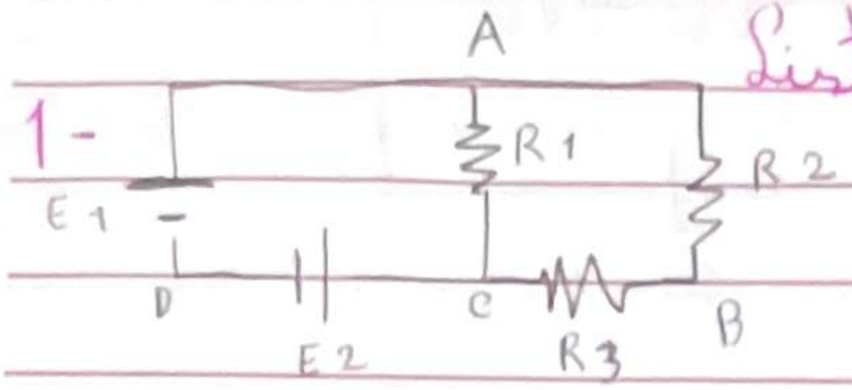
/ /

Lista

1-



R1 = 12 Ω
R2 = 10 Ω
R3 = 9 Ω
E1 = 12 V
E2 = 4 V

$+I_3 \cdot R_1 + E_2 - E_1 = 0$

$I_3 \cdot 12 + 4 - 12 = 0$

$I_3 \cdot 12 - 8 = 0$

$I_3 = \frac{8}{12} = \frac{2}{3}$ A

$I_2 \cdot R_2 + I_2 R_3 - I_3 R_1 = 0$

$I_2 \cdot 10 + I_2 \cdot 9 - I_3 \cdot 12 = 0$

$19 \cdot I_2 - 12 \cdot \frac{2}{3} = 0$

$19 \cdot I_2 = 8$

$I_2 = \frac{8}{19}$ A

$I_1 = \frac{8}{19} + \frac{2}{3} \cong 1,09$ A

2- $I_1 = I_2 + I_3$

$6 + 3 i_2 = 0$

$i_2 = -2$ A

$-25 + 5 i_3 = 0$

$i_3 = 5$ A

• O sentido começa a partir do polo positivo e a fonte de 5 V

3- $I_2 = 18\ A$ $I_3 = 9\ A$ $I_1 = 1A$

4- $15i + 5 + 6i + 8i - 3 + 11i - 12 + 10i$

$50i = -10$

$i = -0,2$

$0,2\ A$

→ R1: Ω R2: Ω R3: Ω

E1: 10 E2: 9 E3: 5

$18 - 9 = 9$ $10 - 9 = 1$ $9 + 9 = 18$