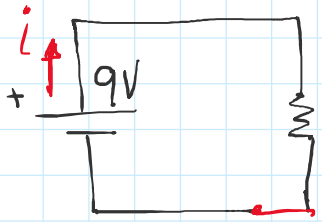
Circuitos DC

Friday, June 13, 2025 7:05 PM

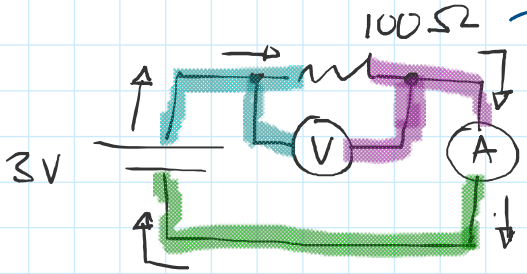
DC = Direct Current => Corriente/Voltaje constantes.

Circuito:



- Tinkercad
- Ley de Ohm
- Serie y Paralelo (Resistencias)
- Circuitos RC → Carga
  → Descarga
  → Equilibrio

→ Entregable 1

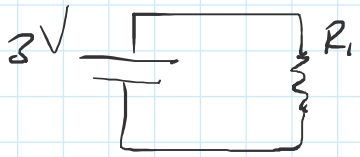


di?

$V = iR$

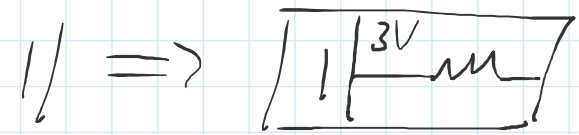
$\Rightarrow i = \frac{V}{R} = \frac{3}{100} = 0{,}03\,A$

$= 30\,mA$

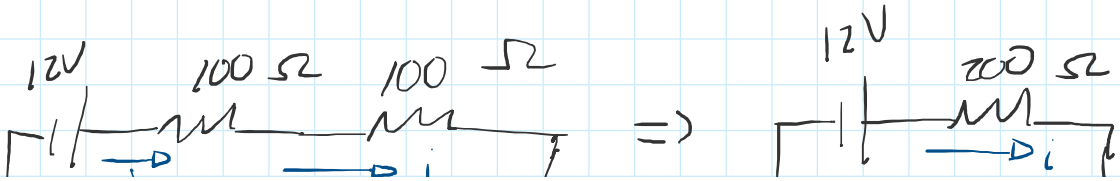


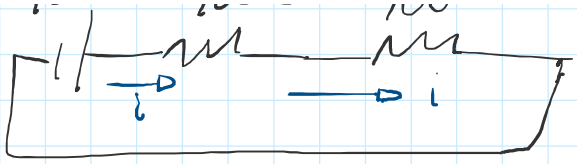
$V_{R_1} = 3V$

Fuente

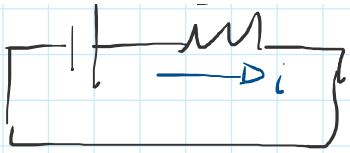


Resistencias en Serie





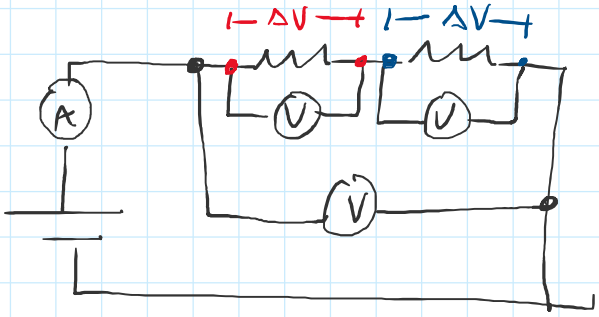
$\Rightarrow$



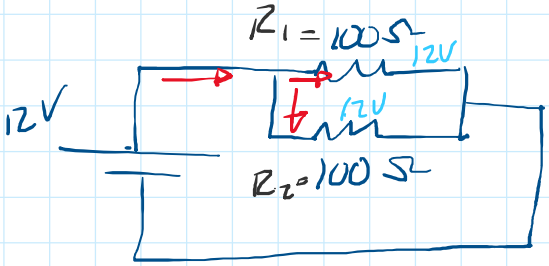
$V_1 = 0,06\,(100) = 6\,V$

$V_2 = 0,06\,(50) = 6\,V$

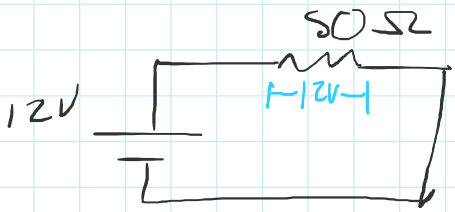
$i = \frac{12}{200} = 0,06\,A = 80\,mA$



$\longrightarrow$ Entregable 2



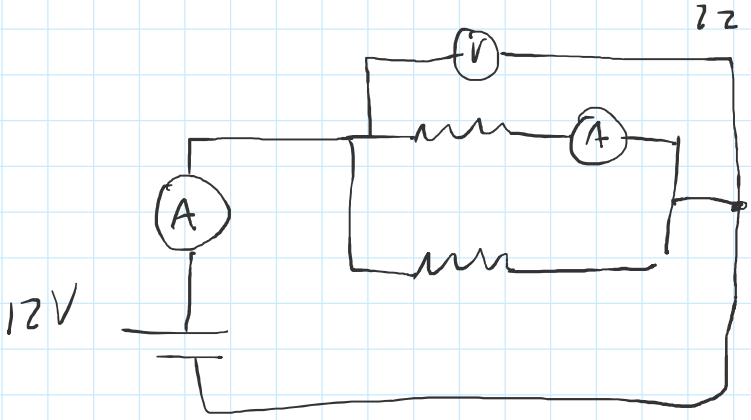
$Req = \left(\frac{1}{100} + \frac{1}{100}\right)^{-1} = 50\,\Omega$



$i = \frac{V}{R} = \frac{12}{50} = 0,24\,A = 240\,mA$

$i_1 = \frac{V_1}{R_1} = \frac{12}{100} = 120\,mA$

$i_2 = \frac{V_2}{R_2} = \frac{12}{100} = 120\,mA$



$\longrightarrow$ Entregable