

Primera malla

$$\begin{aligned} 18 &= 0,82 I_1 + (I_1 - I_2) \\ 18 &= 1,82 I_1 - I_2 \quad (1) \end{aligned}$$

Segunda malla

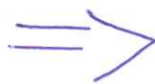
$$\begin{aligned} 1(I_2 - I_1) + 1,2 I_2 + 2,2(I_2 - I_3) &= 0 \\ -I_1 + 4,4 I_2 - 2,2 I_3 &= 0 \quad (2) \end{aligned}$$

Tercera malla

$$\begin{aligned} 2,2(I_3 - I_2) + 0,39 I_3 &= -5 \\ -2,2 I_2 + 2,59 I_3 &= -5 \quad (3) \end{aligned}$$

Solucionando el sistema de ecuaciones

$$\begin{aligned} 1,82 I_1 - I_2 + 0 &= 18 \\ -1 I_1 + 4,4 I_2 - 2,2 I_3 &= 0 \\ 0 - 2,2 I_2 + 2,59 I_3 &= -5 \end{aligned}$$



$$\begin{aligned} I_1 &= 11,45 \text{ mA} \\ I_2 &= 2,84 \text{ mA} \\ I_3 &= 0,48 \text{ mA} \end{aligned}$$

ERROR PORCENTUAL

Malla 1

Malla 2

$$\begin{aligned} e\% &= \left(\frac{|V_{\text{teórico}} - V_{\text{medido}}|}{V_{\text{teórico}}} \right) \times 100 \\ &= \frac{|11,50 - 11,45|}{11,50} \times 100 = 0,43\% \end{aligned}$$

$$e\% = \frac{|2,85 - 2,84|}{2,85} \times 100 = 0,35\%$$

Malla 3

$$e\% = \frac{|0,48 - 0,48|}{0,48} \times 100 = 0\%$$