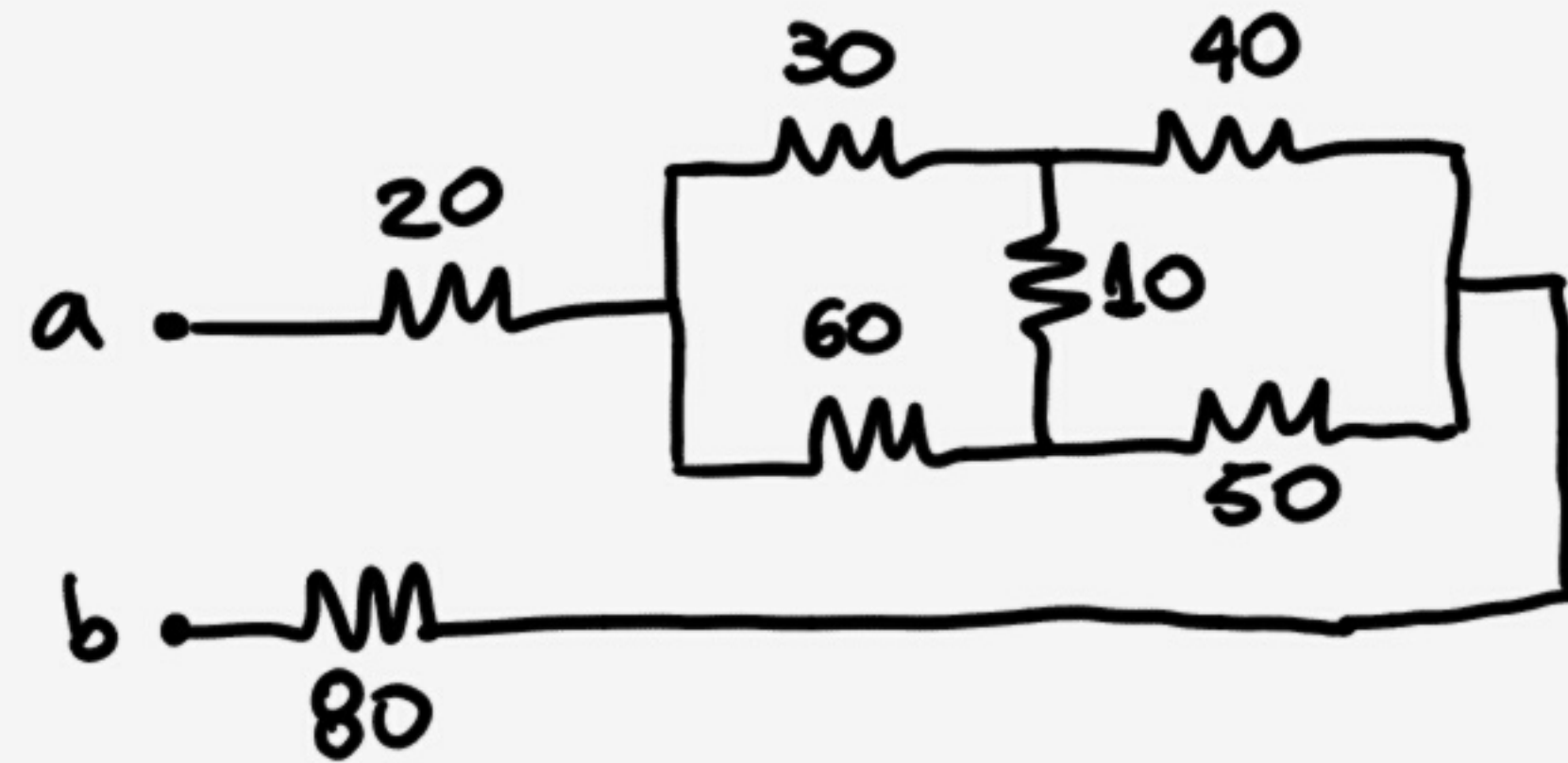
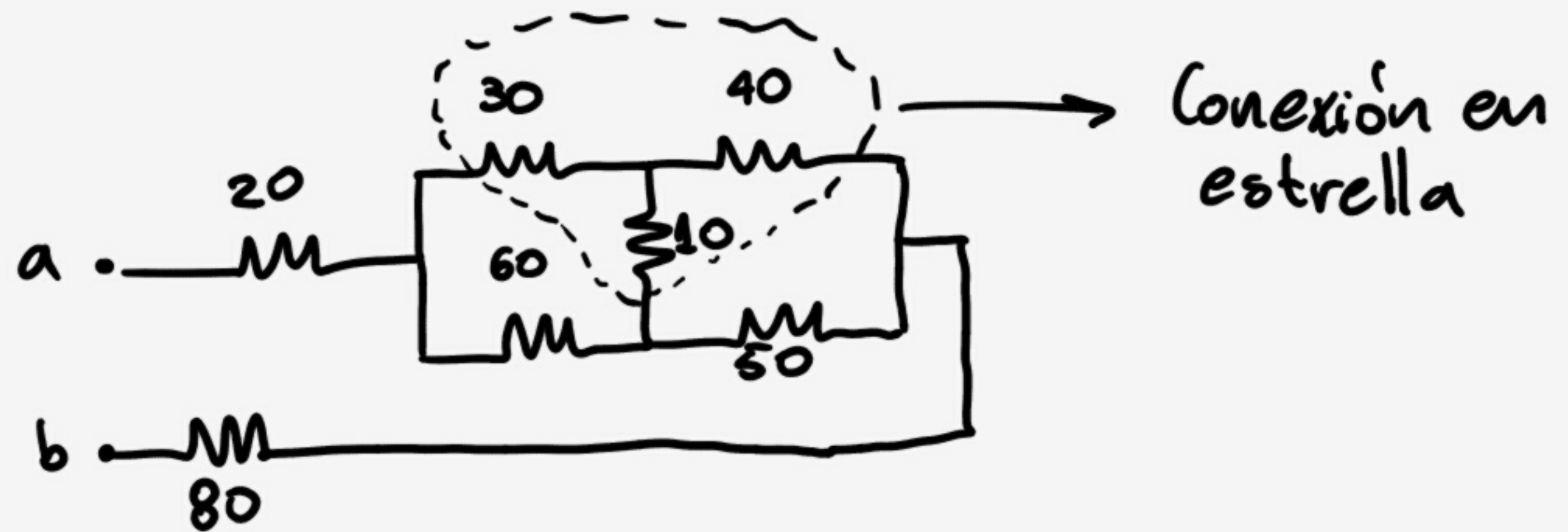


