

Elektrodinamika.

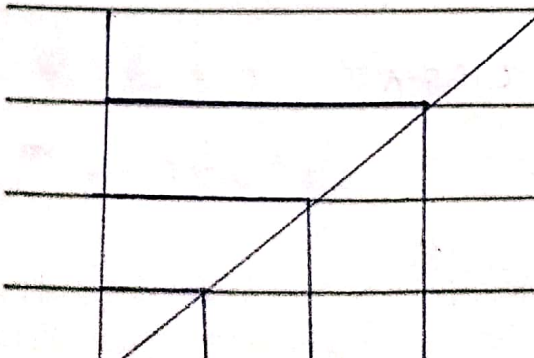
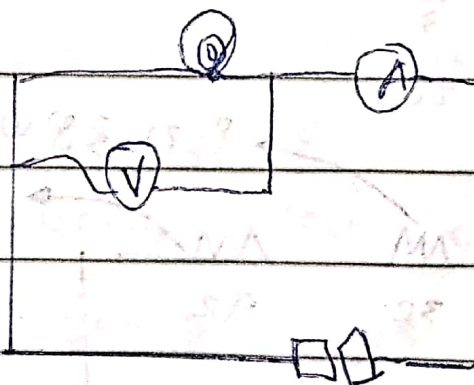
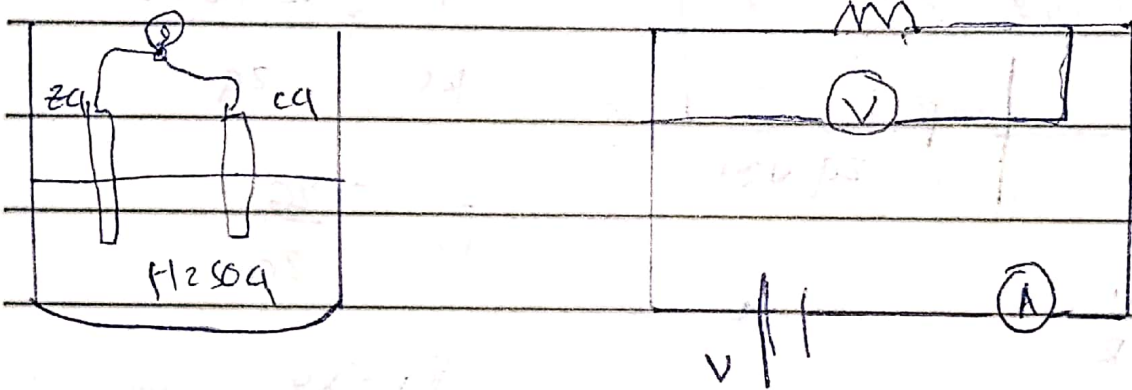
1. Hukum Ohm

2. Rangkaian listrik.

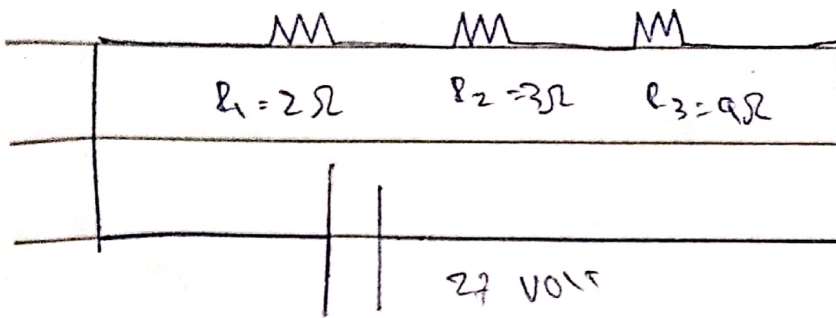
Pembahasan:

