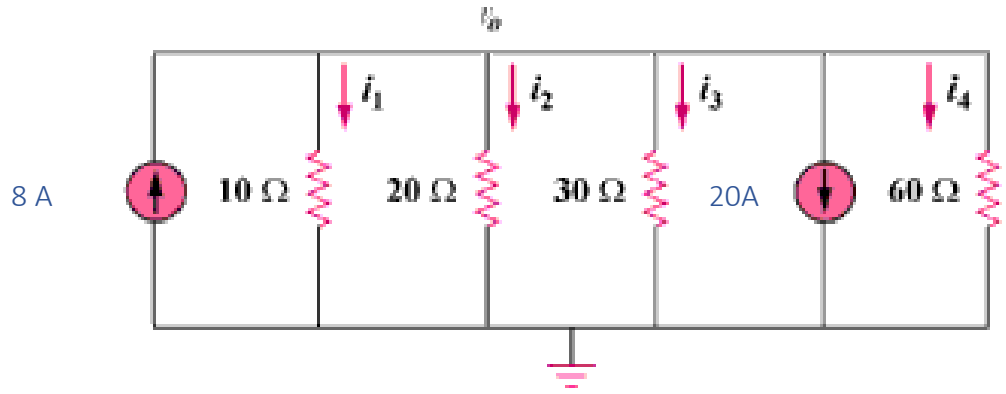
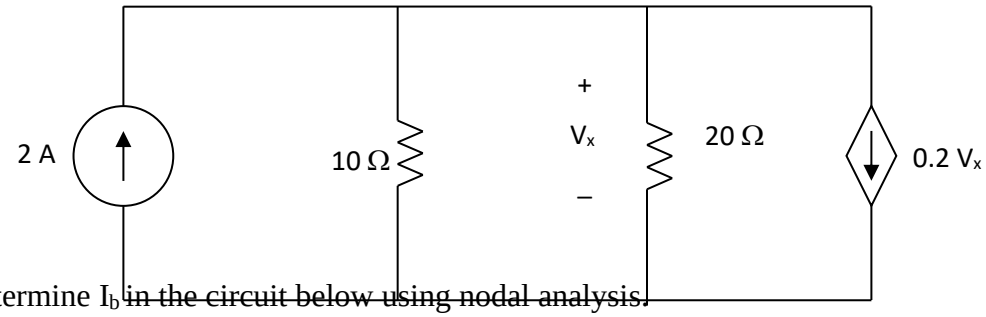
Assignment problems: Chapter 3

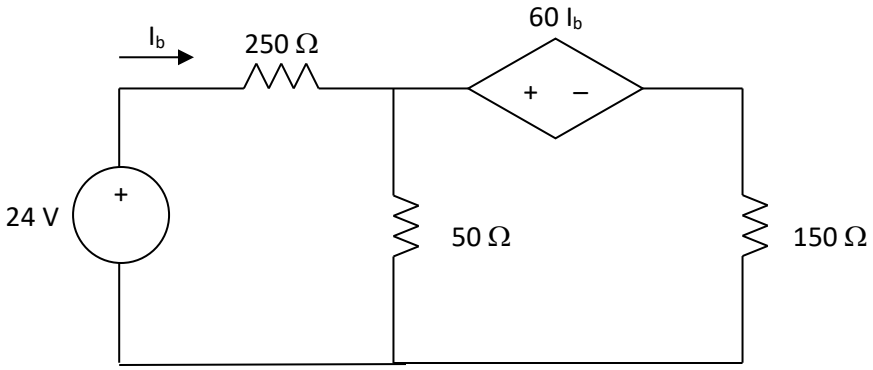
3.3 Find the currents i_1 through i_4 and the voltage v_o in the following circuit.



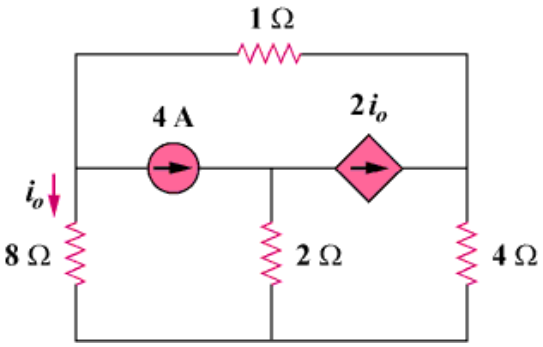
3.7: Apply nodal analysis to solve for V_x in the following circuit.



