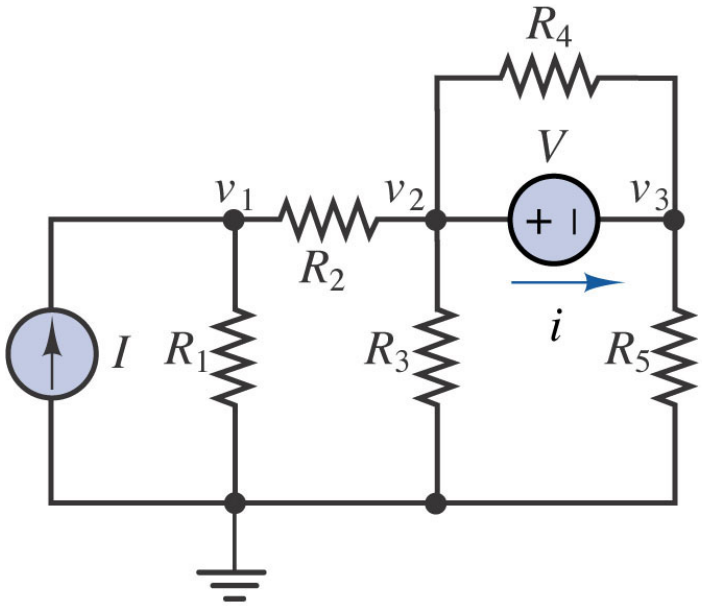
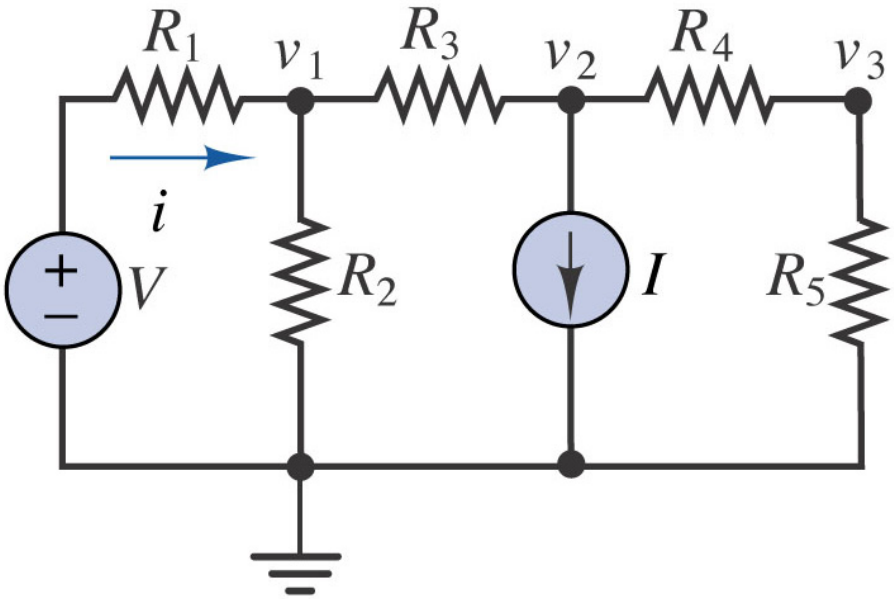
Problem 1

Let $I = 0.2$ A; $R_1 = 200\ \Omega$; $R_2 = 75\ \Omega$; $R_3 = 25\ \Omega$; $R_4 = 50\ \Omega$; $R_5 = 100\ \Omega$; $V = 10$ V. Treat the resistor R_5 as the load. Find the Thevenin equivalent resistance seen by the load. Compute the Thevenin voltage and Norton current.



Problem 2

Let V = 3 V; $R_1 = 0.5\ \Omega$; $R_2 = 0.5\ \Omega$; $R_3 = 0.25\ \Omega$; $R_4 = 0.5\ \Omega$; $R_5 = 0.25\ \Omega$; $I = 0.5$ A. Treat the resistor R_5 as the load. Find the Thevenin equivalent resistance seen by the load. Compute the Thevenin voltage and Norton current.



Problem 3

Let V_{S1}= 12 V; V_{S2}= 5 V; R_1 = 50 Ω; R_2 = R_3 = 20 Ω; R_4 = 10 Ω; R_5 = 15 Ω. Treat R_4 as the load. Calculate the Thevenin equivalent resistance, the Thevenin voltage, and the Norton current.