$$J = \sigma E \quad \swarrow \quad DC$$

$$V = I R \quad \swarrow \quad AC$$

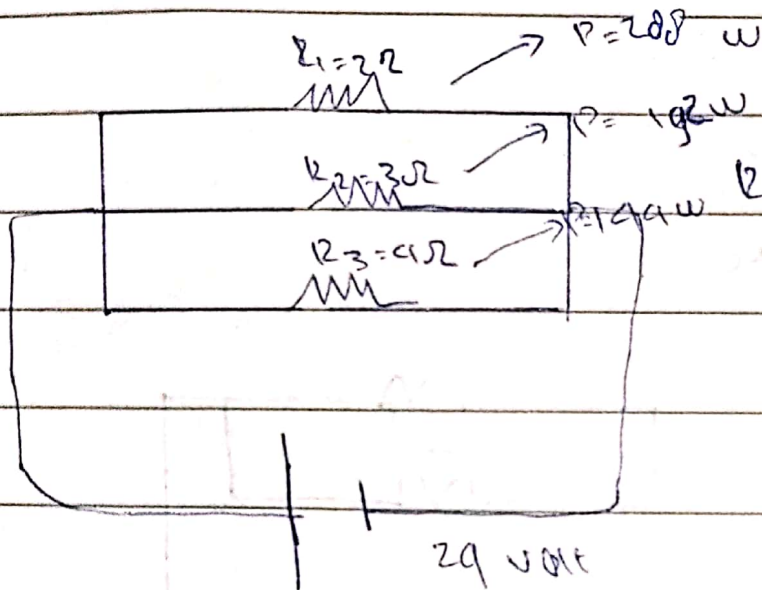


$$V = I R$$



$$Z_T = 3A$$

CS



$$R_T \Rightarrow \frac{1}{R_T} = \frac{1}{2} + \frac{1}{3} + \frac{1}{9}$$

$$\frac{1}{R_T} = \frac{12 + 8 + 6}{24}$$

$$\frac{1}{R_T} = \frac{26}{24}$$

$$R_T = \frac{24}{26}$$

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

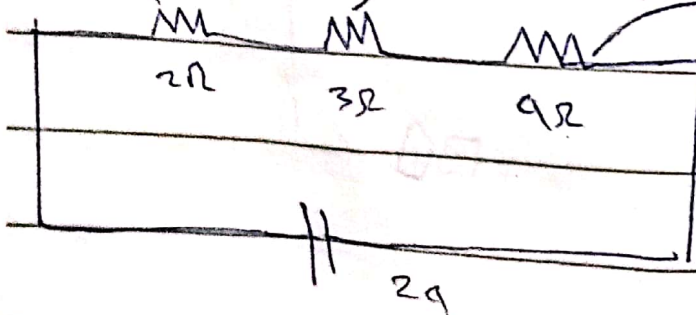
$$= \frac{24}{\frac{24}{26}}$$

$$= 26A$$

$$P = 192W$$

$$P = 21.38W$$

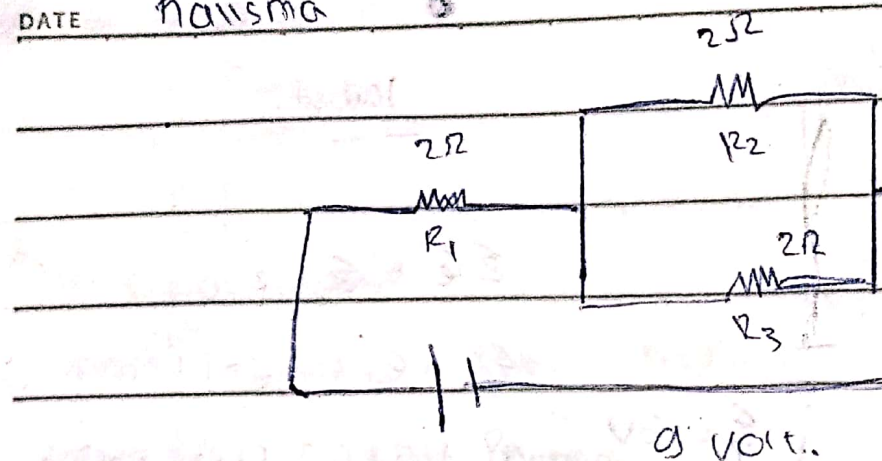
$$P = 20.51W$$



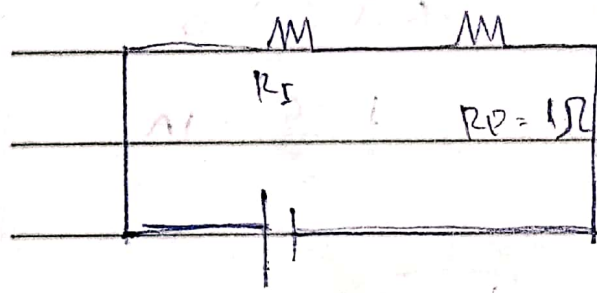
$$I = 2.67A$$

DATE

Kausma



9 volt.



