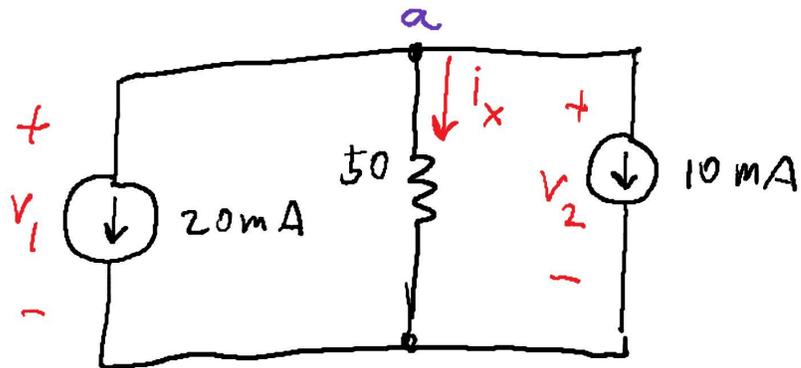


(a) Write KCL equation of the node a starting from the leftmost branch and progress in order. Use a convention that a current entering a node is positive. Also, use the variables defined in the figure (e.g., i_x).

(b) Find i_x .

(c) Find v_1 .

(d) Find v_2 .



Write your answers in the following format:

Qa: $10 + 10 i_1 - 10 - 10 i_1 + 40 = 0$
Qb. $i_x = 10\text{A}$
Qc. $v_1 = 0\text{V}$
Qd. $v_2 = 0\text{V}$