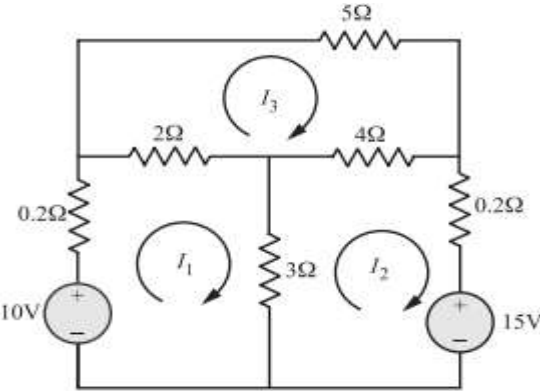
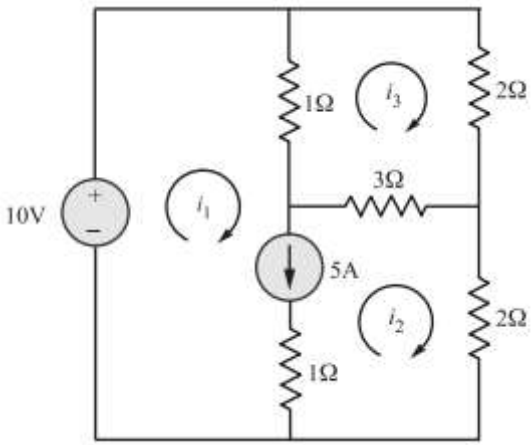


Sl. No.	Problems	Ans
1	<p>For the electrical network shown in Fig, determine the loop currents and all branch currents.</p> 	$I_1 = 0.11\text{A}$ $I_2 = -2.53\text{A}$ $I_3 = -0.9\text{A}$
2	<p>For the network shown in Fig. find the mesh currents.</p> 	$i_1 = 7.5\text{A}$ $i_2 = 2.5\text{A}$ $i_3 = 2.5\text{A}$
3	<p>Use the node-voltage method to find the power developed by the 20 V source in the circuit shown in Fig.</p>	<b>602.5 W</b>

4	<p>Refer the network shown in Fig.. Find the node voltages <math>V_d</math> and <math>V_c</math>.</p>	$v_c = -1.14\text{V}$ $v_d = -18.3\text{V}$
5	<p>Use nodal analysis to find <math>V_o</math> in the circuit shown in Fig.</p>	$V_o = 11.056 - j8.09$
6	<p>Find <math>i_1</math> in the circuit of Fig. using nodal analysis.</p>	$i_1 = 7.59 \cos(4t + 108.4^\circ) \text{ A}$
7	<p>Determine the current <math>i_l</math> in the circuit of Fig. using mesh analysis</p>	$6.12 \angle 144.78^\circ \text{ A}$

8	<p>The current <math>i_o = 4\text{ A}</math>. Find the power dissipated in the <math>70\ \Omega</math> resistor</p>	280 W
9	<p>Refer the circuit shown in Fig.. Find <math>I</math> using mesh analysis.</p>	7.9 /43.49 A
10	<p>Obtain the node voltages <math>v_1</math>, <math>v_2</math> and <math>v_3</math> for the following circuit</p>	$v_1 = 2\text{ V}$ , $v_2 = 12\text{ V}$ , $v_3 = -8\text{ V}$

For the electrical network shown in Fig, determine the loop currents and all branch currents.