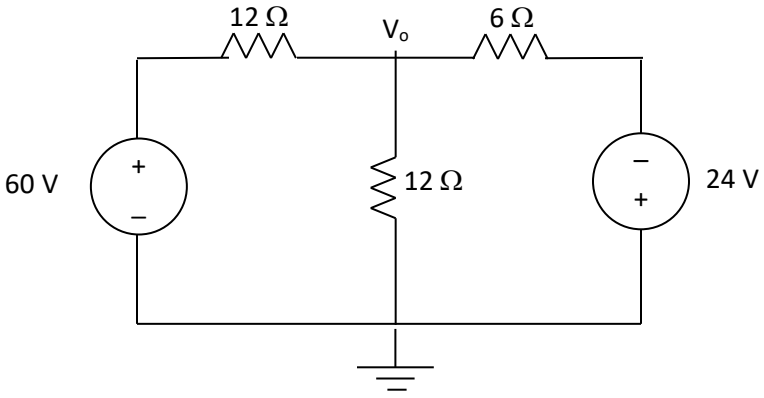
3.9: Determine I_b in the circuit below using nodal analysis.



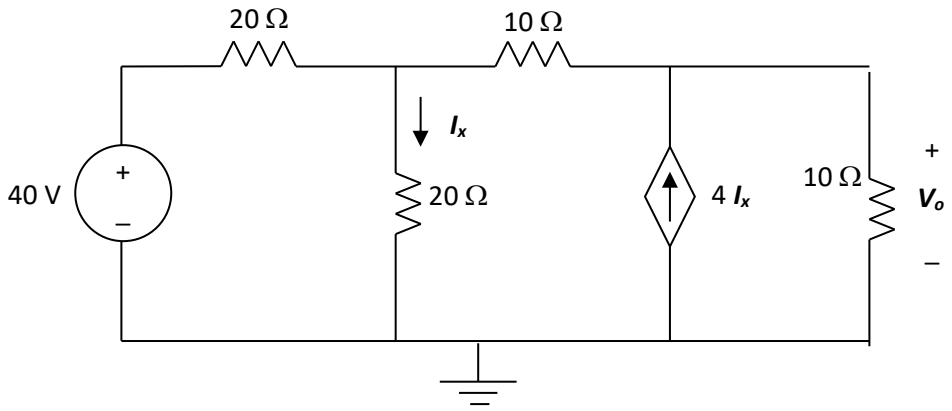
3.10: Find i_0 in the following circuit.



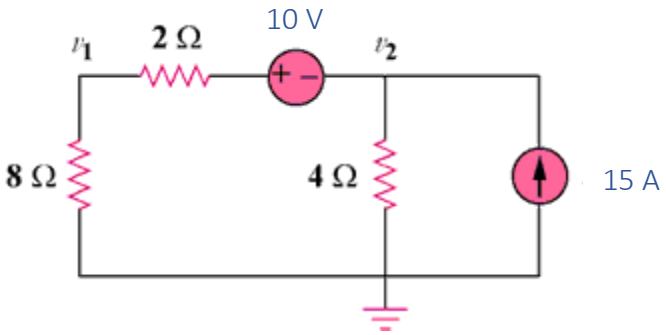
3.11: Find V_o and the power dissipated in all the resistors in the following circuit.



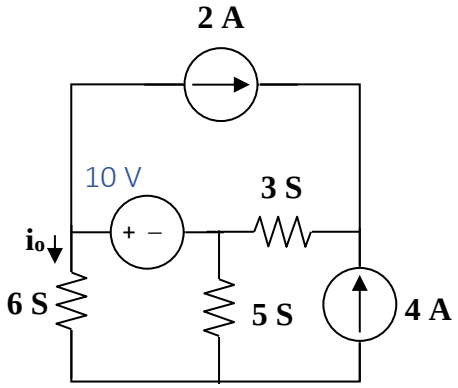
3.12: Using nodal analysis, determine V_o in the following circuit.