Obtener la resistencia equivalente entre los puntos a y b del siguiente circuito. Todas las resistencias están en Ω .



Solución:



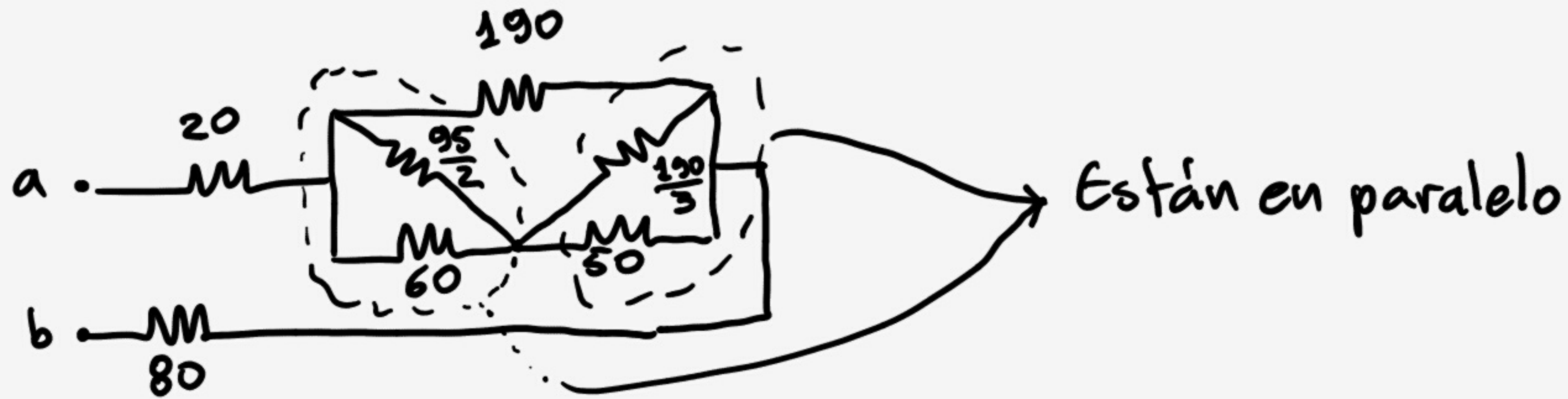


$$R_a = \frac{30 \times 40 + 30 \times 10 + 40 \times 10}{10}$$

$$R_a = \frac{1200 + 300 + 400}{10} = 190$$

