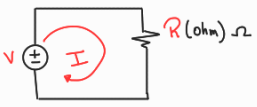
diferencia de potencial ≠ existencia de corriente

+ → −

④ circuito electrico



Ley de ohm (Ω)

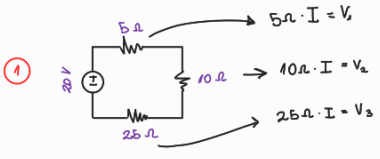
- $V = I \cdot R$ →

- $P = V \cdot I$ →

Se puede calcular
- Potencia
- Corriente
- Voltaje
- Resistencia

ejercicios:

①



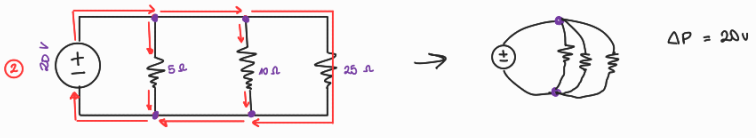
$20\,v = V_1 + V_2 + V_3$

$20V = I\,(5 + 10 + 25)\,\Omega$

$\frac{20V}{40\Omega} = 0{,}5\,A$

* Resistencias con la misma corriente se suman

②



$\Delta P = 20v$

$\frac{V_T}{R_T} = \frac{V_a}{R_a} + \frac{V_d}{R_d} + \frac{V_c}{R_c}$

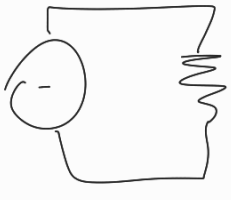
$\frac{20}{R_T} = \frac{20}{5\Omega} + \frac{20}{10\Omega} + \frac{20}{25}$

$\frac{1}{R_T} = \frac{1}{5} + \frac{1}{10} + \frac{1}{25} \Rightarrow R_T = 2{,}94$

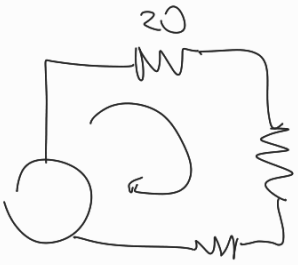
* mismo voltaje se calcula el reciproco

Conclusiones: reducir resistencias con razonamiento

$40 = I \cdot 10S$



10S



$= 20,2$

$\frac{40}{70} = 0,57$