

Dept. of Computer Science and engineering
Class Test 2 APEE1131 (Electrical Circuits and Electronics)-2017
Full Marks: 20 Time: 1 (One) Hour
NB: Answer all Questions. (4x5=20 Marks)

1. Find the current through each resistor and voltage drop across each resistor of the circuit using branch current analysis method is shown in fig. 1.
2. Determine the voltages at the nodes in the given circuit by using nodal analysis is shown in fig. 2.
3. Find i_o in the circuit using superposition theorem is shown in fig. 3.
4. Find the Norton equivalent circuit for the circuit at terminals a-b is shown in fig. 4.

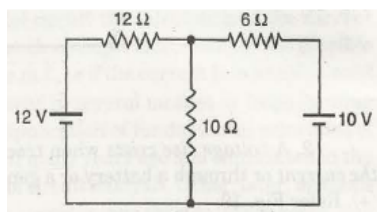


Fig. 1

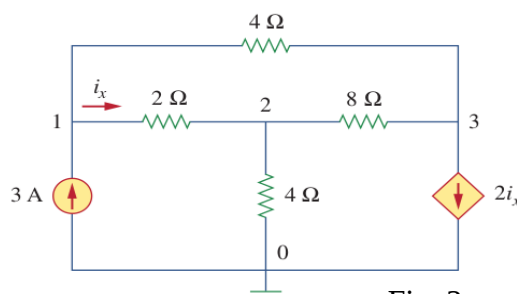


Fig. 2

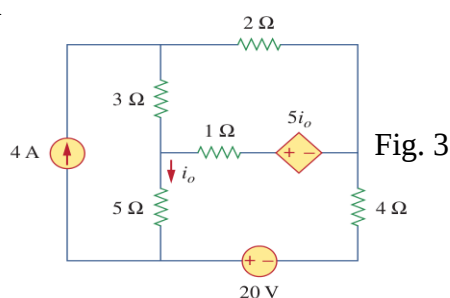


Fig. 3

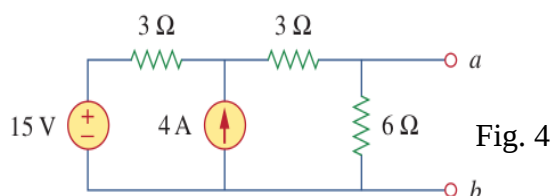


Fig. 4

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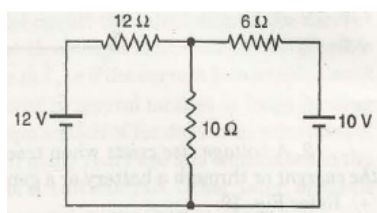


Fig. 1

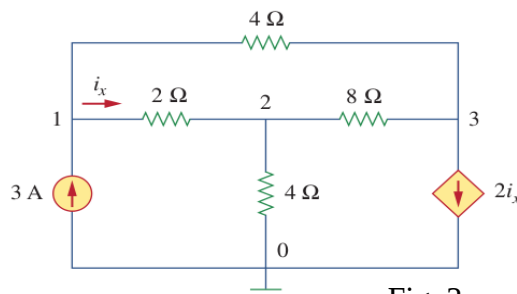


Fig. 2

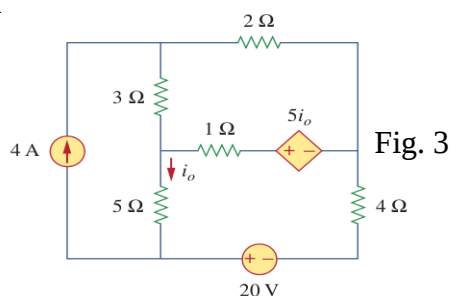


Fig. 3

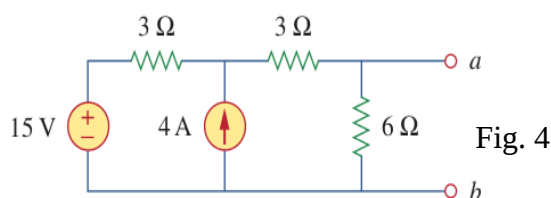


Fig. 4