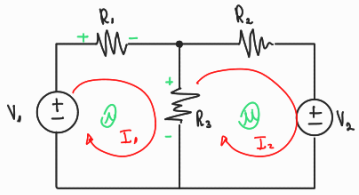
Circuito irreducible :



- $V_1 = 50\ V$
- $R_1 = 10\ \Omega$
- $R_2 = 30\ \Omega$
- $R_3 = 10\ \Omega$
- $V_2 = 60\ V$

Resolver $I_1 = 2$

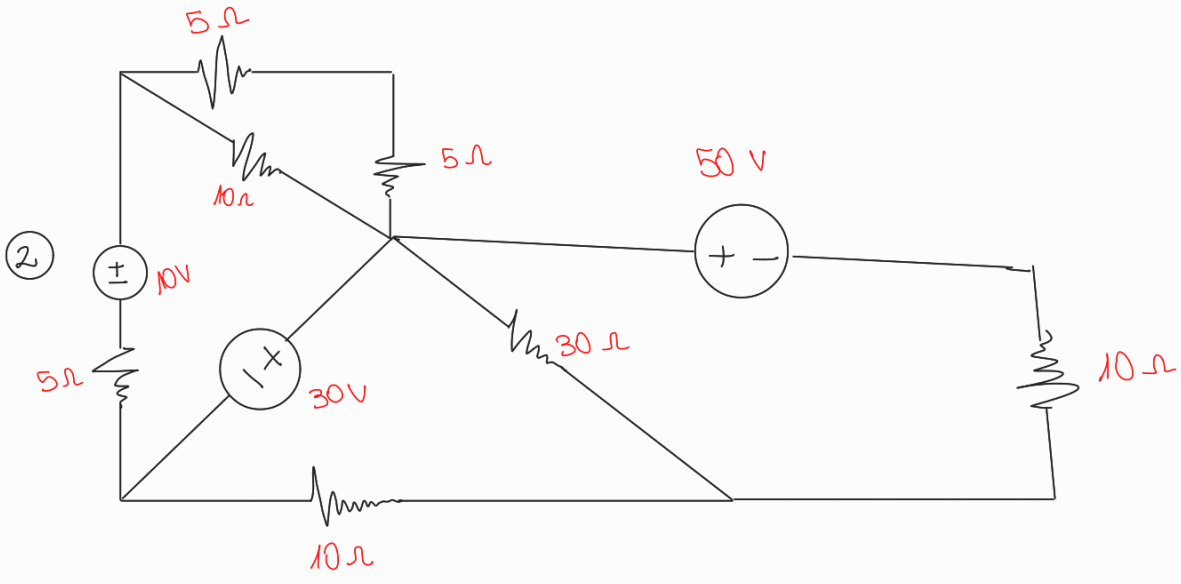
$I_2 = 1$

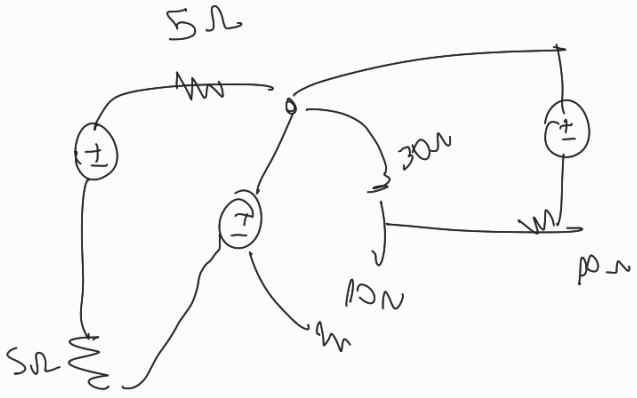
(i) $V_1 = V_{R_1} + V_{R_3}$ (ii) $V_2 = V_{R_2} + V_{R_3}$

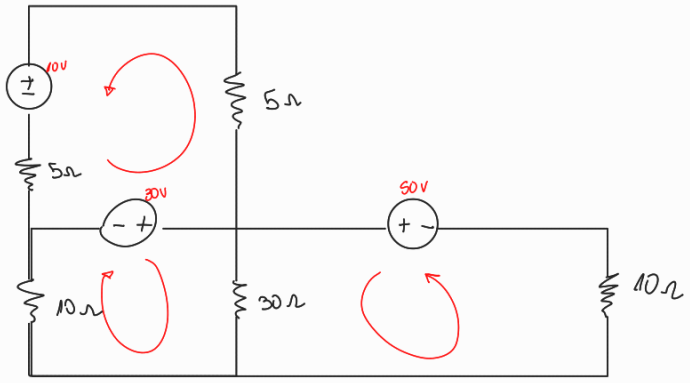
(i) $V_1 = I_1 \cdot R_1 + (I_1 + I_2) R_3$

(ii) $V_2 = I_2 \cdot R_2 + (I_2 + I_1) R_3$

(i) $V_1 = I_1(R_1 + R_3) + I_2 R_3$ (ii) $V_2 = I_2(R_2 + R_3) + I_1 R_3$







(i) $30 - 10 = V_{r1} + V_{r2}$

$20V = I_1 (10)$

$I_1 = 2A$

(ii) $30_V = V_{R10} + V_{R30}$

$30_V = I_2 \cdot 10\Omega + (I_2 + I_3)\, 30\Omega$

(iii) $50 = (I_2 + I_3)\, 30\Omega + I_3 \cdot 10\Omega$