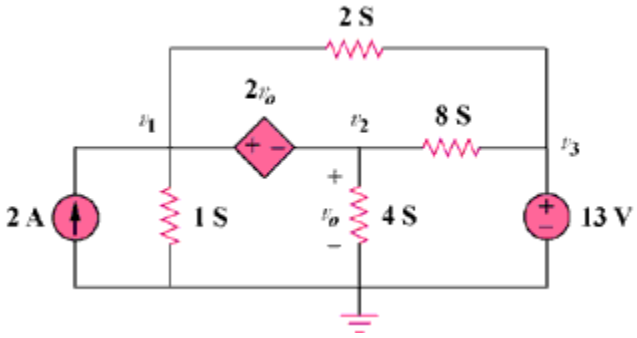
3.13: Calculate v_1 and v_2 in the following circuit, using nodal analysis.



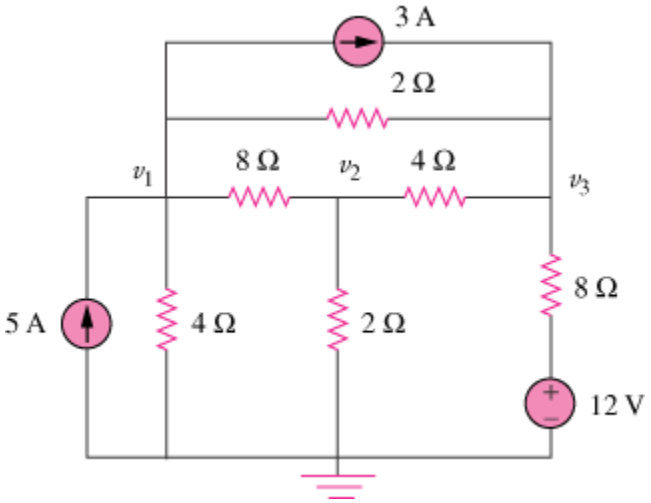
3.15: Apply nodal analysis to find i_o and the power dissipated in each resistor in the following circuit.



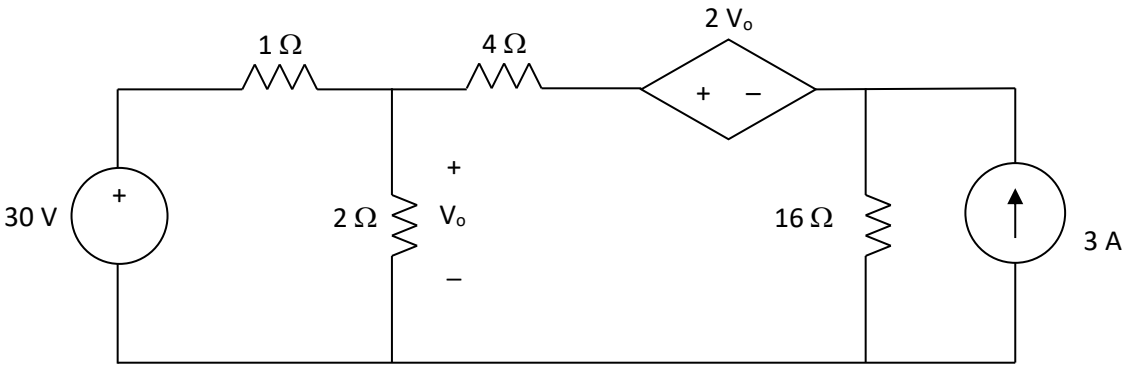
3.16: Determine voltages v_1 through v_3 in the following circuit, using nodal analysis.



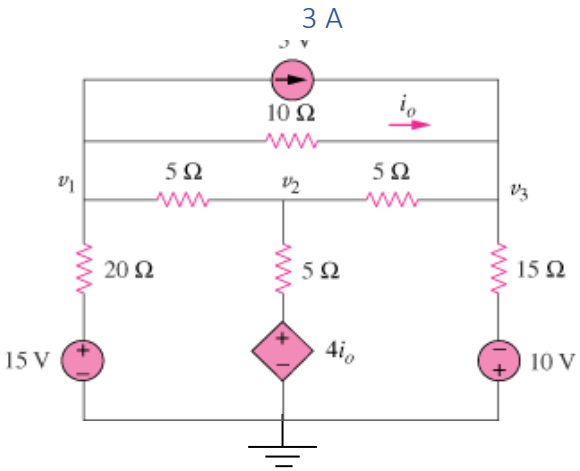
3.19: Use nodal analysis to find v_1, v_2, and v_3 in the following circuit.



