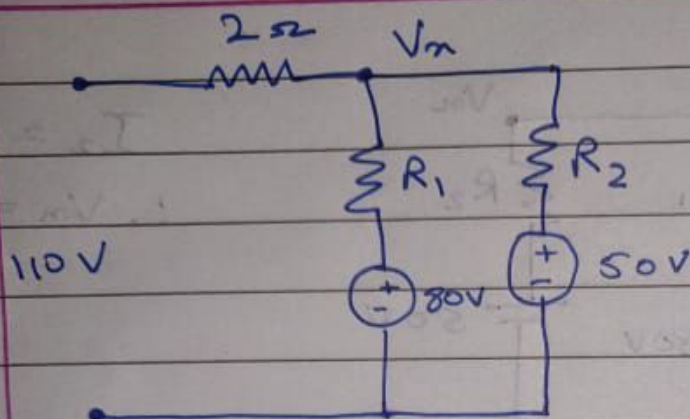


Q-2.1b)



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if $i_2 = 0$

$\Rightarrow V_m = 50$
volts

if $V_m = 50$ volts
& $i_2 = 0$

~~$\frac{110 - 50}{2}$~~

then our equation
will be like

$$\frac{110 - 50}{2} = \frac{50 - 80}{R_1}$$

$$\frac{R_1}{2} = \frac{-30}{60}$$

$$\Rightarrow \boxed{R_1 = -1 \Omega}$$

But resistance is not negative
 $\therefore i_2$ cannot be zero.

Hence, the only possible answer
should be if $R_2 = \infty$ then
 $i_2 = 0$.