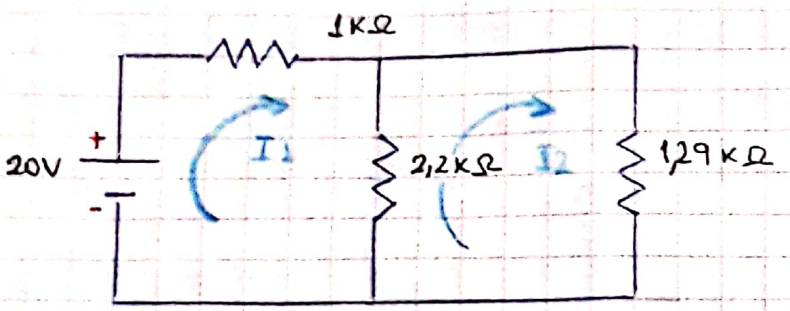


$$Req = \frac{(0,82)(0,470)}{(0,82)+(0,470)} = 1,29\,K\Omega$$

Malla 1

$$20 - I_1 - 2,2(I_1 - I_2) = 0$$
$$20 - I_1 - 2,2(I_1) + 2,2(I_2) = 0$$

$$-3,2\,I_1 + 2,2\,I_2 = -20 \quad (1) *$$

Malla 2

$$-1,29(I_2) - 2,2(I_2 - I_1) = 0$$
$$-1,29(I_2) - 2,2(I_2) + 2,2(I_1) = 0$$

$$2,2\,I_1 - 3,49\,I_2 = 0 \quad (2) *$$

$I_1 = 12,03$ mA
$I_2 = 6,95$ mA → en I_x

Ley de Ohm

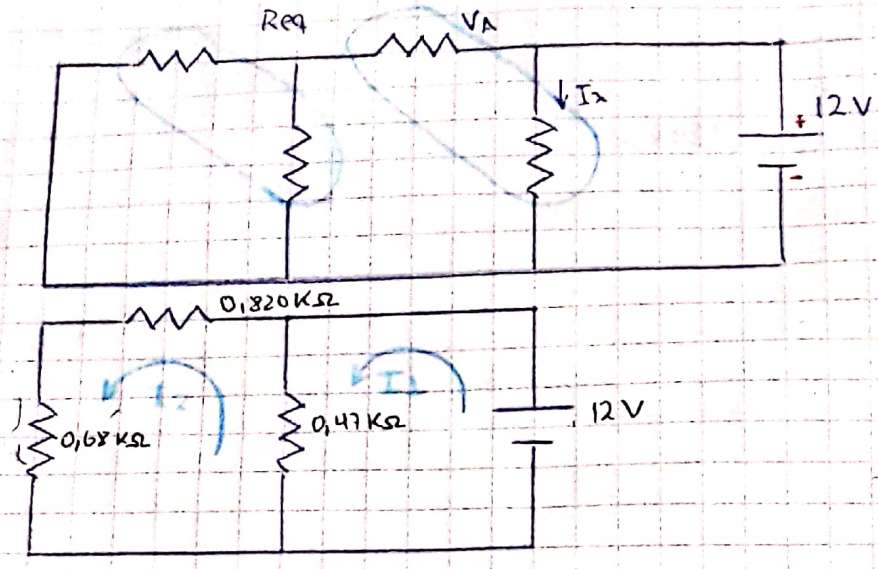
$$R_{0,82} = I \cdot R = 12 \cdot R$$

$$V_A = 5,699\,V$$

Para $I_{x\,TOTAL} = I_{x\,V1=0} - I_{x\,V2=0}$

$$I_x = 33,53 - 6,95$$
$$I_x = 26,58$$

$$V_A = V_{A\,V1=0} + V_{A\,V2=0}$$
$$V_A = 6,56 + 5,699$$
$$V_A = 952\,mV \;//$$



Divisor de Voltaje

$$V_1 = \frac{R_2}{R_1 + R_2}$$

$$\frac{1}{Req} = \frac{1}{1R} + \frac{1}{2,2}$$

$$\frac{1}{Req} = \frac{2,2 + 1}{(1)(2,2)}$$

$$Req = 0,68$$

$$I_2 - 0,47\,(I_1 - I_2) = 0$$

$$-0,47\,I_1 + 0,47\,I_2 = -12 \quad (1)$$

$$-0,82\,I_2 - 0,68\,I_2 - 0,47\,(I_2 - I_1) = 0$$

$$0,47\,I_1 - 1,97\,(I_2) = 0 \quad (2)$$

$I_1 = 33,53\,mA \longrightarrow I_x$

$I_2 = 8\,mA$

$R_{0,82} = I_2 R = 8\,(0,82)$

Ley de Ohm

$V = 6,56\,V$