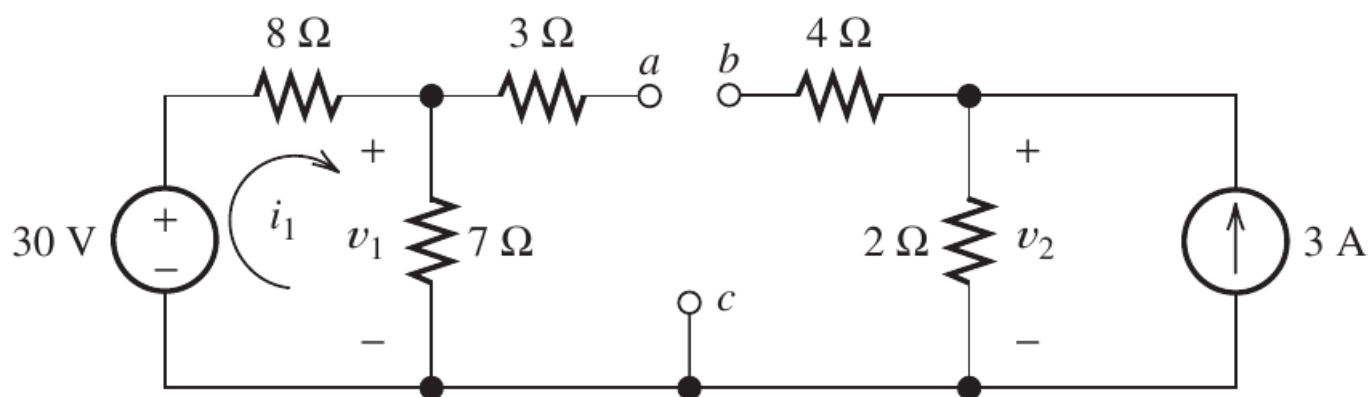

Figure 1

2. Write equations and solve for the node voltages shown in Figure 2 . Then find the value of i_1
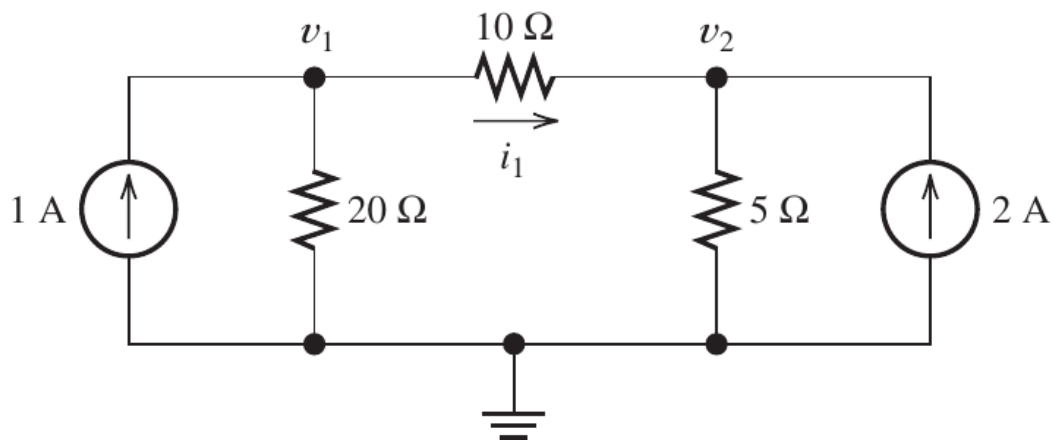

Figure 2

3. In the circuit of Figure 3, calculate V_1 , and determine the Thevenin Voltage with respect to the terminals a & b.
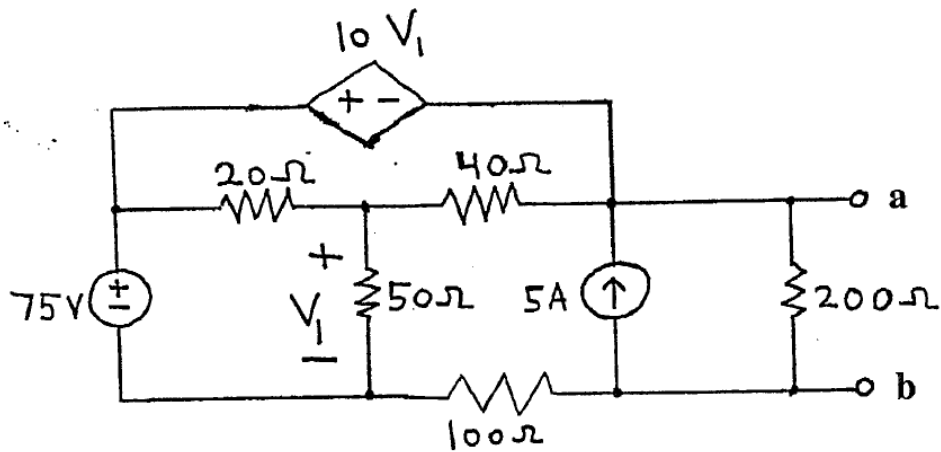

