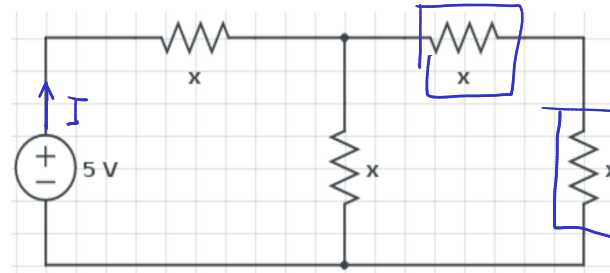
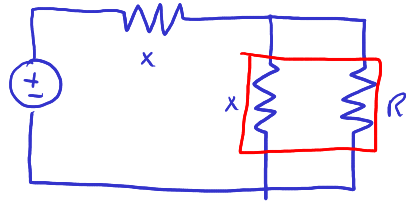


### Resistencia desconocida

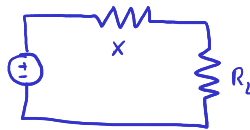
Un circuito consta de 4 resistencias idénticas de valor  $x$ , dispuestas como muestra la figura. Calcule  $x$  para que circulen 10 mA por la fuente.



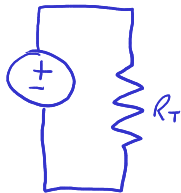
$$V = IR$$



$$R_1 = x + x = 2x$$



$$\frac{1}{R_2} = \frac{1}{x} + \frac{1}{2x} = \frac{3}{2x} \quad R_2 = \frac{2x}{3}$$



$$R_T = x + \frac{2}{3}x = \frac{5}{3}x$$

$$R = \frac{V}{I} = \frac{5}{3}x$$

$$x = \frac{3V}{5A} = \frac{3 \cdot 5^{-1}}{5 \cdot 10^{-2}} = 300 \Omega //$$