



Malla 1

$$+18 - 820i_1 - 1000i_1 + 1000i_2 = 0 \quad \rightarrow \quad i_1 = \frac{18 + 1000i_2}{1820} \quad (1)$$

$$+18 - 1820i_1 + 1000i_2 = 0$$

Malla 2

$$-1000i_2 + 1000i_1 - 1200i_2 - 2200i_2 + 2200i_3 = 0$$

$$-4400i_2 + 1000i_1 + 2200i_3 = 0 \quad (2)$$

Malla 3

$$-5 - 2200i_3 + 2200i_2 - 390i_3 = 0$$

$$-5 - 2590i_3 + 2200i_2 = 0 \quad (3)$$

(1)  $\rightarrow$  (2)

$$-4400i_2 + 1000\left(\frac{18 + 1000i_2}{1820}\right) + 2200i_3 = 0$$

$$-4400i_2 + 9.89 + 549.45i_2 + 2200i_3 = 0$$

$$-3850.55i_2 + 2200i_3 + 9.89 = 0$$

$$\rightarrow i_2 = \frac{2200i_3 + 9.89}{3850.55} \quad (4)$$

(4)  $\rightarrow$  (3)

$$-5 - 2590i_3 + 2200\left(\frac{2200i_3 + 9.89}{3850.55}\right) = 0$$

$$-5 - 2590i_3 + 1256.96i_3 + 5.65 = 0$$

$$-1333.04i_3 = 0.65$$

$$i_3 = \frac{0.65}{-1333.04}$$

$$\rightarrow i_3 = 0.4876 \text{ mA}$$

$$i_1 = 11.45 \text{ mA}$$

$$i_2 = 2.847 \text{ mA}$$

En este caso la corriente  $i_3$  va en sentido contrario