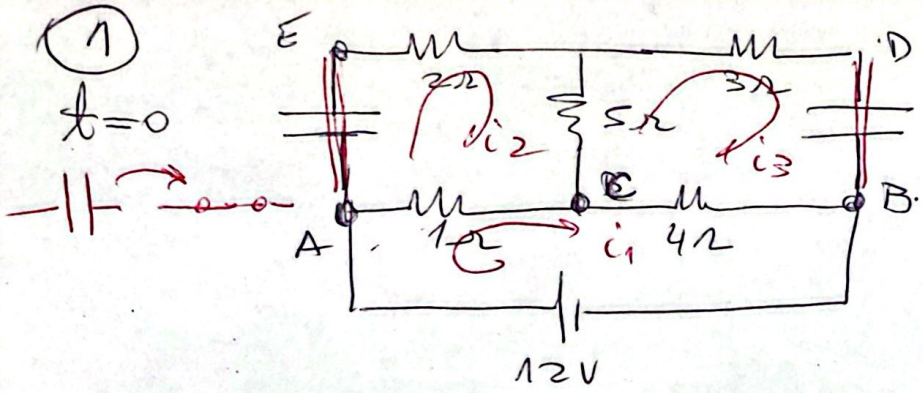
(1)

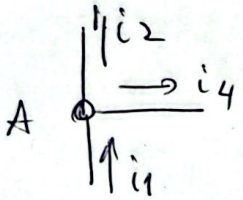


$t=0$

$$\begin{cases} 12 - 1\Omega(i_1-i_2) - 4(i_1-i_3)=0 \\ -2i_2 - 5(i_2-i_3) - 1(i_2-i_1)=0 \\ -3i_3 - 4(i_3-i_1) - 5(i_3-i_2)=0 \end{cases}$$

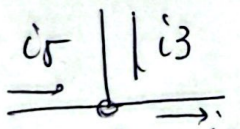
$$\begin{cases} 12V = 5i_1 - i_2 - 4i_3 \\ 0 = -i_1 + 8i_2 - 5i_3 \\ 0 = -4i_1 - 5i_2 + 12i_3 \end{cases} \Rightarrow \begin{cases} i_1 = 4,9A \\ i_2 = 2,2A \\ i_3 = 2,5A \end{cases}$$

Luego Nodo (A)



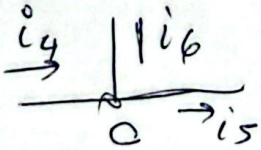
$$4,9A = 2,2A + i_4$$
$$\boxed{i_4 = 2,7A}$$

Nodo (B)



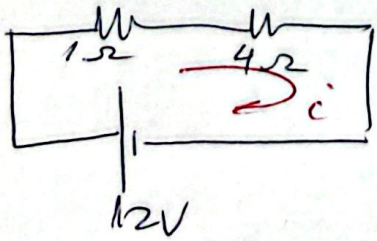
$$2,5A + i_5 = 4,9$$
$$\boxed{i_5 = 2,4A}$$

Nodo (C)



$$i_4 + i_6 = i_5$$
$$2,7 + i_6 = 2,4A$$
$$\boxed{i_6 = 0,3A}$$

$t \to \infty$



$$i = \frac{12V}{5\Omega} = 2,4A.$$

$$V_D - 4\Omega \cdot i = V_B$$
$$V_D - V_B = 4\Omega \cdot i = 9,6V = V_{c_2}$$

$$V_A - 1\Omega \cdot i = V_B$$
$$V_A - V_B = 1\Omega \cdot i = 2,4V = V_{c_1}$$