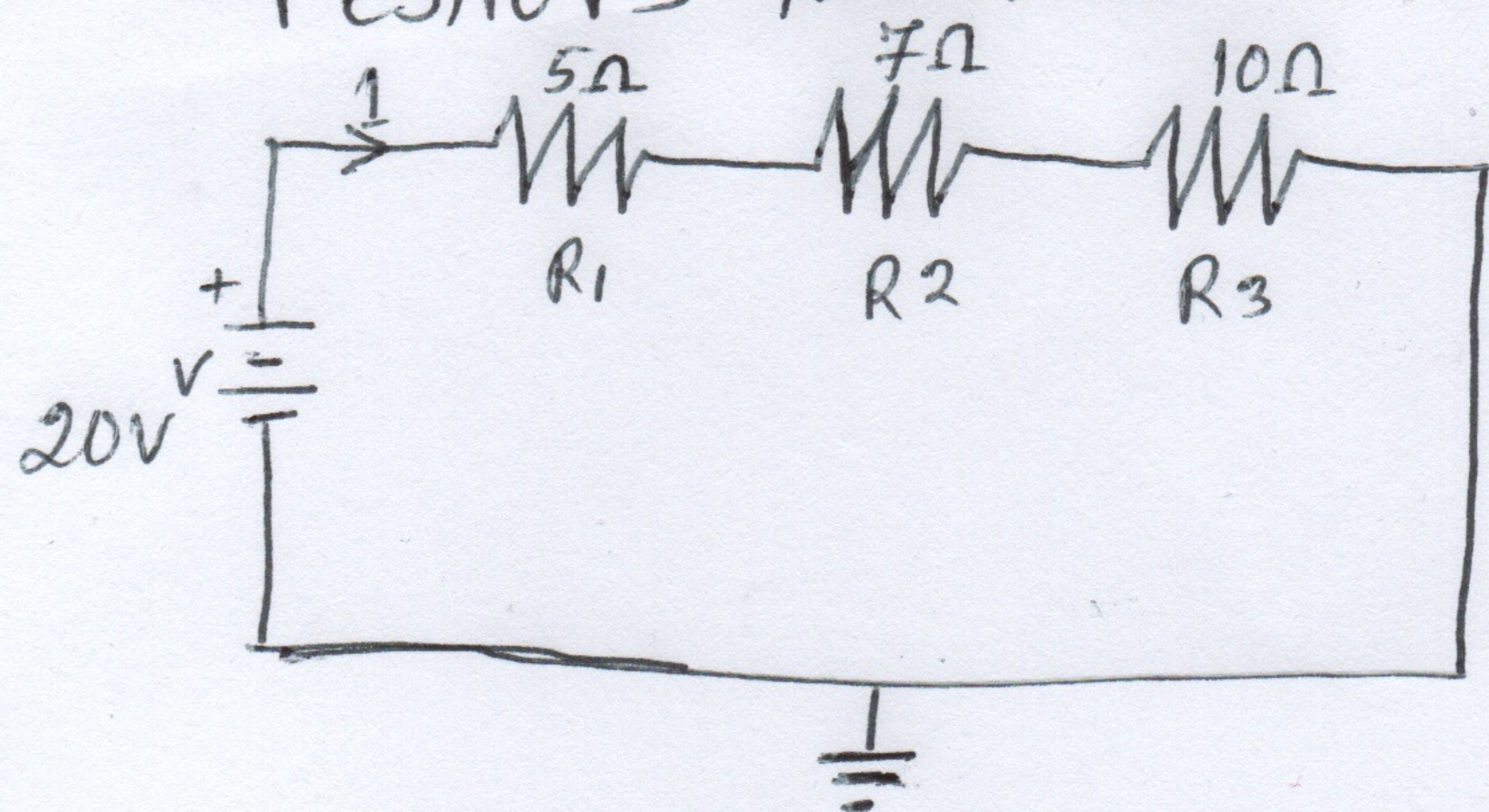


① Calculate the Voltage across the various resistors in the circuit.