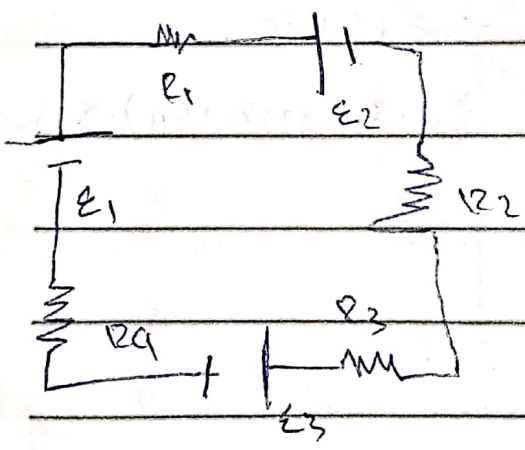
$$R_t = 3\Omega$$

$$I = 3A$$

$$V_{R1} = I \cdot R_1 = 3 \cdot 1 = 3V$$

$$V_{R2} = 3V$$

$$V_{R3} = 3V$$



$$E_1 > E_2 > E_3$$

(1) Gambar arah arus emf

Emfnya E

(2) gambar loop & susun

(3) jika arah arus searah dengan arah loop maka +

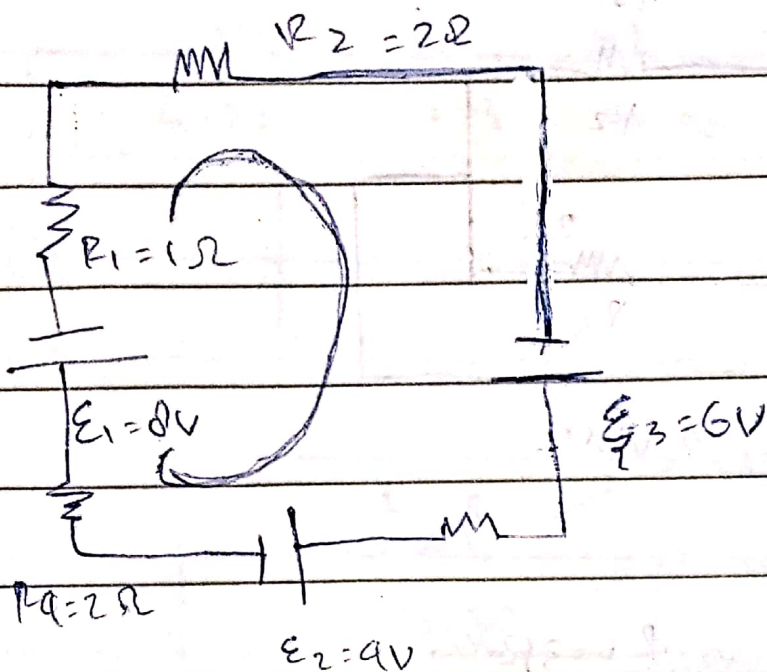
$$\sum E + \sum i \cdot R = 0$$

$$E_1 + E_2 + E_3 + I(R_1 + R_2 + R_3) = 0$$

29-9-2024.

S M T W T F S

ATE



Jawab:

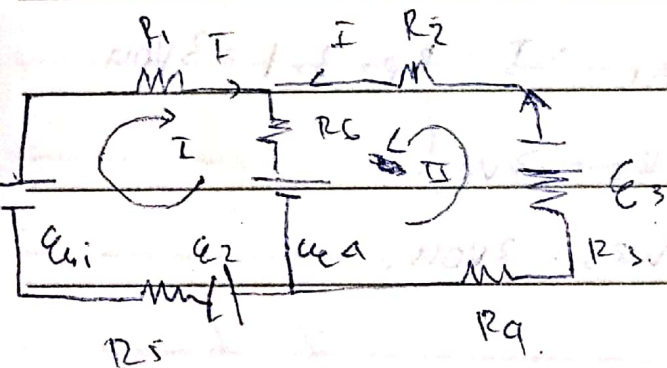
$$\sum \mathcal{E} + \sum I \cdot R = 0$$

$$\mathcal{E}_1 + \mathcal{E}_2 + \mathcal{E}_3 - I(R_1 + R_2 + R_3) = 0$$

$$8 + 4 - 6 - I(1 + 2 + 2) = 0$$

$$6 - I(6) = 0$$

$$I = \frac{6}{6} = 1A$$



LOOP I

$$\sum \mathcal{E} + \sum I \cdot R = 0$$

$$-\mathcal{E}_1 + \mathcal{E}_4 + \mathcal{E}_2(R_1 + R_2) + I_3 + R_3 = 0$$

LOOP II

$$\sum \mathcal{E} + \sum I \cdot R = 0$$

$$-\mathcal{E}_3 + \mathcal{E}_4 + I_2(R_2 + R_3 + R_4) + I \cdot R_6 = 0$$