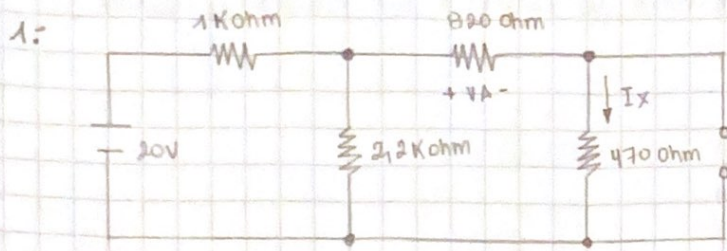


## Resolución de Ejercicios.



$$\bullet \text{Req}_1 = \frac{1}{\frac{1}{820} + \frac{1}{2200}} = 597,35 \Omega$$

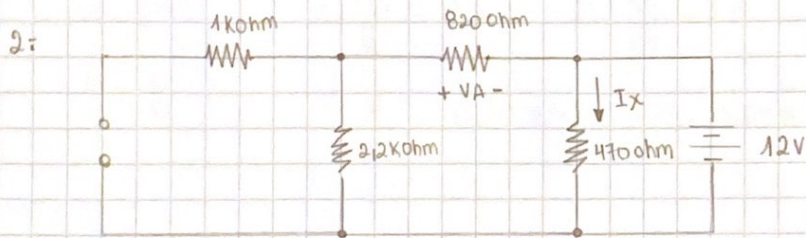
$$\text{Req}_2 = 1\text{Kohm} + 597,35 = 1597,35\text{Kohm}$$

$$\bullet I_1 = \frac{V}{R} \Rightarrow \frac{20}{1597,35} = 12,52 \text{ mA} //$$

$$\bullet I_A = \left( \frac{2200}{2200 + 820} \right) \cdot 12,52 = 9,12 \text{ mA} //$$

$$V_{820} = I_A \cdot R_{820} \Rightarrow 9,12 \cdot 820 = 7,47 \text{ V} //$$

$$\bullet I_x = \left( \frac{0,001}{470 + 0,001} \right) \cdot 12,52 = 0 \text{ mA} //$$



$$\bullet \text{Req}_1 = \frac{1}{\frac{1}{1000} + \frac{1}{2200}} = 687,5 \Omega$$

$$\bullet \text{Req}_2 = 687,5 + 820 = 1507,5 \Omega$$

$$\bullet \text{Req}_3 = \frac{1}{\frac{1}{1507,5} + \frac{1}{470}} = 358,3 \Omega$$

$$\bullet I_T = \frac{V}{R} \Rightarrow \frac{12}{358,3} = 33,49 \text{ mA} //$$

$$\bullet I_A = \left( \frac{470}{470 + 1507,5} \right) \cdot 33,49 = 7,95 \text{ mA} //$$

$$\bullet V_{820} = I_A \cdot R_{820} \Rightarrow 7,95 \cdot 820 = -6,53 \text{ V} //$$

$$\bullet I_X = \left( \frac{1507,5}{470 + 1507,5} \right) \cdot 33,49 = 25,53 \text{ mA} //$$

◦ Voltaje total

$$V_T = 7,47 - 6,53 = 0,941 \text{ mV} //$$

◦ Intensidad total

$$I_T = 0 + 25,53 = 25,53 \text{ mA} //$$