

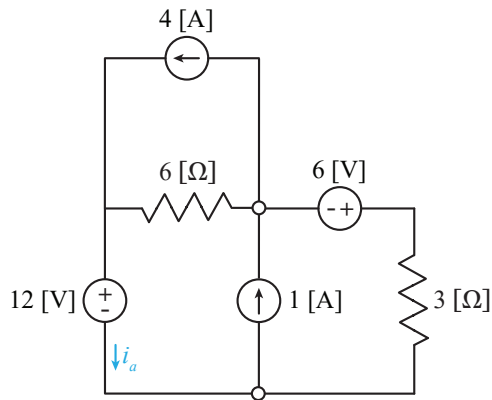
Source Transformation Worksheet

MEMS 0031 - Electrical Circuits

June 10th, 2020

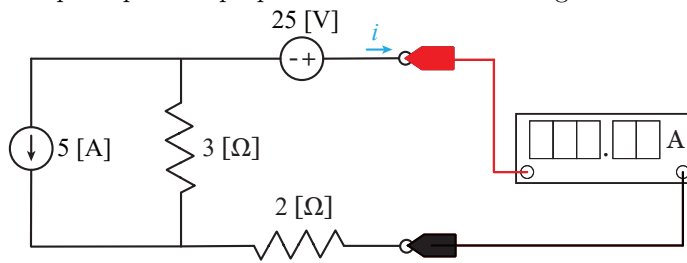
Problem #1

Use source transformation to find the current i_a in the circuit shown in the figure below.



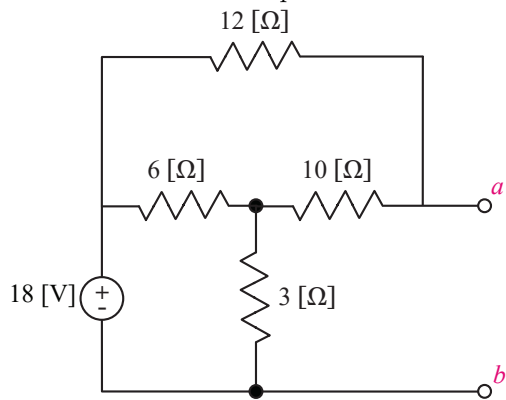
Problem #2

Use the principal of superposition to find the reading of the ammeter in the circuit shown in the figure below.



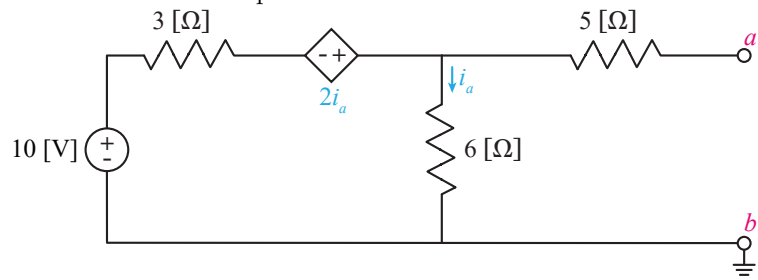
Problem #3

Determine the Thevenin equivalent circuit for the circuit shown in the figure below.



Problem #4

Determine the Norton equivalent circuit for the circuit shown in the figure below.



Problem #5

Determine the maximum power that can be absorbed by a resistor, R , connected to the terminals a-b of the circuit shown in the figure below. Specify the value for R .

