

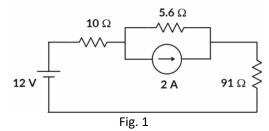
Department of ECE, Bennett University

EECE105L: Fundamentals of Electrical and Electronics Engineering

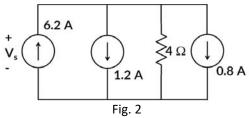
Tutorial Sheet-4

Topics Covered: Source Transformation/Source conversion

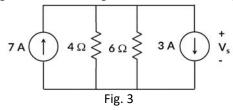
1. For the circuit shown in Fig. 1, by converting the current source into voltage source, find the current through 91 Ω resistor.



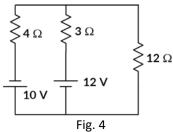
2. For the network shown in fig. 2, by replacing all the current sources with a single current source, find the source voltage V_s .



3. For the network shown in fig. 3, find the voltage V_s and current through 4 Ω resistor.



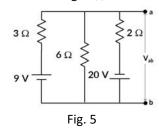
4. For the circuit shown in fig. 4, determine the current through 12 Ω resistor by changing the voltage sources into current sources.



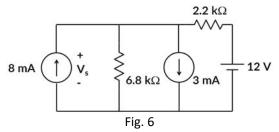
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5. In the circuit shown in fig. 5, find the voltage V_{ab} and current through 6 Ω resistance.



6. For the circuit shown in fig. 6, find the voltage V_s and current through 12 V source.



Source Transformation/ Source Conversion

- 1) 218 mA
- 2) 16.8 V
- 3) 9.6 V, 2.4 A
- 4) 0.19 A
- 5) -7 V, -1.17 A
- 6) 17.35 V, 2.43 A