Figure 3

4. Solve for the power delivered to the 8 ohm resistor and solve for the node voltages for the circuit given in Figure 4
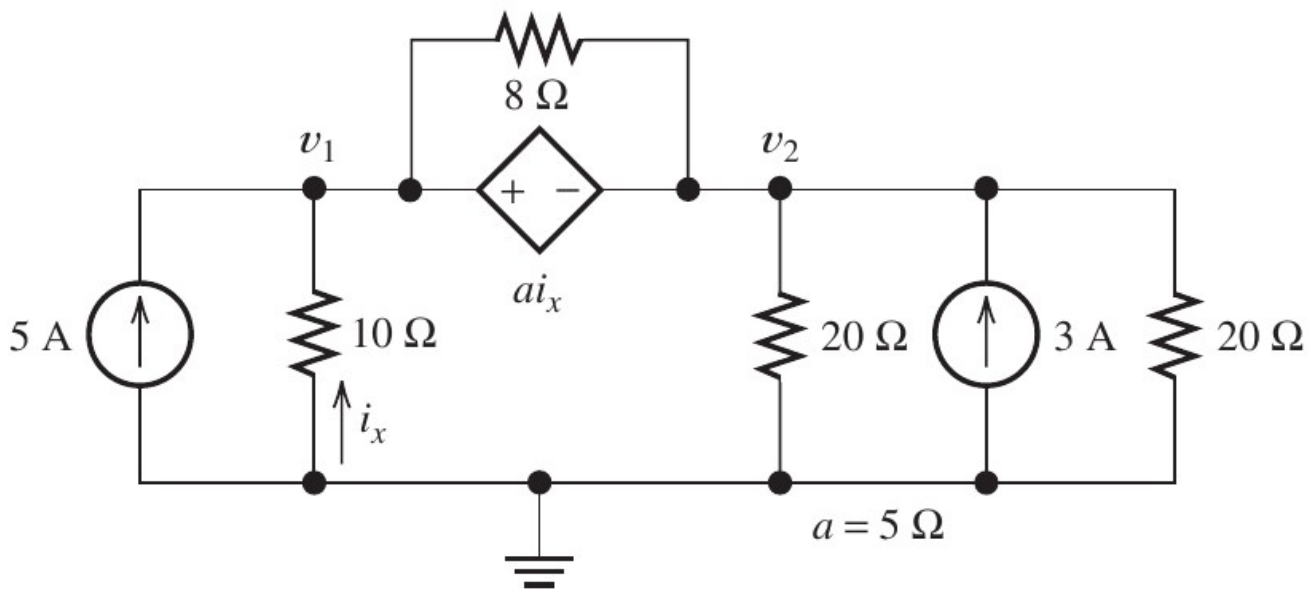

Figure 4

5. Solve for
 i) the mesh currents i1, i2, i3 and i4 (using mesh analysis)
ii) node voltages v1, v2, v3, and v4 (using node analysis)
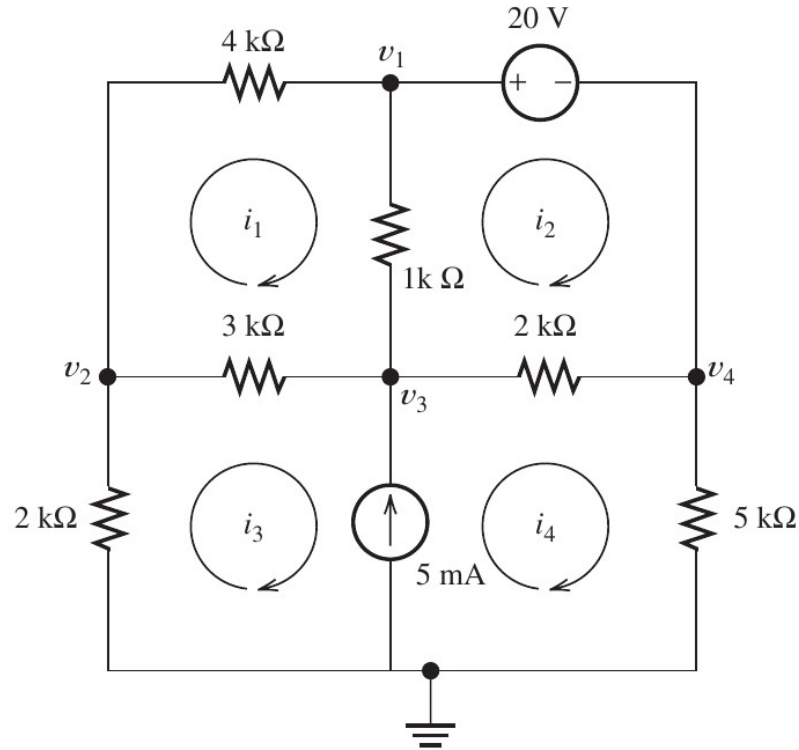for the circuit given in Figure 5 .

Figure 5

6. Solve for the power delivered by the voltage source for the circuit given below using the mesh – currrent method.
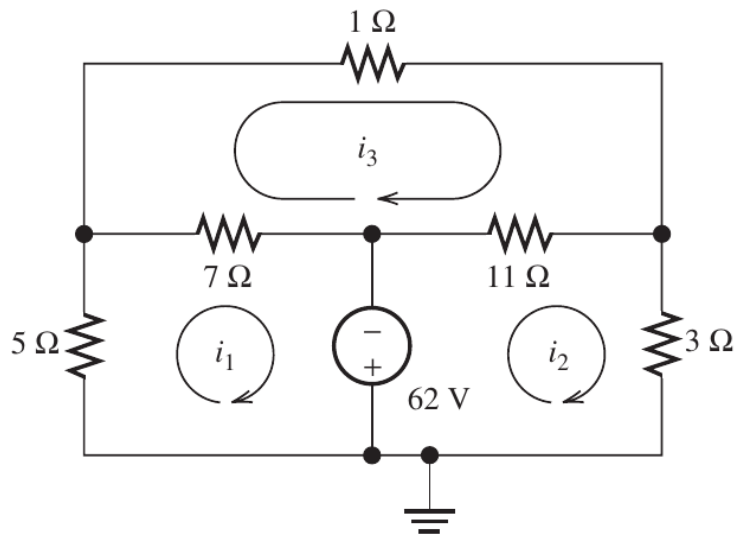

Figure 6