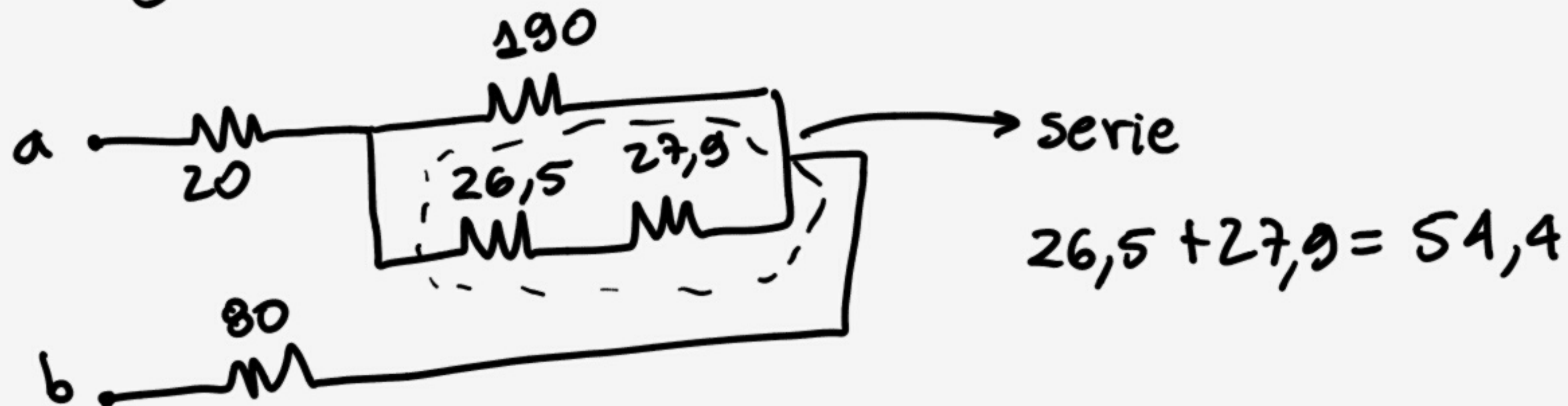
$$R_b = \frac{1900}{40} = \frac{95}{2}$$

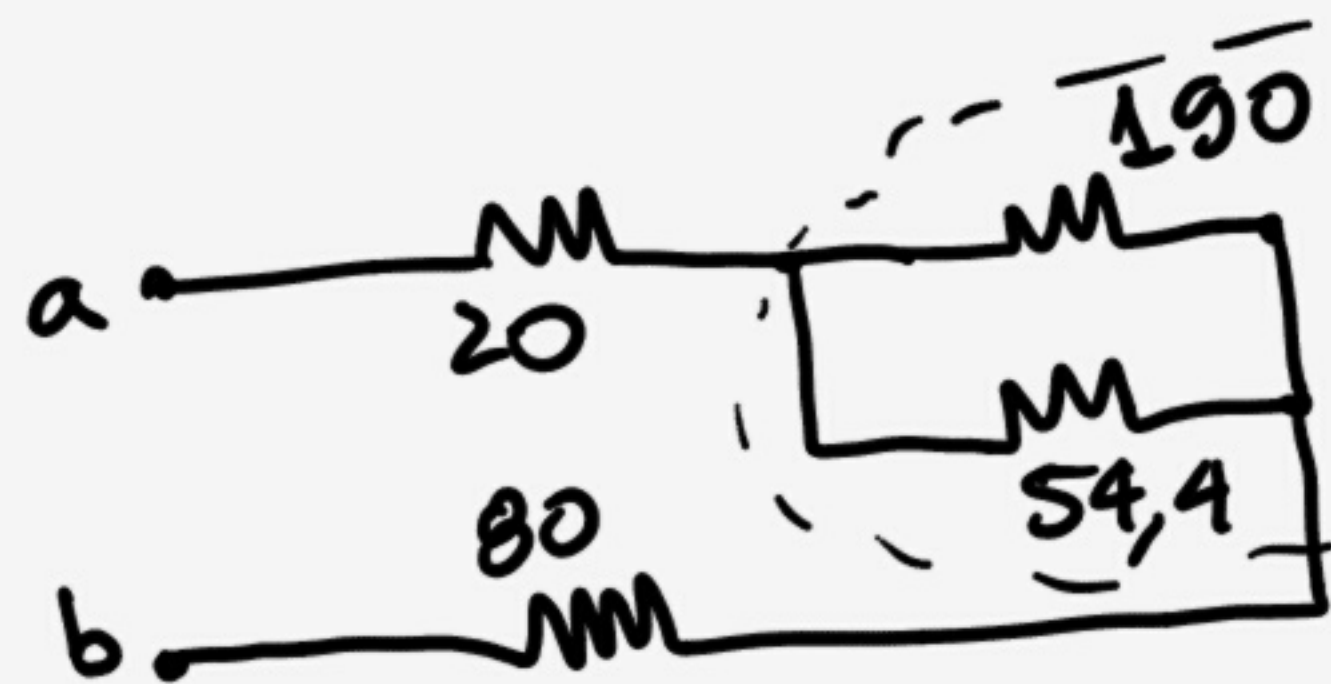
$$R_c = \frac{1900}{30} = \frac{190}{3}$$



$$\frac{\frac{95}{2} \times 60}{\frac{95}{2} + 60} = \frac{5700}{215} = \frac{1140}{43} = 26,5$$

