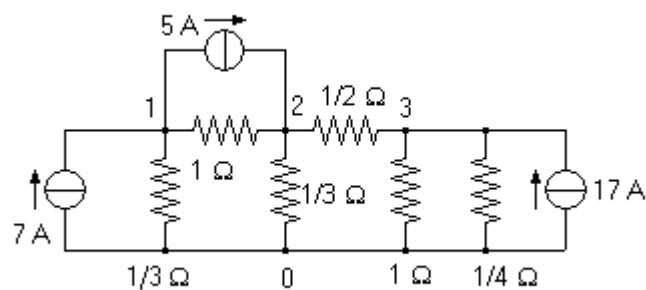


Esercizio 2.1)

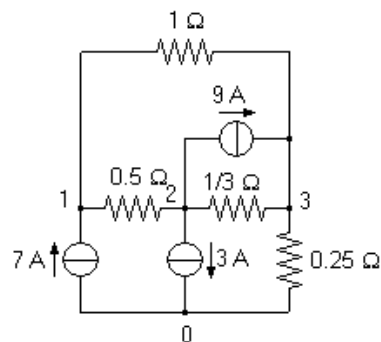
Usando il metodo ai nodi, scrivere il sistema risolvete, in forma matriciale, per il circuito in figura.



$$\begin{bmatrix} 4 & -1 & 0 \\ -1 & 6 & -2 \\ 0 & -2 & 7 \end{bmatrix} \begin{bmatrix} v_1 \\ v_2 \\ v_3 \end{bmatrix} = \begin{bmatrix} 2 \\ 5 \\ 17 \end{bmatrix}$$

Esercizio 2.2)

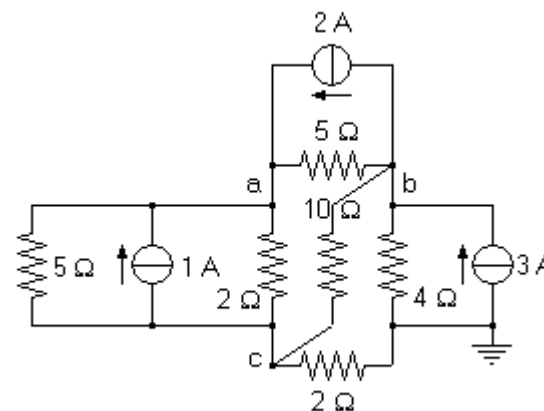
Usando il metodo ai nodi, scrivere il sistema risolvete, in forma matriciale, per il circuito in figura.



$$\begin{bmatrix} 3 & -2 & -1 \\ -2 & 5 & -3 \\ -1 & -3 & 8 \end{bmatrix} \begin{bmatrix} v_1 \\ v_2 \\ v_3 \end{bmatrix} = \begin{bmatrix} 7 \\ -12 \\ 9 \end{bmatrix}$$

Esercizio 2.3)

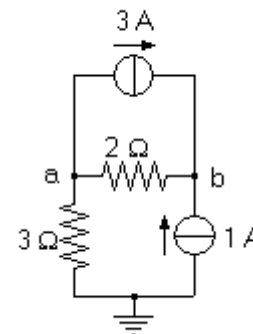
Determinare le tensioni di nodo, v_a , v_b , v_c , per il circuito in figura.



$$[v_a = 9.789 \text{ V}, v_b = 5.0526 \text{ V}, v_c = 3.4737 \text{ V}]$$

Esercizio 2.4)

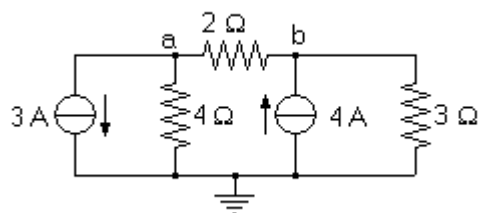
Determinare le tensioni di nodo v_a e v_b per il circuito in figura.



$$[v_a = 3 \text{ V}, v_b = 11 \text{ V}]$$

Esercizio 2.5)

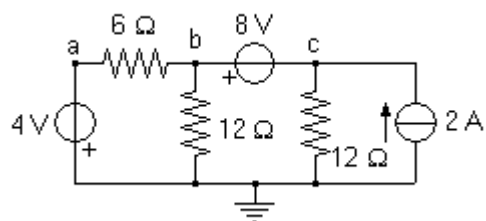
Determinare le tensioni di nodo v_a e v_b per il circuito in figura.



$$[v_a = -4/3 \text{ V}, v_b = 4 \text{ V}]$$

Esercizio 2.6)

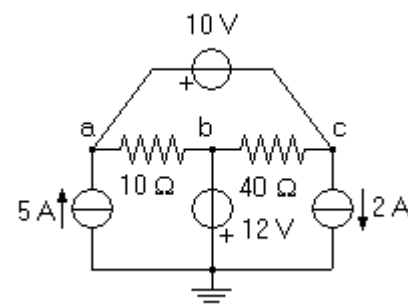
Determinare le tensioni di nodo v_a , v_b e v_c per il circuito in figura.



$$[v_a = -4 \text{ V}, v_b = 6 \text{ V}, v_c = -2 \text{ V}]$$

Esercizio 2.7)

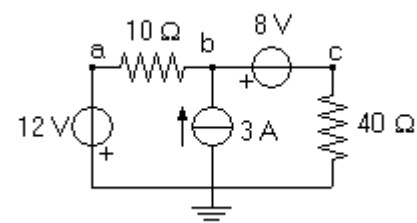
Determinare le tensioni di nodo v_a , v_b e v_c per il circuito in figura.



$$[v_a = 14 \text{ V}, v_b = -12 \text{ V}, v_c = 4 \text{ V}]$$

Esercizio 2.8)

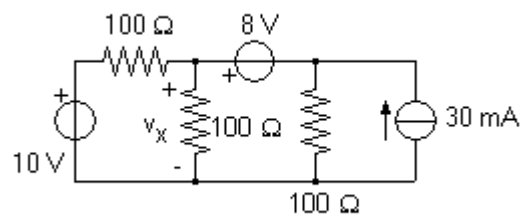
Determinare le tensioni di nodo per il circuito in figura.



$$[v_a = -12 \text{ V}, v_b = 16 \text{ V}, v_c = 8 \text{ V}]$$

Esercizio 2.9)

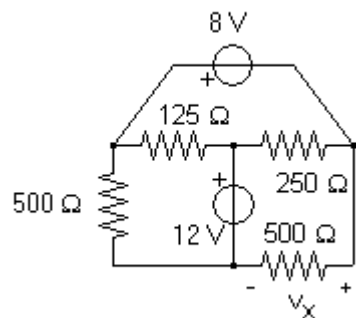
Usando il metodo ai nodi, determinare la tensione v_x .



$[v_x = 7 \text{ V}]$

Esercizio 2.10)

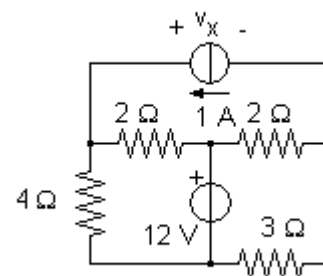
Usando il metodo ai nodi, determinare la tensione v_x .



$[v_x = 4 \text{ V}]$

Esercizio 2.11)

Usando il metodo ai nodi, determinare la tensione v_x .



$[v_x = 3.33 \text{ V}]$