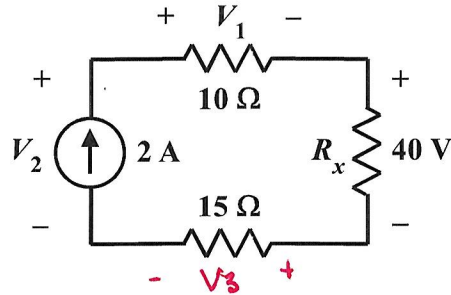For the circuit shown below:

a. Determine the value of V_1.

$$V_1 = (10\,\Omega)(2A) = 20\,V$$

b. Determine the value of R_x.

$$40V = R_x(2A) \Rightarrow R_x = \frac{40V}{2A} = 20\,\Omega$$

c. Determine the value of V_2.

$$V_3 = (15\,\Omega)(2A) = 30V$$
$$V_2 = V_1 + 40V + V_3 = 20V + 40V + 30V = 90V$$

d. How much power does R_x absorb?

$$P_x = (40V)(2A) = 80\,W$$

e. How much power does the independent current source deliver?

$$P_s = V_2(2A) = (90V)(2A) = 180\,W$$