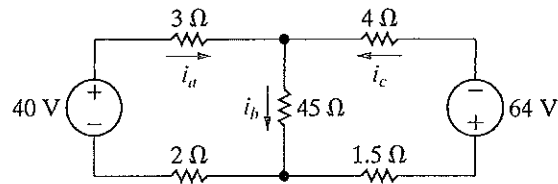


HOMEWORK 2

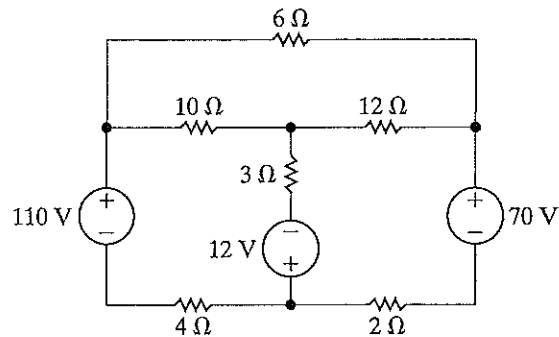
- 4.31** a) Use the mesh-current method to find the branch currents i_a , i_b , and i_c in the circuit in Fig. P4.31.
PSPICE
b) Repeat (a) if the polarity of the 64 V source is reversed.

Figure P4.31



- 4.32** a) Use the mesh-current method to find the total power developed in the circuit in Fig. P4.32.
PSPICE
b) Check your answer by showing that the total power developed equals the total power dissipated.

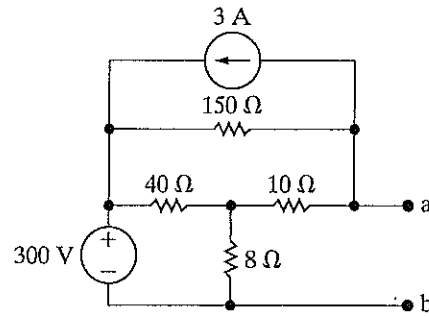
Figure P4.32



- 4.65** Find the Thévenin equivalent with respect to the terminals a,b for the circuit in Fig. P4.65.

PSPICE

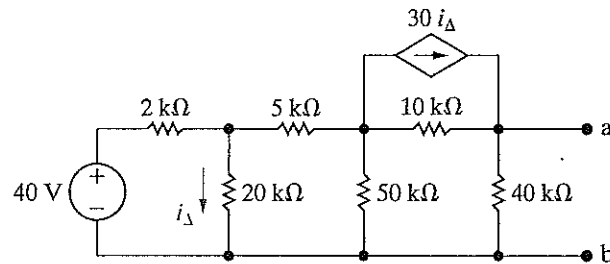
Figure P4.65



- 4.72** Find the Thévenin equivalent with respect to the terminals a,b for the circuit seen in Fig. P4.72.

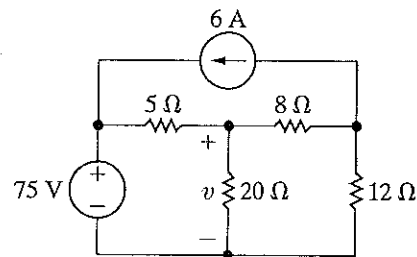
PSPICE

Figure P4.72



- 4.91** a) Use the principle of superposition to find the voltage v in the circuit of Fig. P4.91.
b) Find the power dissipated in the $20\ \Omega$ resistor.

Figure P4.91



- 4.92** Use the principle of superposition to find the voltage v in the circuit of Fig. P4.92.

Figure P4.92

