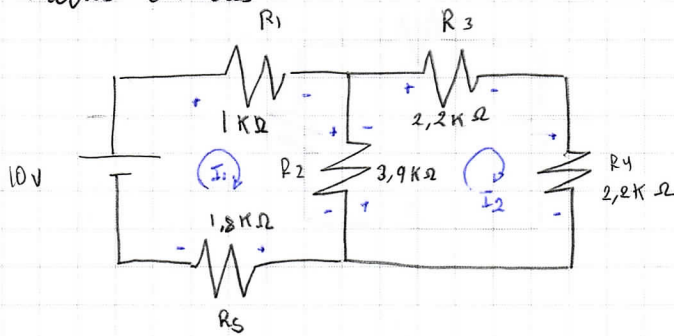Metodo de mallas   LVK

Mallas cerradas

Malla 1 / Trayectoria 1

$10 - 1000 I_s - 3900 (I_s - I_2) - 1800 I_1 = 0$

$10 - 1000 I_s - 3900 I_s + 3900 I_2 - 1800 I_s = 0$

$10 - 6700 I_s + 3900 I_2 = 0$

Malla 2 / Trayectoria 2

$-3900(I_2 - I_s) - 2200 I_2 - 2200 I_2 = 0$

$-3900 I_2 + 3900 I_s - 2200 I_2 - 2200 I_2 = 0$

$-8300 I_2 = -3900 I_s$

→ Por la malla antes trabajado tenemos

$I_s = 2{,}05 \cdot 10^{-3} [A]$ $I_1 = 1{,}087 \cdot 10^{-3} [A]$

$I_2 = 9{,}63 \cdot 10^{-4} [A]$

$V_{R_1} = (2{,}05 \cdot 10^{-3})(1000)$ $V_{R_2} = (1{,}087 \cdot 10^{-3})(3900)$

$V_{R_1} = 2{,}05 [V]$ $V_{R_2} = 4{,}24 [V]$

$V_3 = (9{,}63 \cdot 10^{-4})(2200)$ $V_{R_4} = V_3$

$V_3 = 2{,}12 [V]$ $V_{R_4} = 2{,}12 [V]$

$V_{RS} = (2{,}05 \cdot 10^{-3})(1800)$

$V_{RS} = 3{,}69 [V]$

$V_{R_1} = 2{,}05 [V]$
$V_{R_2} = 4{,}24 [V]$
$V_{RS} = 2{,}12 [V]$
$V_{R_4} = 2{,}12 [V]$
$V_{RS} = 3{,}69 [V]$