

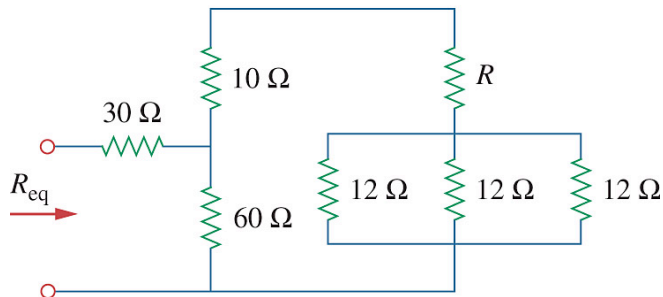
Boise State University
Electrical Engineering Department

EE 210: Circuits I
Spring 2018

Due Date: Wed. 2/07/2018

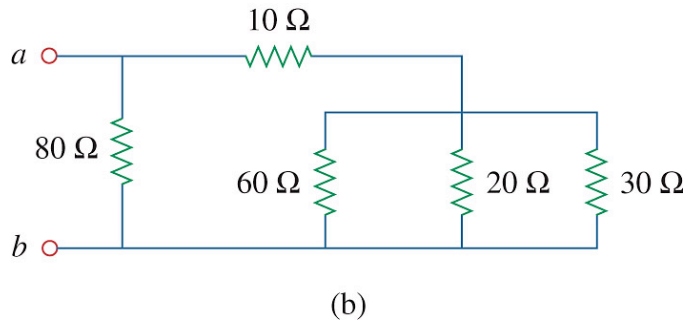
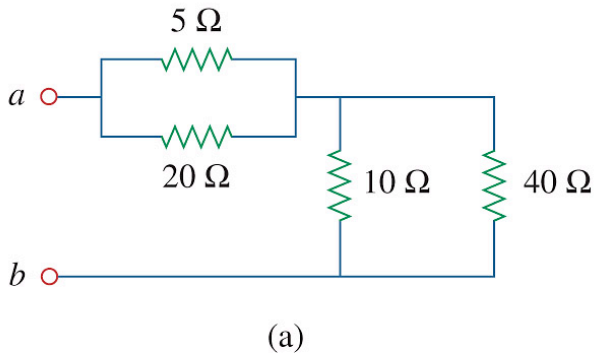
Problem 1.

If $R_{eq} = 50 \Omega$ in the circuit, find R .



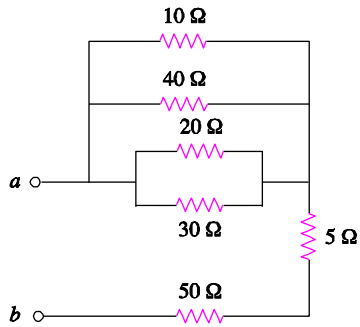
Problem 2.

Calculate the equivalent resistance R_{ab} at terminals $a-b$ for each of the circuits.

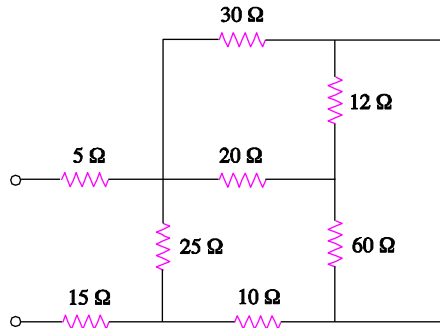


Problem 3.

Find the equivalent resistance at terminals $a-b$ of each circuit.



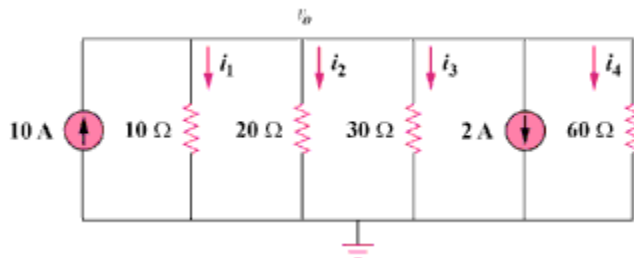
(a)



(b)

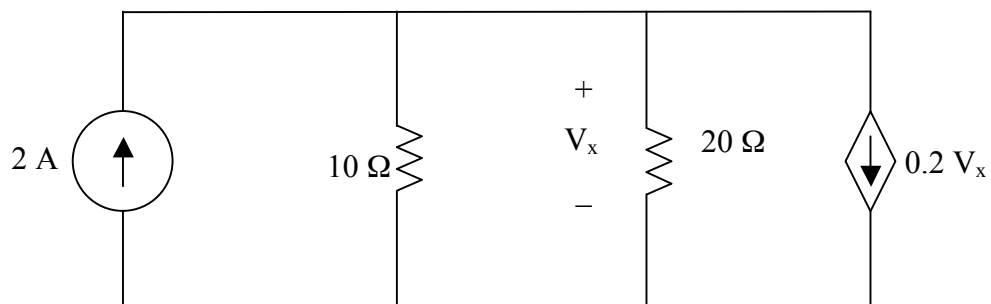
Problem 4.

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



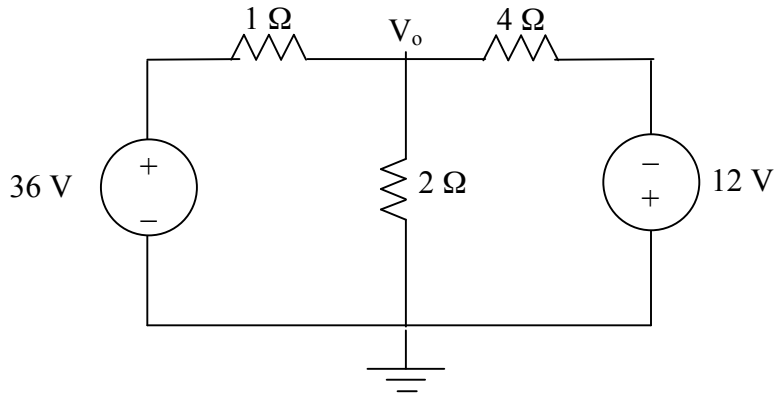
Problem 5.

Apply nodal analysis to solve for V_x in the circuit.



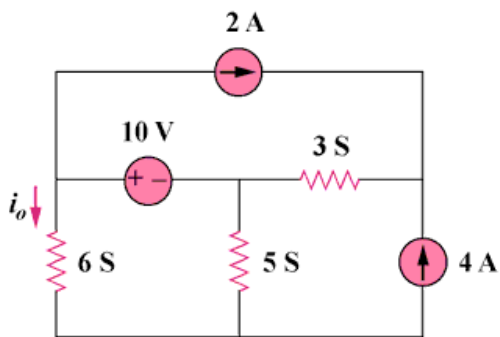
Problem 6.

Find V_o and the power dissipated in all the resistors in the circuit.



Problem 7.

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



Problem 8.

Using nodal analysis, find current i_o in the circuit.

