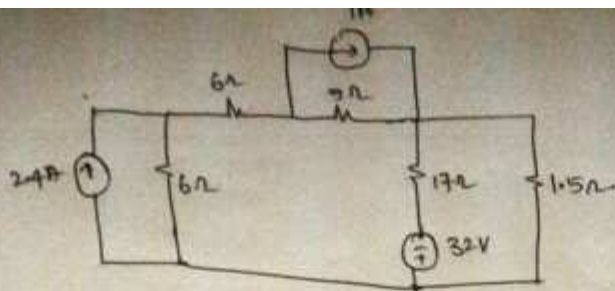


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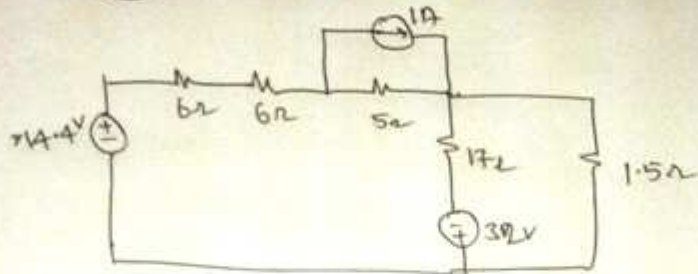
Answer

①



Step 1

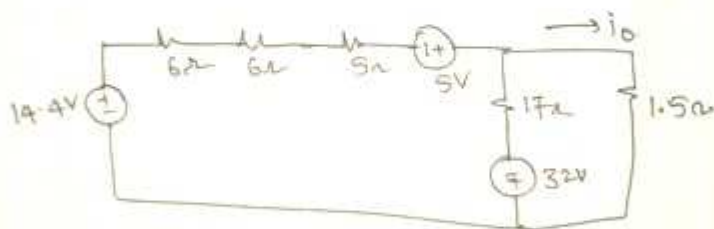
$(2.4A)$ to voltage source $V = (6)(2.4) = 14.4V$



Step 2

$(14.4V)$ to shorted source

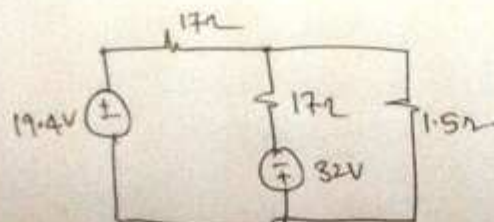
$(1A)$ to voltage source $V = (1)(5) = 5V$



$$V = 14.4 + 5 = 19.4V$$

$$R = 6 + 6 + 5 = 17\Omega$$

Step 3

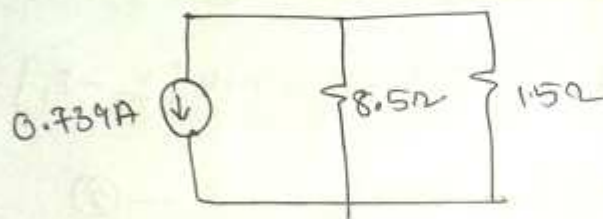
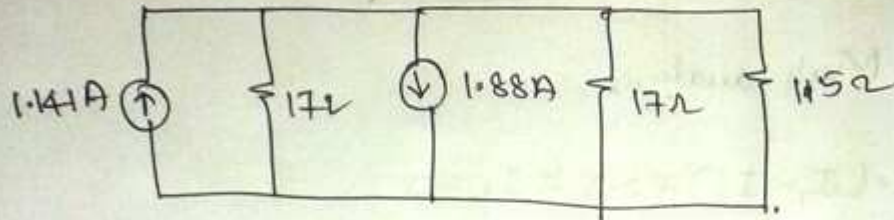


$(19.4V)$, $(32V)$ to current sources

$$I_1 = \frac{19.4}{17} = 1.141 \text{ A}$$

$$I_2 = \frac{32}{17} = 1.88 \text{ A}$$

Step 4



$$\frac{(17)(17)}{17+17} = 8.5 \Omega$$

By current division rule

$$i_o = -\frac{(0.739) [8.5]}{8.5 + 1.5}$$

$$i_o = -0.628 \text{ A}$$

Likes: 53

Dislikes: 1