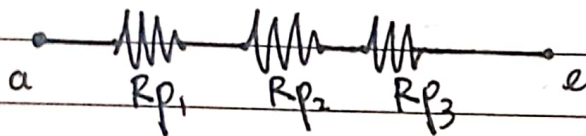
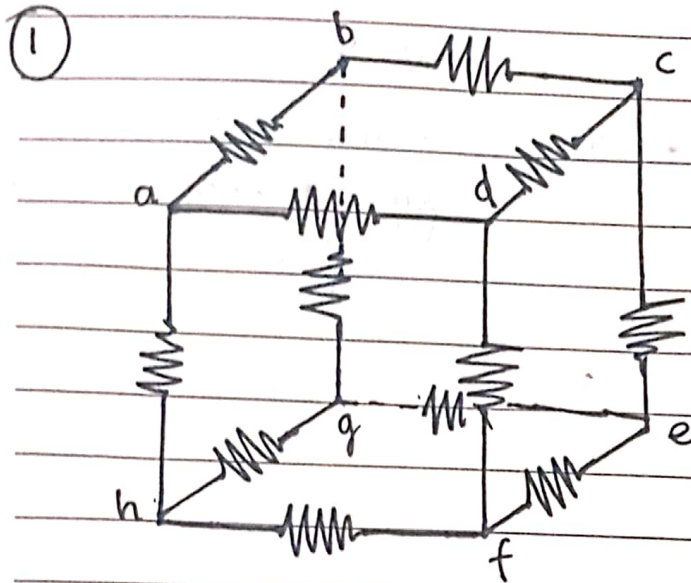


Nama : Jestica Dwi Cahyani Utari
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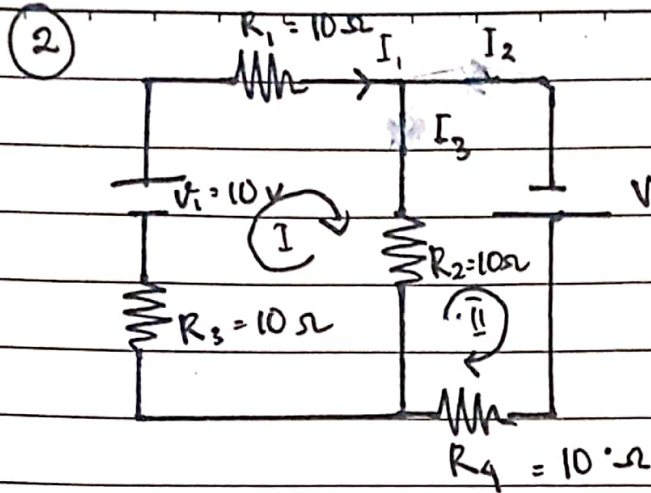
No. _____

Date . . .



$$\frac{1}{R_{p1}} = \frac{1}{R_{ab}} + \frac{1}{R_{ad}} + \frac{1}{R_{ag}}$$

$$\frac{1}{R_{p3}} = \left(\frac{1}{R_{ec}} + \frac{1}{R_{ef}} + \frac{1}{R_{eh}} \right) + \left(\frac{1}{R_{ab}} + \frac{1}{R_{ad}} + \frac{1}{R_{ag}} \right)$$



$$V_1 > V_2$$

Hitung arus
pada masing-masing
loop.

penyelesaian

loop 1

$$\sum V + \sum I \cdot R = 0$$

$$-10 + I_1 (10 + 10) + I_3 (10) = 0$$

$$-10 + 20 I_1 + 10 I_3 = 0$$

$$I_1 = I_3 + I_2$$

$$-10 + 20 (I_3 + I_2) + 10 I_3 = 0$$

$$-10 + 20 I_3 + 20 I_2 + 10 I_3 = 0$$

$$-10 + 30 I_3 + 20 I_2 = 0$$

$$30 I_3 + 20 I_2 = 10 \quad \dots \text{pers. (1)}$$

loop 2

$$\sum V + \sum I \cdot R = 0$$

$$5 + 10 I_2 + 10 I_3 = 0 \quad \dots \text{pers (2)}$$

substitusi

$$-10 + 30 I_3 + 20 I_2 = 0 \quad \left| \begin{array}{l} \times 1 \\ \times 3 \end{array} \right| \quad -10 + 30 I_3 + 20 I_2 = 0$$

$$5 + 10 I_3 + 10 I_2 = 0 \quad \left| \begin{array}{l} \times 1 \\ \times 3 \end{array} \right| \quad 15 + 30 I_3 + 30 I_2 = 0$$

$$-25 - 10 I_2 = 0$$

$$I_2 = -2,5 \text{ A}$$

No.

Date . .

$$5 + 10I_3 + 10I_2 = 0$$

$$5 + 10I_3 + 10(-2,5) = 0$$

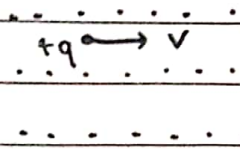
$$5 + 10I_3 - 25 = 0$$

$$10I_3 = 25 - 5$$

$$10I_3 = 20$$

$$I_3 = 2 \text{ A}$$

③

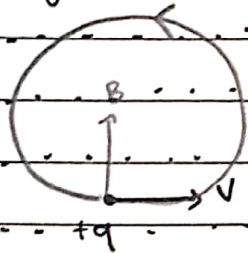


a) gambar arah muatan listrik tersebut

b) rumuskan jumlah putaran setiap detiknya

Penyelesaian

a)



$$b) f = \frac{1}{T}$$



$$f = \frac{1}{T}$$

$$T = \frac{2\pi r}{v}$$

$$T = \frac{2\pi \cdot \frac{mv}{qB}}{v}$$

$$T = \frac{2\pi m}{qB}$$

$$f = \frac{1}{\frac{2\pi m}{qB}}$$

$$f = \frac{qB}{2\pi m}$$

