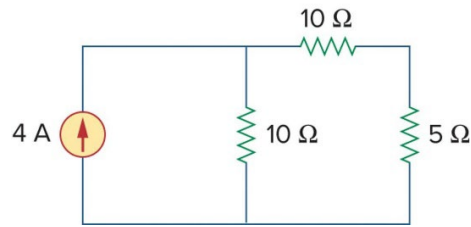


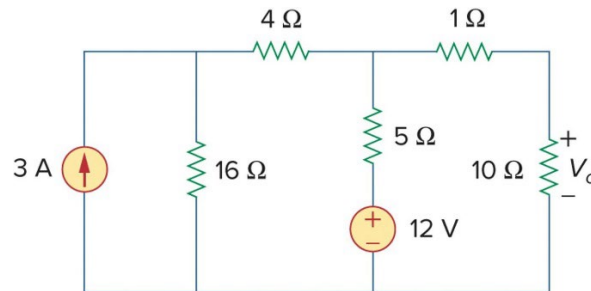
Electric Circuits

Homework Set 9

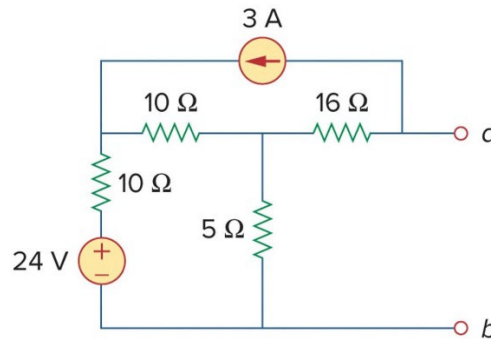
- Determine the TEC for the following circuit as seen by the $5\ \Omega$ resistor (i.e. let the $5\ \Omega$ resistor be the load resistor).



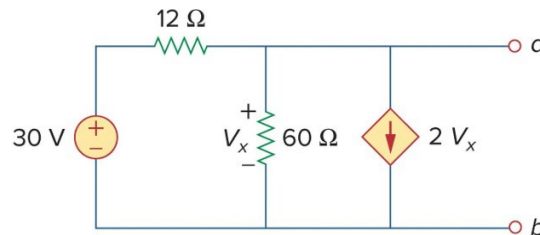
- Apply Thevenin's theorem to find V_o (that is, assume the $10\ \Omega$ resistor will be your load resistor).



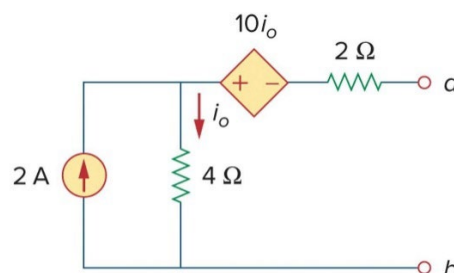
- Find the TEC at the terminals a - b in the following circuit.



- Obtain the TEC and NEC for the following circuit over the terminals a - b .

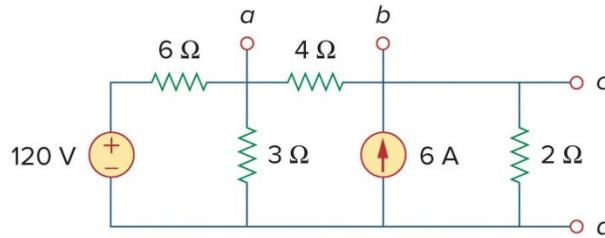


- Determine the NEC at terminals a - b for the circuit below.

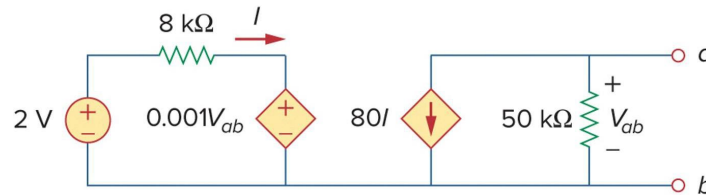


6. Find the NEC for the following circuit as viewed from the terminals:

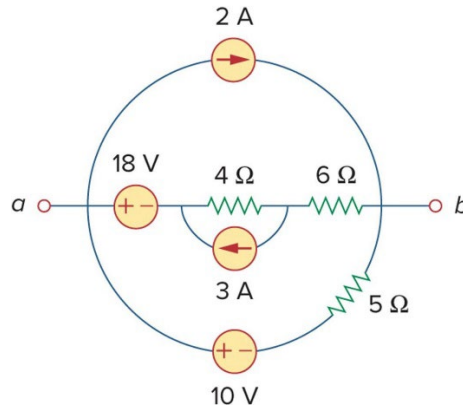
- a. $a-b$
- b. $c-d$



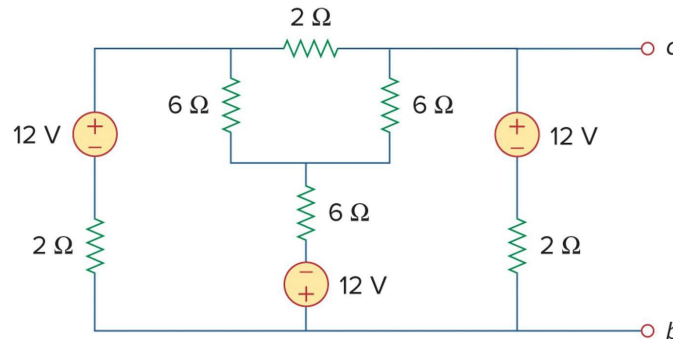
7. Find the NEC for the circuit below as seen from the terminals $a-b$.



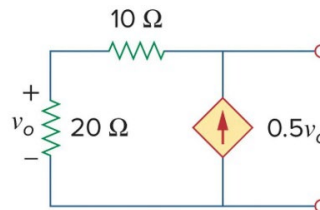
8. Find the TEC and NEC at terminals $a-b$ for the following circuit.



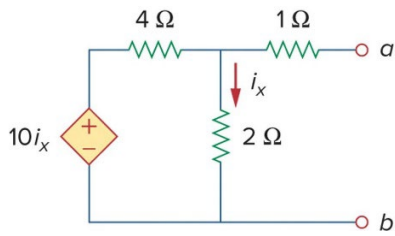
9. Obtain the TEC and NEC at terminals $a-b$ for the circuit below.



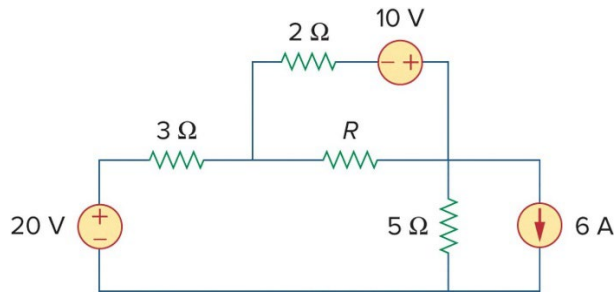
10. Find the TEC for the following circuit.



11. Obtain the TEC for the following circuit.



12. Find the maximum power that can be delivered to the resistor R in the circuit below.



13. The variable resistor R in the circuit below is adjusted until it absorbs the maximum power from the circuit.

- Find the value of R for max power
- Find the max power absorbed by R

