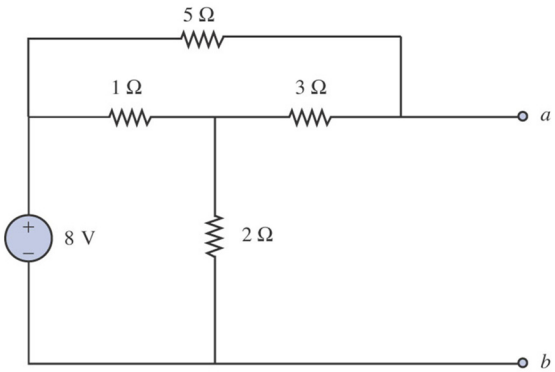
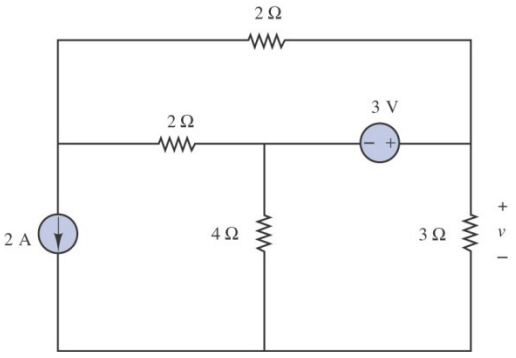
Problem 1

Find the Norton equivalent to the left of terminals a and b of the circuit shown in the figure below.



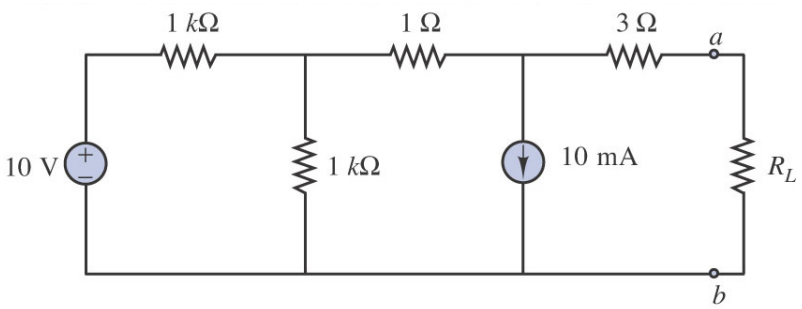
Problem 2

Determine the voltage drop on the 3Ω resistor. See the 3Ω resistor as a load resistor. Replace the rest of the network by its Thevenin equivalent. Then calculate the voltage on the 3 Ω resistor using the equivalent circuit.



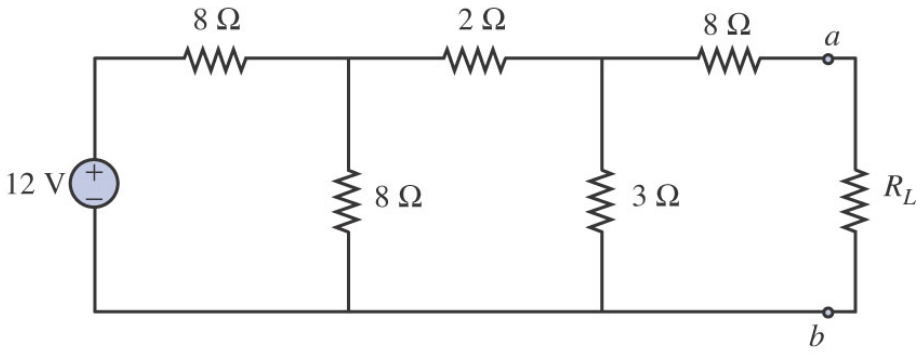
Problem 3

Find the Thevenin equivalent circuit and the Norton equivalent circuit that the load sees for the circuit below.



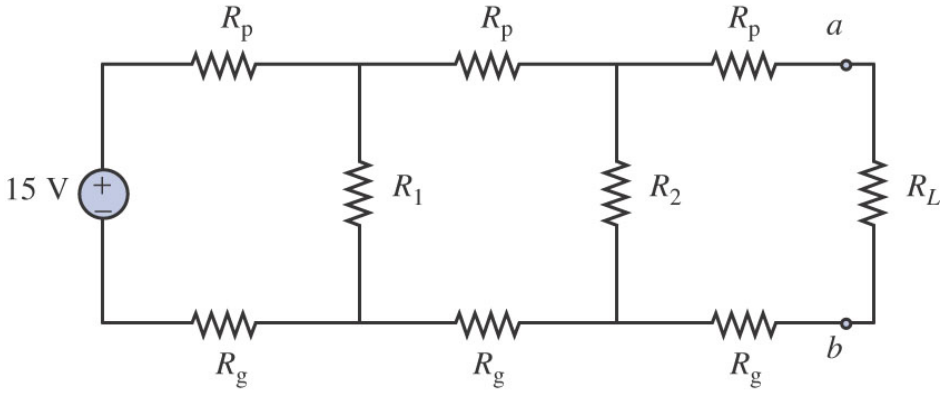
Problem 4

Find the Thevenin equivalent and Norton equivalent of the circuit connected to R_L as shown below.



Problem 5

Find the Thevenin equivalent and the Norton equivalent of the circuit connected to R_L in the figure below, where $R_1 = 10\ \Omega$, $R_2 = 20\ \Omega$, $R_g = 0.1\ \Omega$, and $R_p = 1\ \Omega$.



Problem 6

Construct the Thevenin equivalent circuit between terminals a and b. V_s = 12 V, R = 1 kΩ, R_x = 996 Ω.