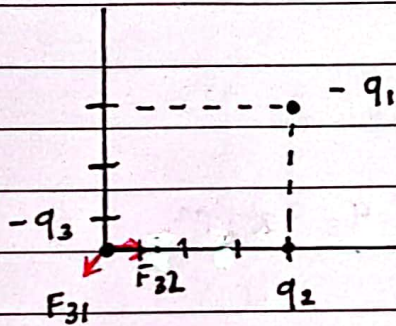


$$F_{13} = k \frac{q_1 q_3}{3^2} (-\hat{j}) \rightarrow \text{asalnya dr } \frac{(0\hat{i} - 3\hat{j})}{\sqrt{0^2 + 3^2}}$$

$$F_{12} = k \frac{q_1 q_2}{5^2} \left(\frac{-4\hat{i} + 3\hat{j}}{5} \right)$$

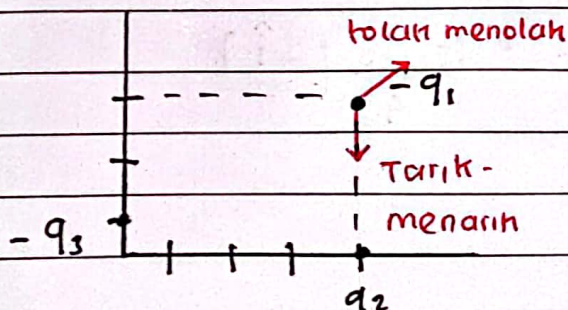
Menggambar Gaya

18 - 03 - 2024



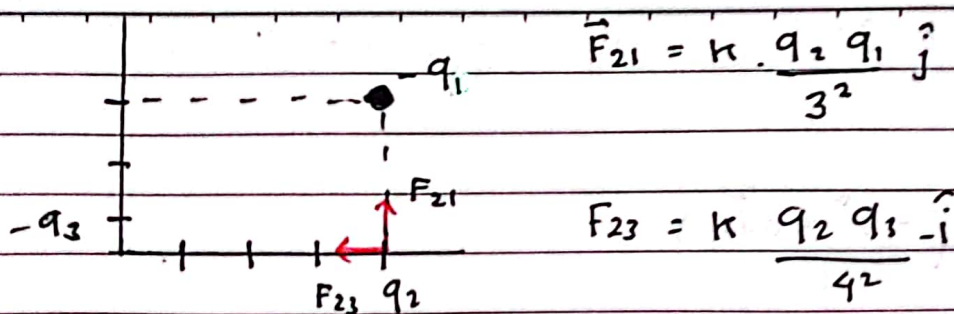
$$\vec{F}_{31} = \frac{1}{4\pi\epsilon_0} \frac{q_3 q_1}{5^2} \left(\frac{-4\hat{i} - 8\hat{j}}{5} \right)$$

$$\vec{F}_{22} = \frac{1}{4\pi\epsilon_0} \frac{q_3 q_2}{4^2} \hat{i}$$



$$\begin{aligned} \vec{F}_{12} &= k \frac{q_1 \cdot q_2}{3^2} \left(\frac{0\hat{i} + 3\hat{j}}{3} \right) \\ &= k \frac{q_1 q_2}{3^2} \hat{j} \end{aligned}$$

$$\vec{F}_{13} = k \frac{q_1 q_3}{5^2} \left(\frac{4\hat{i} + 3\hat{j}}{5} \right)$$



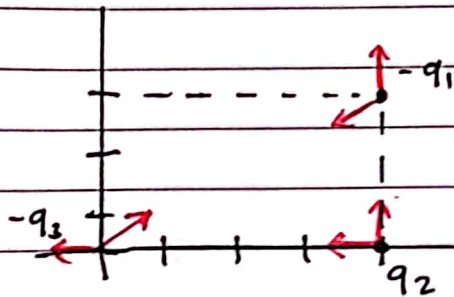
$$\vec{F}_{21} = k \frac{q_2 q_1}{3^2} \hat{j}$$

$$\vec{F}_{23} = k \frac{q_2 q_3}{4^2} (-\hat{i})$$

Medan

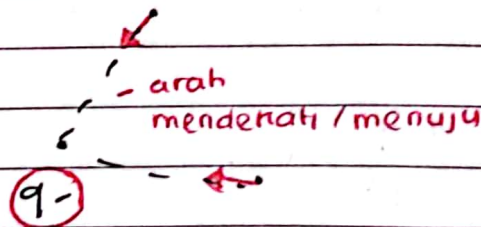
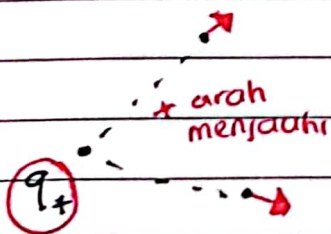
medan

$$\vec{E} = \frac{\vec{F}}{q}$$



$$\vec{E}_3 = \frac{\vec{F}}{q_3} = k \frac{q_3 q_1}{r^2} \frac{1}{q_3}$$

$$= k \frac{q_2}{r^2}$$



$$\vec{E}_{31} = k \frac{q}{5^2} \left(\frac{4\hat{i}}{5} + \frac{3\hat{j}}{5} \right)$$

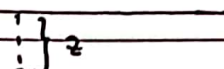
$$\vec{E}_{32} = k \frac{q_2}{4^2} (-\hat{i})$$

Muatan non

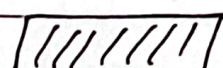
$$1) \vec{E} = k \frac{q}{r^2} \hat{r}$$

$$= k \sum_{i=1}^n \frac{q_i}{r_i^2} \hat{r}_i$$

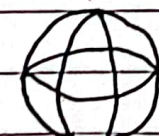
$$= k \sum_{i=1}^n \left[\frac{q_1}{r_1^2} \hat{r}_{01} + \frac{q_2}{r_2^2} \hat{r}_{02} + \dots + \frac{q_n}{r_n^2} \hat{r}_{0n} \right]$$

2) 

$$\vec{E} = k \int \frac{dq}{r^2} \hat{r}_0 = k \int \frac{\lambda dx}{r^2} \hat{r}_0 \rightarrow \text{medan pd kawat lurus}$$

3) 

$$\vec{E} = k \iint \frac{\sigma da}{r^2} \hat{r}_0 \rightarrow \text{luas}$$

4) 

$$\vec{E} = k \iiint \frac{\rho d\tau}{r^2} \hat{r}_0 \rightarrow \text{volume}$$

$$\vec{E} = () q_i$$

$$\vec{E} = \int () \lambda dl$$

$$\vec{E} = \int \frac{1}{4\pi\epsilon_0}$$