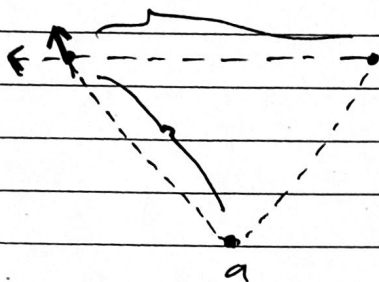


Listrik Statis

Medan magnet adalah daerah di sekitar magnet atau arus listrik dimana gaya magnet dapat dirasakan. Medan magnet mempengaruhi muatan listrik yg lain

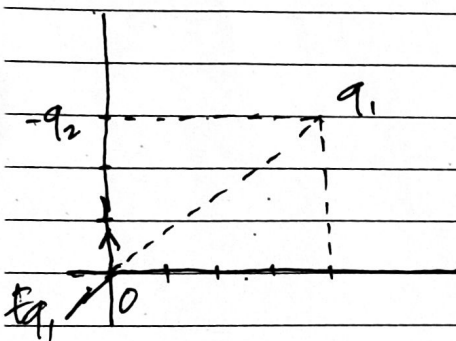
$$k = \frac{1}{4\epsilon_0}$$

$$E = \frac{F}{Q} = k \frac{q}{r^2} \hat{r}_0$$



$$E_p = \vec{E}_Q + \vec{E}_q$$

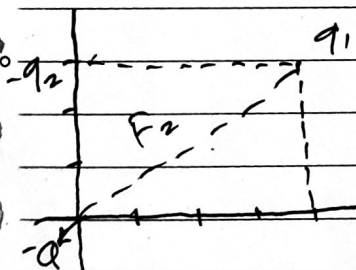
$$= k \left[\frac{1}{r^2} \hat{r}_0 + \frac{Q}{r^2} \hat{r}_0 \right]$$



$$E_{(0)} = k \left[\frac{q_2}{3^2} (\hat{j}) + \frac{q_1}{5^2} \left(\frac{-4\hat{i} - 3\hat{j}}{5} \right) \right]$$

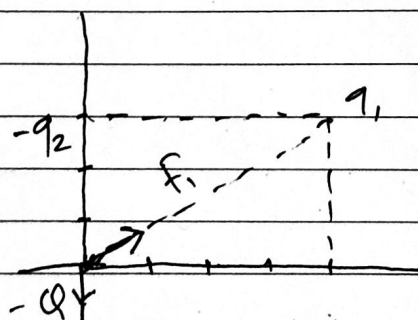
$$= k \left[-4 \frac{q_1}{125} \hat{i} + \left(\frac{7_2}{5} - \frac{3q_1}{125} \right) \hat{j} \right]$$

$$= \sqrt{(1^2 + 1)^2}$$



$$\vec{F} = \vec{F}_1 + \vec{F}_2$$

$$= kQ \left[\frac{q_2}{3^2} (\hat{j}) + \frac{q_1}{5^2} \left(\frac{-4\hat{i} - 3\hat{j}}{5} \right) \right]$$



$$\vec{F} = \vec{F}_1 + \vec{F}_2$$

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

$$= kQ$$