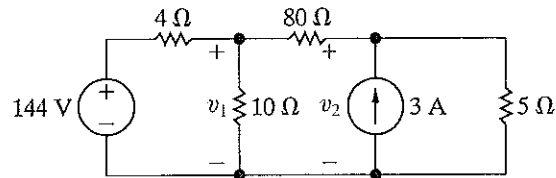


# HOMEWORK 1

- 4.12** Use the node-voltage method to find  $v_1$  and  $v_2$  in the circuit in Fig. P4.12.

PSPICE

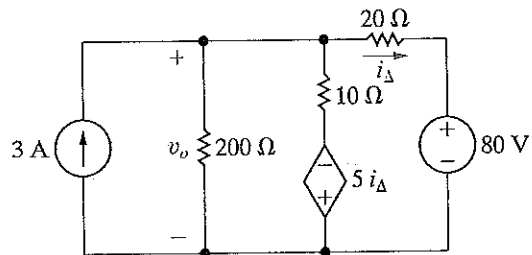
Figure P4.12



- 4.17** a) Use the node-voltage method to find  $v_o$  in the circuit in Fig. P4.17.  
 b) Find the power absorbed by the dependent source.  
 c) Find the total power developed by the independent sources.

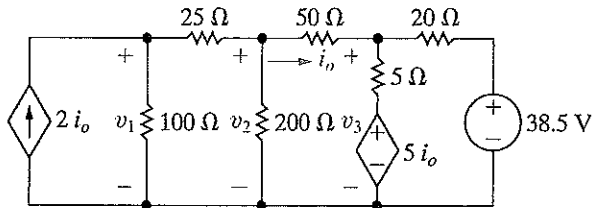
PSPICE

Figure P4.17



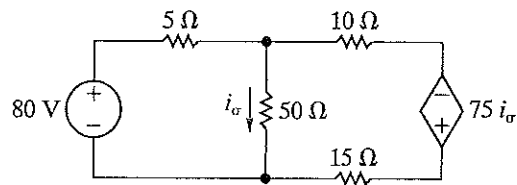
- 4.18** a) Find the node voltages  $v_1$ ,  $v_2$ , and  $v_3$  in the circuit in Fig. P4.18.  
PSPICE  
 b) Find the total power dissipated in the circuit.

Figure P4.18



- 4.19** Use the node-voltage method to calculate the power delivered by the dependent voltage source in the circuit in Fig. P4.19.  
PSPICE

Figure P4.19



- 4.20** a) Use the node-voltage method to find the total power developed in the circuit in Fig. P4.20.  
PSPICE  
 b) Check your answer by finding the total power absorbed in the circuit.

Figure P4.20

