(1) For the circuit shown in Figure 1, find the currents $I_1$, $I_2$, $I_3$, and $I_4$.

Answers: $I_1 = 12$ A, $I_3 = 5$ A (Answers for $I_2$ and $I_4$ on your own)

Figure 1: Circuit for problem 1.

(2) You are given the circuit of Figure 2. Find $V_x$ as indicted in the diagram. Answer on your own.

Figure 2: Circuit for problem 2.
(3) You are given the circuit shown in Figure 3. Find the voltages $V_1$, $V_2$ and $V_3$. Answers on your own.

![Circuit for problem 3](image)

(4) You are given the circuit shown in Figure 4. Find $R_{eq}$ and $I_0$. Ans: $R_{eq} = 12.09 \, \Omega$, $I_0 = 3.309 \, \text{A}$

![Circuit for problem 4](image)

(5) Work problem 2.16 from the text. Ans: $V_1 = 12 \, \text{V}$, $V_2 = 2 \, \text{V}$

(6) Work problem 2.21 from the text. Ans: $P_R = 30 \, \text{W}$, $P_{\text{source}} = 36 \, \text{W}$

(7) Work problem 2.22 from the text. Ans: Supplied: $P_A = 60 \, \text{W}$, $P_b = 15 \, \text{W}$, $P_c = 25 \, \text{W}$ $P_D = 30 \, \text{W}$, $P_E = 20 \, \text{W}$: Show $P_{\text{supplied}} = P_{\text{absorbed}}$

(8) Work problem 2.60 from the text. Ans $R_{eq} = 4.76 \, \Omega$, $I = 140 \, \text{mA}$

(9) Work problem 2.67 from the text. Ans: $V_{AB} = 4.58 \, \text{V}$

(10) Work problem 2.72 from the text. Ans: (a) $0.0044 \, \Omega$, (b) $60.97 \, \Omega$