



\*Por Mallas

Busco Mis 3 Ecs!

$$\textcircled{1} I_1 + I_2 = I_3$$

$$\text{Malla } \textcircled{1}: 2v + 4v = 4I_1 + 4I_3 \Rightarrow 6v = 4I_1 + 4I_3 \quad \textcircled{2}$$

$$\text{Malla } \textcircled{2}: 4v + 2v = I_2 \cdot 4 + 4I_3 \Rightarrow 6v = 4I_2 + 4I_3 \quad \textcircled{3}$$

Sistema de Ecs:  $\textcircled{1} I_1 + I_2 = I_3$

$$\textcircled{2} 6v = 4I_1 + 4I_3 + 4I_2 \rightarrow \textcircled{6} = 8I_1 + 4I_2$$

$$\textcircled{3} 6v = 4I_2 + 4I_1 + 4I_2 \rightarrow \textcircled{6} = 8I_2 + 4I_1$$

o Igualo ya que los dos son '6'

$$8I_1 + 4I_2 = 8I_2 + 4I_1$$

$$8I_1 - 4I_1 = 8I_2 - 4I_2$$

$$4I_1 = 4I_2$$

$$I_1 = I_2$$

Para terminar de resolver

Vuelvo a  $\textcircled{2}$

Como  $I_1 = I_2 \dots$

$$6 = 8I_1 + 4I_1$$

$$6 = 12I_1 \rightarrow$$

$$I_1 = 0,5A$$

$$I_2 = 0,5A$$

$$I_1 + I_2 = I_3 \rightarrow I_3 = 1A$$