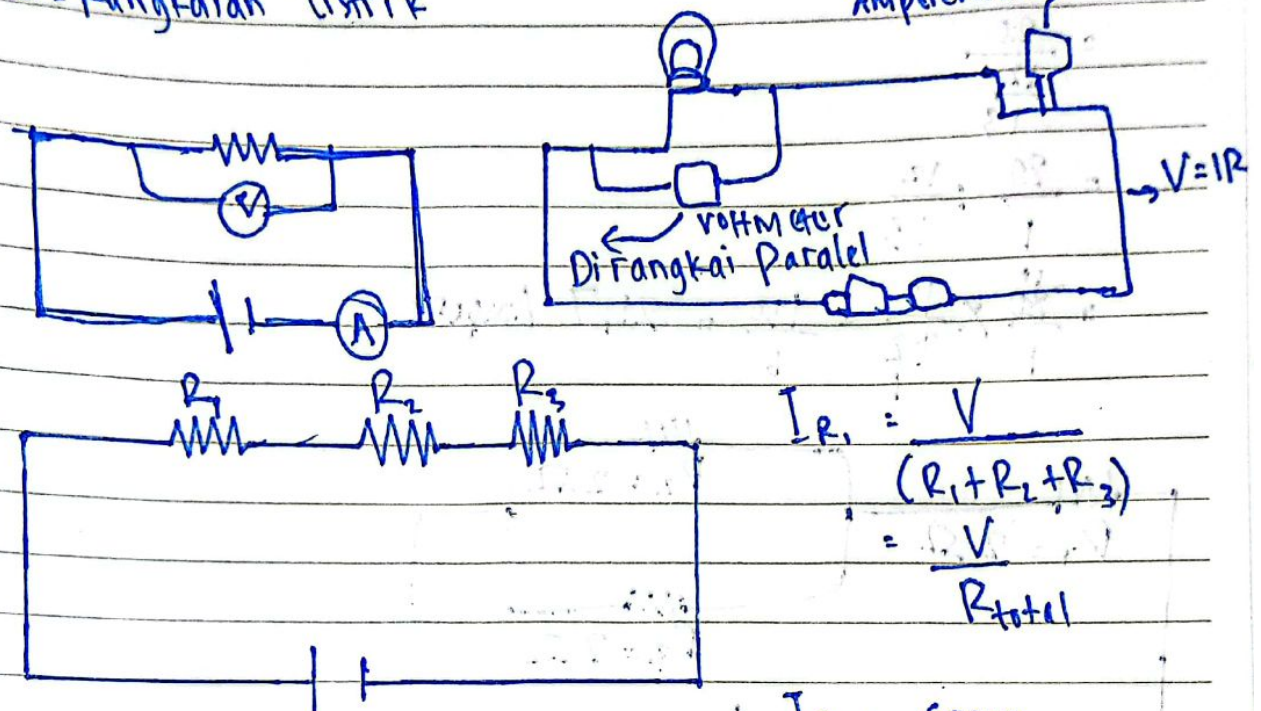


Elektrodinamika

- ①. Hukum Ohm
- ②. Rangkaian Listrik



$$I_{R_1} = \frac{V}{(R_1 + R_2 + R_3)}$$

$$= \frac{V}{R_{\text{total}}}$$

$$I_{R_2} = \text{SAMA}$$

$$I_{R_3} = \text{SAMA}$$

$$V_{R_1} = I \cdot R_1$$

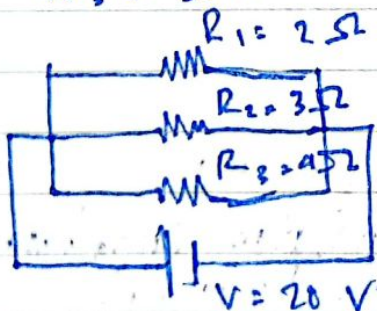
$$V_{R_1} = \frac{V}{(R_1 + R_2 + R_3)} \cdot R_1$$

$$V_{R_2} = \text{SAMA}$$

$$V_{R_3} = \text{SAMA}$$

$$I = \frac{V}{(R_1 + R_2 + R_3)}$$

$$R_1 = \frac{V}{(R_1 + R_2 + R_3)} = \frac{V}{R_t} \rightarrow R_1 \cdot \frac{V}{(R_1 + R_2 + R_3)} \cdot R_1$$



$$V_{R_1} = V_{R_2} = V_{R_3} = V$$

$$I_{R_1} = \frac{V}{R_1}$$

$$I_{R_2} = \text{SAMA}$$

$$I_{R_3} = \text{SAMA}$$

$$I_{R_2} = \text{SAMA}$$

$$I_{R_3} = \text{SAMA}$$

$$R_t =$$

$$\frac{1}{R_t} = \frac{1}{R_1} + \frac{1}{R_2} + \frac{1}{R_3}$$

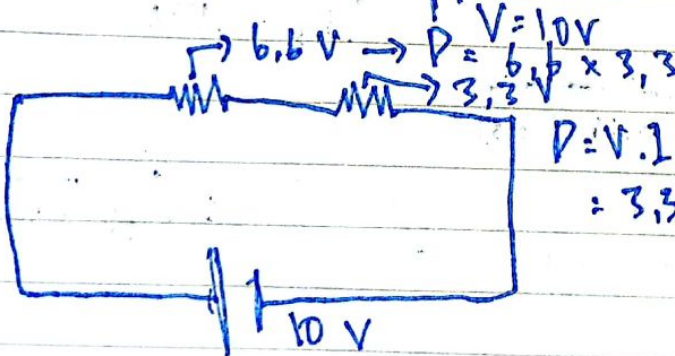
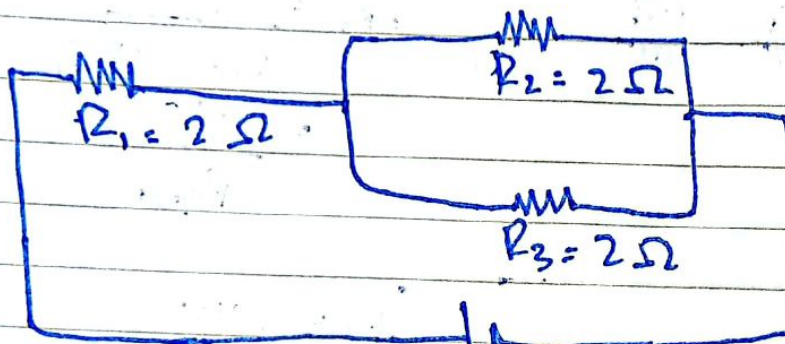
$$P = I \times V \rightarrow \text{Daya}$$

$$I = \frac{V}{R_t}$$

$$= \frac{20}{\frac{12}{13}}$$

$$= \frac{20}{1} \cdot \frac{13}{12}$$

$$= \frac{20}{1} \times \frac{13}{12} = \frac{130}{6} = 21,7 \text{ Ampere}$$



$$P = V \cdot I$$

$$= 3,3 \cdot 3,3$$

$$I_A = \frac{10}{3} = 3,3 \text{ A}$$

Note :

• Susunan hambatan Seri → disusun berurutan

→ Kuat arus yang mengalir tiap hambatan sama besar

→ Potensial total sama dengan jumlah potensial masing-masing hambatan

- Rangkaian susunan paralel $\rightarrow$ disusun sejajar
- $\Rightarrow$ kuat arus total yang mengalir sama dengan jumlah kuat arus yang mengalir pada tiap hambatan
 - $\Rightarrow$ beda potensial pada tiap hambatan sama dengan beda potensial pada sumber,