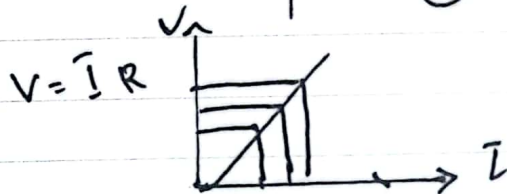
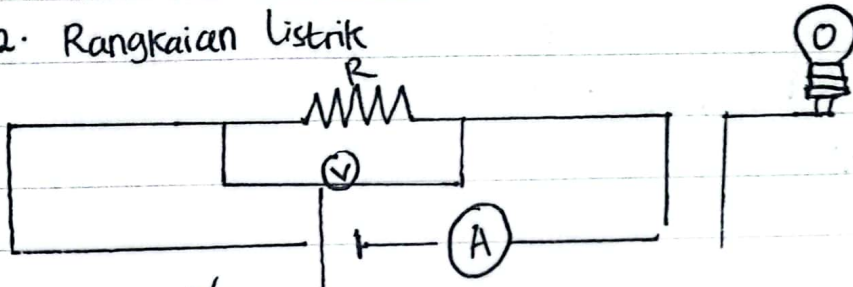


Kalisma Pertemuan ke 10.

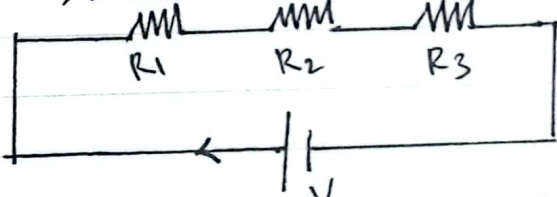
Elektrodinamika

1. Hukum Ohm
2. Rangkaian Listrik



2) Rangkaian Listrik

a) susunan Hambatan Seri



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

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

dinamakan Rangkaian
Paralel

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

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

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

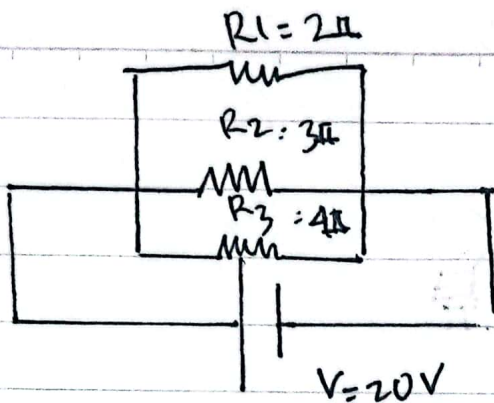
$$I_{R3} = I \text{ dan}$$

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

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

$$V_{R2} = I \cdot R_2$$

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



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

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

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

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

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

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

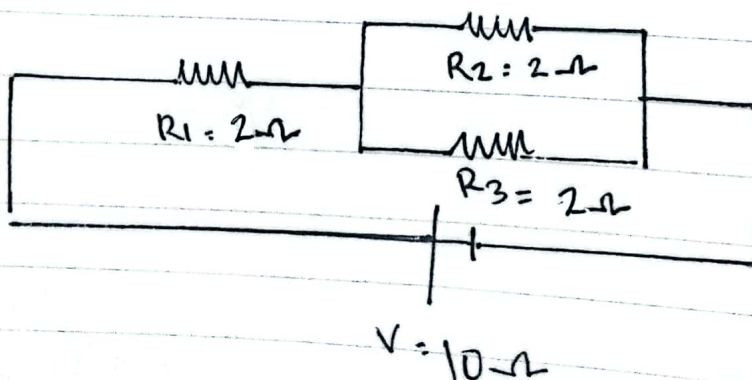
$$\frac{1}{R_t} = \frac{1}{2} + \frac{1}{3} + \frac{1}{4}$$

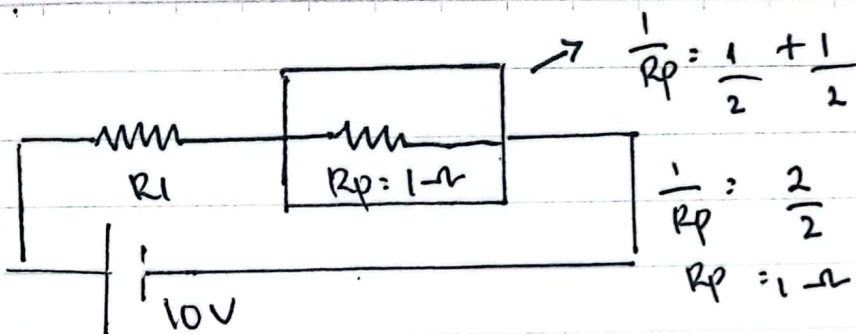
$$= \frac{6}{12} + \frac{4}{12} + \frac{3}{12}$$

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

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

$$I = \frac{V}{R_t} \rightarrow \frac{20}{\frac{12}{13}} = 21,73A$$





$$R_t = R_1 + R_p = 2 + 1 = 3 \Omega$$

$$I_t = \frac{V}{R_t} = \frac{10}{3} = 3,33 \text{ A}$$

$$I_{R_1} = 3,33 \text{ A}$$

$$I_{R_p} = 3,33 \rightarrow V_{R_p} = R_p \cdot I_{R_p} = 1 \cdot 3,33 = 3,3 \text{ Volt}$$

$$I_{R_2} = I_{R_3} = \frac{V_{R_p}}{R_2} = \frac{3,33}{2}$$

maka, $L_2 = L_3$ lebih terang di bandingkan L_1 lebih redup.