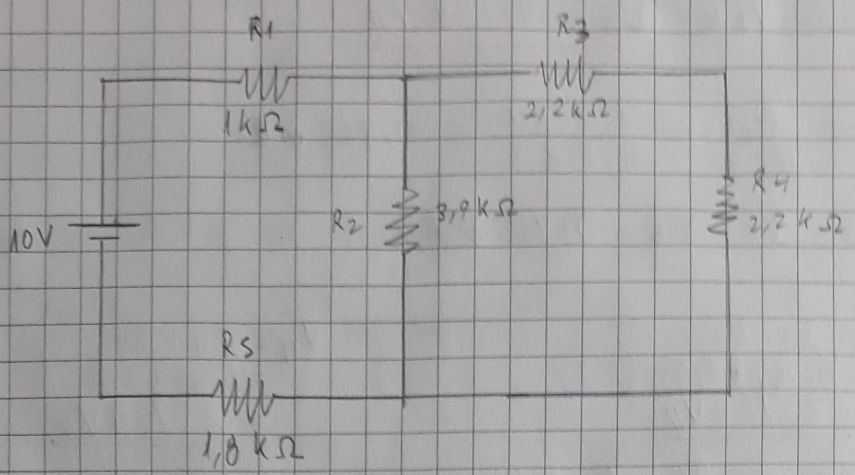
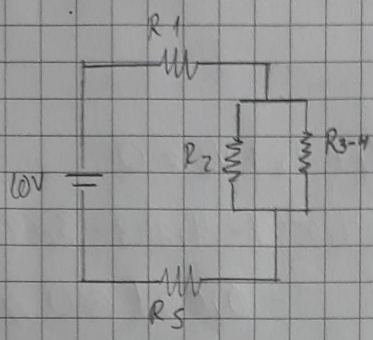
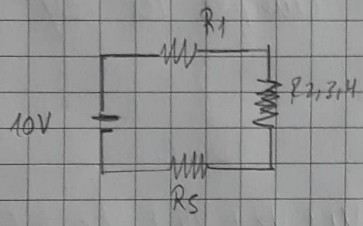


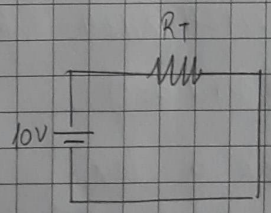


$$R_{3-4} = R_3 + R_4$$
$$= 2,2\,k\Omega + 2,2\,k\Omega$$
$$= 4,4\,k\Omega //$$



$$\frac{1}{R_{2,3,4}} = \frac{1}{R_2} + \frac{1}{R_{3,4}}$$

$$R_{2,3,4} = \frac{R_2 \cdot R_{3,4}}{R_{3,4} + R_2}$$
$$= \frac{3,9 \cdot 4,4}{4,4 + 3,9}\,k\Omega$$
$$= 2,0674\,k\Omega //$$



$$R_T = R1 + R_{2,3,4} + R_5$$
$$= 1\,k\Omega + 2,0674 + 1,8\,k\Omega$$
$$= 4,867\,k\Omega //$$

$$I_T = \frac{V_T}{R_T} = \frac{10\,V}{4,86\,k\Omega} = 2,055\,mA //$$

$$I_T = I_1 = I_5 = I_{2,3,4} = 2,055\,mA //$$

$$V_1 = I_1 \cdot R1$$
$$= 2,055 \cdot 1$$
$$= 2,055\,V //$$

$$V_5 = I_5 \cdot R_5$$
$$= 2,055 \cdot 1,8$$
$$= 3,698\,V //$$

$$V_{2,3,4} = I_{2,3,4} \cdot R_{2,3,4}$$
$$= 2,055 \cdot 2,0674$$
$$= 4,248\,V //$$

$V_{2,3,4} = V_{3,4} = V_2 = 4,248\ V$ //

$$I_{3,4} = \frac{V_{3,4}}{R_{3,4}} = \frac{4,248\ V}{4,4\ k\Omega} = 0,965\ mA$$ //

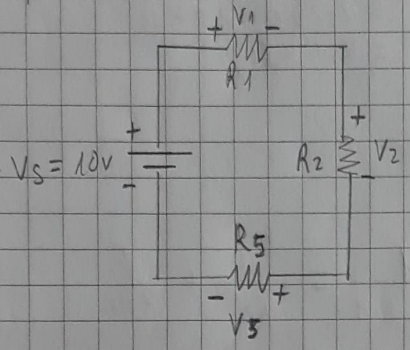
$I_{3,4} = I_3 = I_4 = 0,965\ mA$ //

$V_3 = I_3 \cdot R_3$
$= 0,965 \cdot 2,2$
$= 2,124\ V$ //

$V_4 = I_4 \cdot R_4$
$= 0,965 \cdot 2,2$
$= 2,124\ V$ //

Ley de Kirchhoff de Voltaje:

Trayectoria 1 (Malla 1):



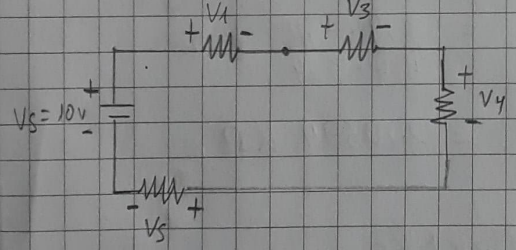
$V_S + V_1 + V_2 + V_5 = 0$

$10V - 2,055V - 4,248 - 3,698 = 0$

$-0,001 \approx 0$ //

Se cumple la ley

Trayectoria 2 (Malla 2):



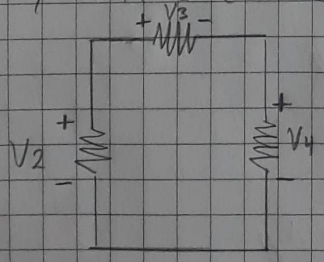
$V_S + V_1 + V_3 + V_4 + V_5 = 0$

$10V - 2,055 - 2,124 - 2,124 - 3,698 = 0$

$-0,001 \approx 0$ //

Se cumple la ley

Trayectoria 3 (malla 3):



$V_2 + V_3 + V_4 = 0$

$4,248 - 2,124 - 2,124 = 0$

$0 = 0$ //

Se cumple la ley