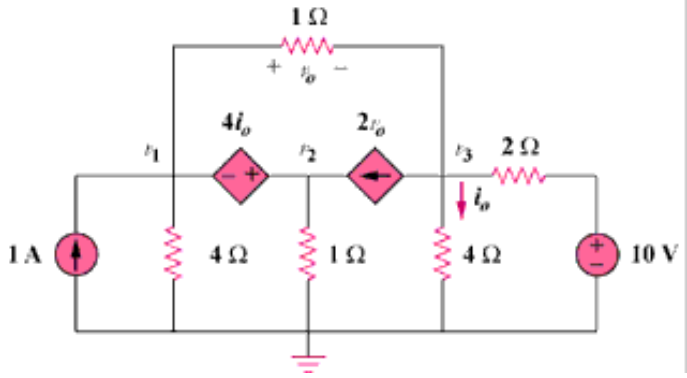
3.23: Use nodal analysis to find V_o.



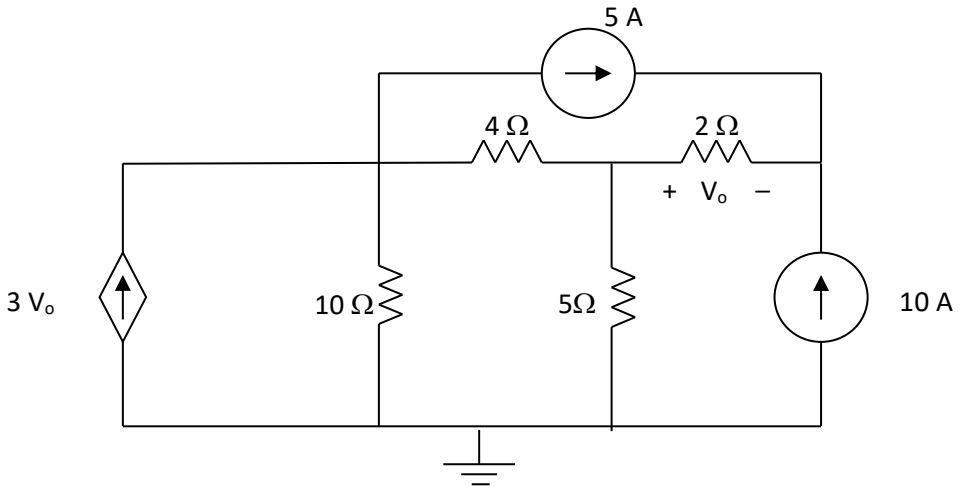
3.26: Calculate the node voltages v_1, v_2, and v_3.



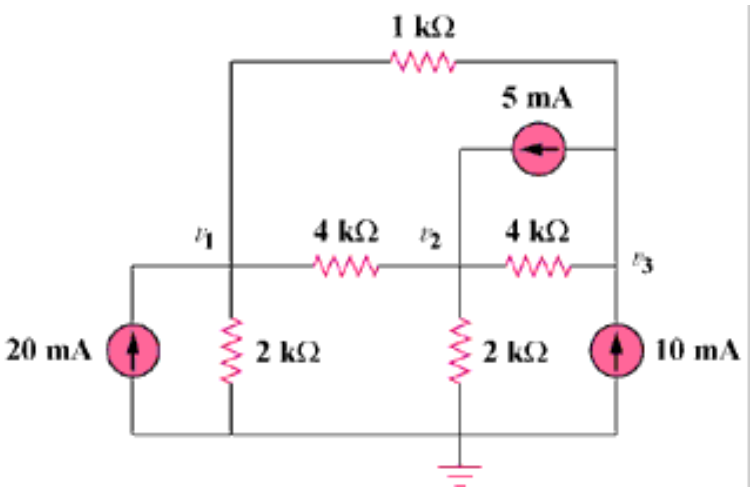
3.31: Find the node voltages.



3.67: Obtain the node-voltage equations and then solve for V_o.



3.69: Write the node voltage equations by inspection.



3.77: Solve for V_1 and V_2.