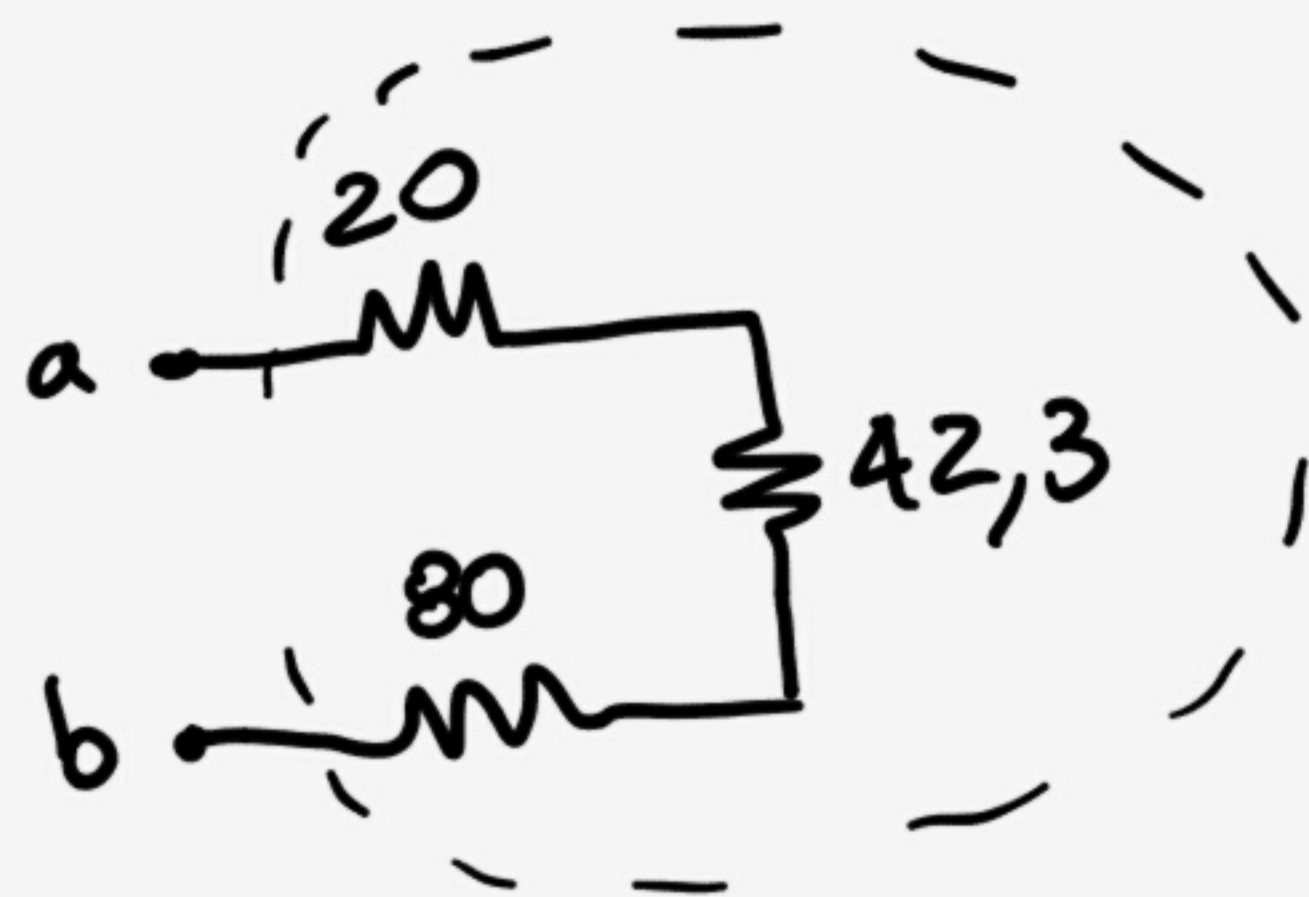
$$\frac{\frac{190}{3} \times 50}{\frac{190}{3} + 50} = \frac{9500}{340} = \frac{475}{17} = 27,9$$





→ Paralelo

$$\frac{190 \times 54,4}{190 + 54,4} = 42,3$$



→ Serie

$$20 + 42,3 + 80 = 142,3$$