$$V_1 = \frac{V R_1}{R_T} = \frac{20 \times 5}{5 + 7 + 10} = 4.54V$$

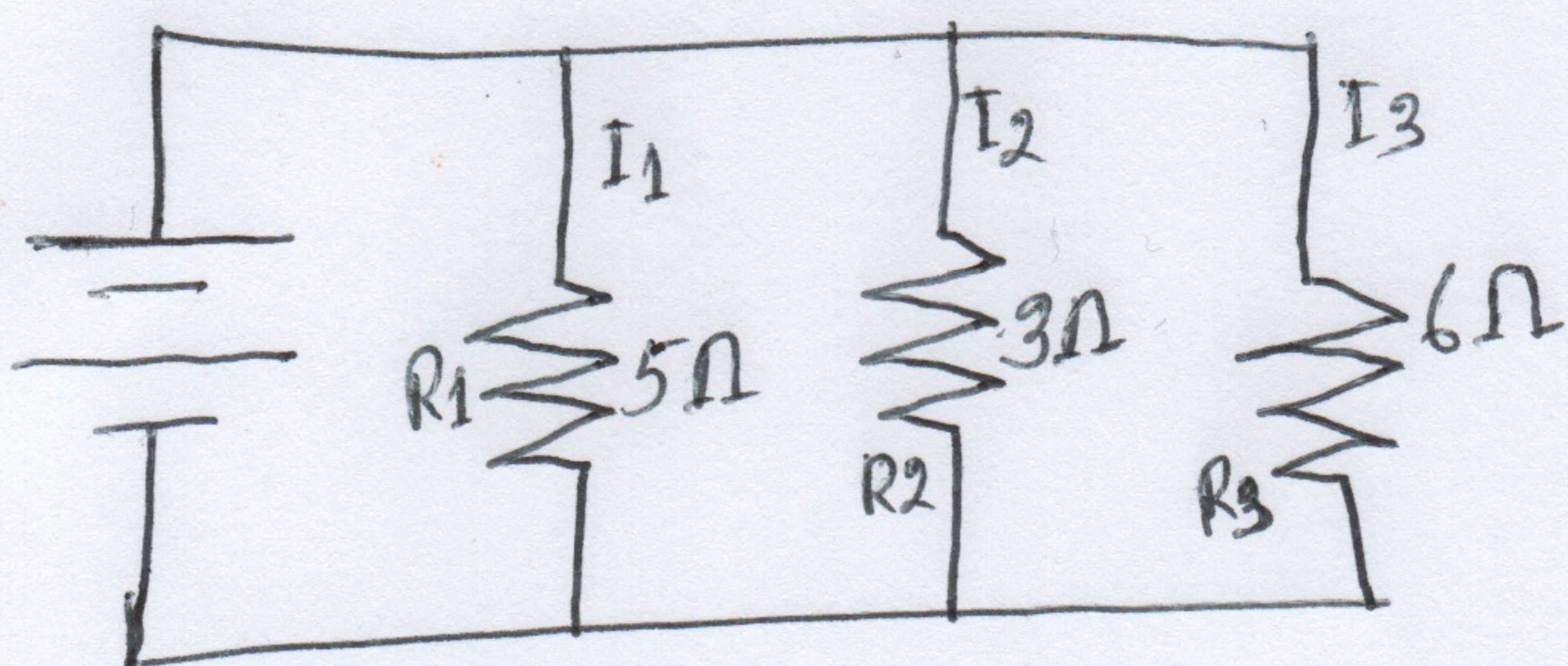
$$V_2 = \frac{V R_2}{R_T} = \frac{20 \times 7}{5 + 7 + 10} = 6.36V$$

$$V_3 = \frac{V R_3}{R_T} = \frac{20 \times 10}{5 + 7 + 10} = 9.09V$$

$$= 4.54 + 6.36 + 9.09$$

$$= 19.99 \approx 20V$$

② Calculate the total resistance in the following circuit.



$$R_1 = 5\Omega \quad R_2 = 3\Omega$$

$$R_3 = 6\Omega$$

$$\frac{1}{R_T} = \frac{1}{R_1} + \frac{1}{R_2} + \frac{1}{R_3}$$

$$= \frac{1}{5} + \frac{1}{3} + \frac{1}{6}$$

$$= 0.2 + 0.33 + 0.17$$

$$= 0.7$$

Task 5