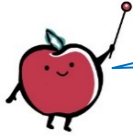


直列・並列回路の抵抗

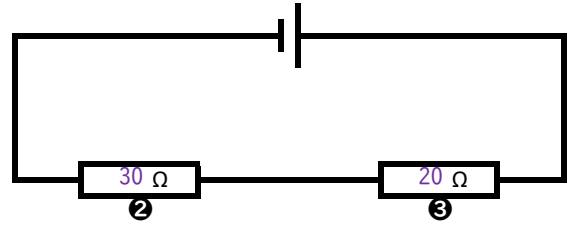
直列回路の**抵抗**は・・・

$$\textcircled{1} = \textcircled{2} + \textcircled{3}$$



これは簡単だね！

$$\textcircled{1} (50) \Omega$$

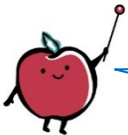
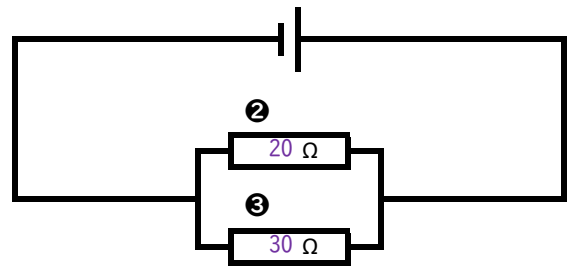


並列回路の**抵抗**は・・・

$$\textcircled{1} = (\textcircled{2} \times \textcircled{3}) \div (\textcircled{2} + \textcircled{3})$$

または $\frac{1}{\textcircled{2}} + \frac{1}{\textcircled{3}} = \frac{1}{\textcircled{1}}$ (逆数の和の逆数)

$$\textcircled{1} (12) \Omega$$



ちょっと難しいけど頑張ってついてきて！
実際に計算を確認してみよう。

パターン①

$$\frac{1}{\textcircled{2}} + \frac{1}{\textcircled{3}} = \frac{1}{\textcircled{1}} \text{ (逆数の和の逆数)} \rightarrow \frac{1}{20} + \frac{1}{30} = \frac{5}{60} \xrightarrow{\text{逆数にする (上下逆)}} \frac{60}{5} = 12$$

パターン② **おすすめ!**

$$\begin{aligned} \textcircled{1} &= (\textcircled{2} \times \textcircled{3}) \div (\textcircled{2} + \textcircled{3}) = (20 \times 30) \div (20 + 30) \\ \textcircled{1} &= 600 \div 50 \\ \textcircled{1} &= 12 \end{aligned}$$

並列の**抵抗**の合成をマスターすれば怖いものなし！
お疲れさまでした！

