

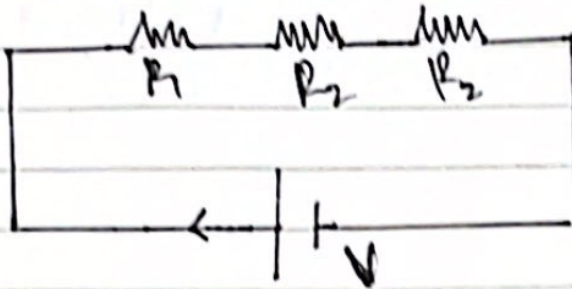
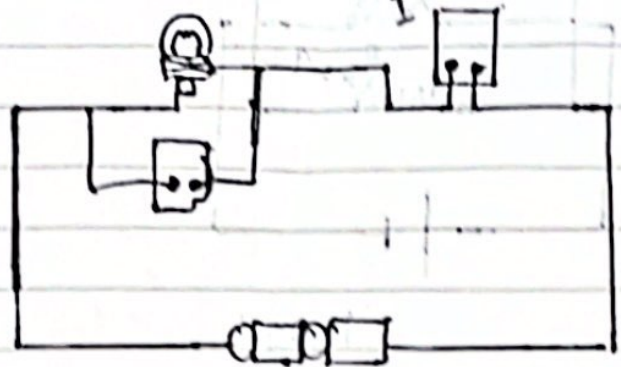
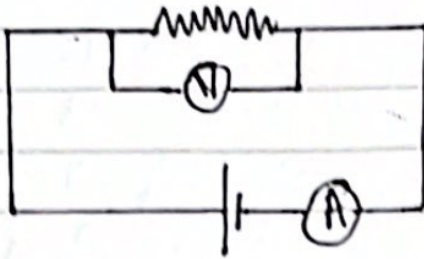
KALISMA

Elektrodinamika

$$V = I \cdot R$$

1). Hukum Ohm

2). Rangkaian listrik



Rangkaian Seri

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

$$I = I_{R1} = I_{R2} = I_{R3}$$

Arus pada rangkaian seri walaupun hambatannya berbeda-beda Arusnya akan tetap sama

berapa tegangan di R_1 ?

$$I_{R1} = \frac{V}{(R_1 + R_2 + R_3)}$$

$$= \frac{V}{R_0}$$

$$I_{R2} = \frac{V}{(R_1 + R_2 + R_3)}$$

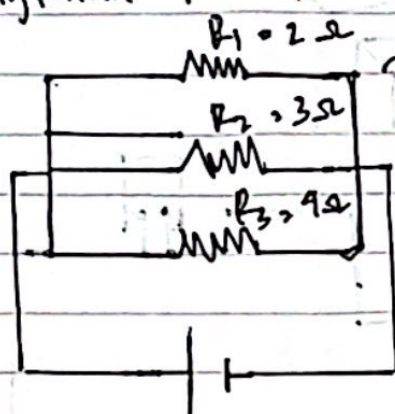
$$I_{R3} = I$$

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

$$V_{R1} = I \cdot R_1$$

$$V_{R1} = \frac{V}{(R_1 + R_2 + R_3)} \cdot R_1$$

Rangkaian Paralel



$$V = 20V$$

dicari R_t ?

$$V_{R1} = V_{R2} = V_{R3} = V$$

$$I_{R1} = \frac{V}{R_1}$$

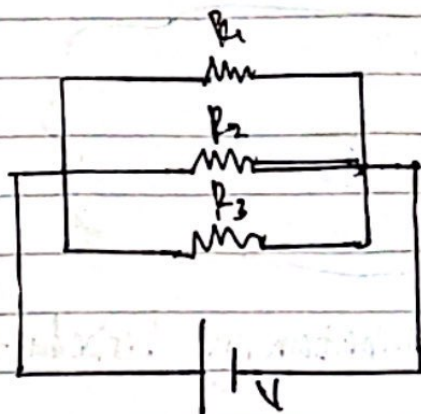
$$I = \frac{V}{R_t}$$

$$I_{R2} = \frac{V}{R_2}$$

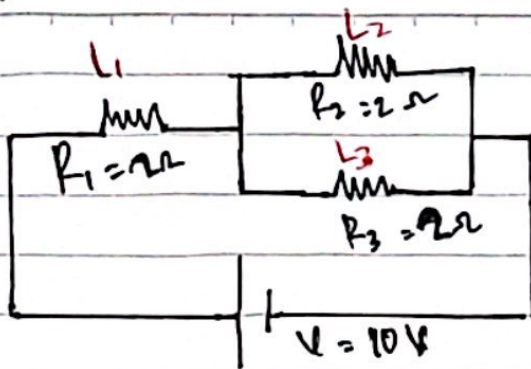
$$R_t = ?$$

$$I_{R3} = \frac{V}{R_3}$$

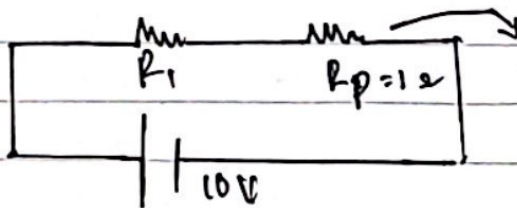
$$\frac{1}{R_t} = \frac{1}{R_1} + \frac{1}{R_2} + \frac{1}{R_3}$$



Kalima



$$\begin{aligned}
 &6.6V \cdot p \approx 6.6 \cdot 3.3 \\
 &2\Omega \quad 1\Omega \quad 3.3 \text{ Volt} \\
 &P = VI \\
 &= 3.3 \cdot 3.3 \\
 &= 9.9 \text{ A} \\
 &I = \frac{10}{3} = 3.3 \text{ A}
 \end{aligned}$$



$$\begin{aligned}
 \frac{1}{R_p} &= \frac{1}{2} + \frac{1}{2} \\
 \frac{1}{R_p} &= \frac{2}{2} \\
 R_p &= 1\Omega
 \end{aligned}$$

$$\begin{aligned}
 R_b &= R_1 + R_p = 2 + 1 = 3\Omega \\
 I_b &= \frac{V}{R_b} = \frac{10}{3} = 3.33 \text{ A}
 \end{aligned}$$

$$I_{R_1} = 3.33 \text{ A}$$

$$I_{R_p} = 3.33 \rightarrow V_{R_p} = R_p \cdot I = 1.33 \cdot 3.33 = 3.3 \text{ Volt}$$

$$I_{R_2} = I_{R_3} = \frac{V_{R_p}}{R_2} = \frac{3.33}{2}$$