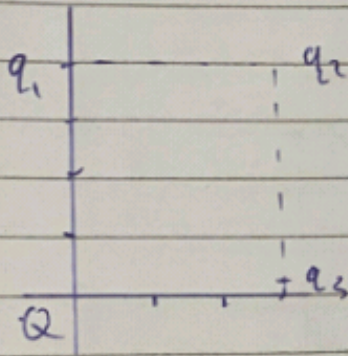


Quiz



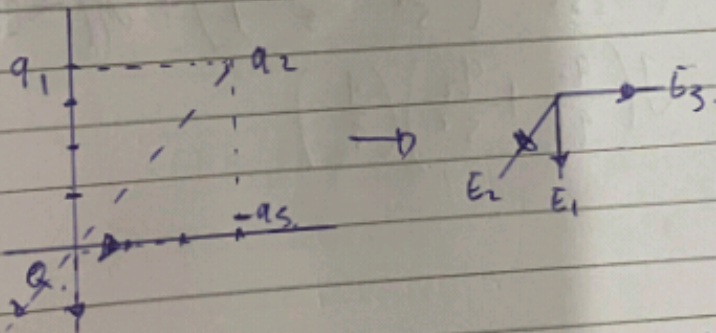
a. Hitung medan listrik di $Q (0,0)$.

b. Hitung gaya listrik di Q .

c. Hitung Potensial Q .

d. Hitung usaha $1/2$ memindahkan ke q muatan 1 s.d.

a. medan listrik.



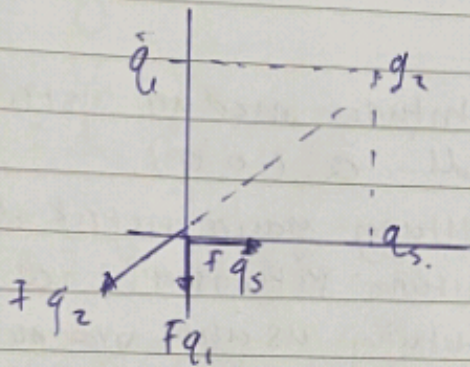
$$\vec{E}_p = k \left[\frac{q_1}{r^2} (-\hat{j}) + \frac{q_2}{s^2} \left(\frac{4\hat{i} - 3\hat{j}}{5} \right) + \frac{q_3}{3^2} (-\hat{i}) \right]$$

$$= k \left[-\hat{i} \left(\frac{q_3}{3^2} \right) + \left(\frac{q_2}{s^2} \frac{4}{5} \right) + \left(-\hat{j} \left(\frac{q_1}{r^2} \right) - \left(\frac{q_2}{s^2} \frac{3}{5} \right) \right) \right]$$

$$= k \left[-\hat{i} \left(\frac{q_3}{3^2} \right) + \left(\frac{q_2}{s^2} \frac{4}{5} \right) - \hat{j} \left(\frac{q_1}{r^2} \right) - \left(\frac{q_2}{s^2} \frac{3}{5} \right) \right]$$

No.

Date



$$F_Q = kQ \left(\frac{q_1}{r^2} (-\hat{j}) + \frac{q_2}{s^2} \left(\frac{-5\hat{i} - 4\hat{j}}{5} \right) + \frac{q_3}{3^2} (\hat{j}) \right)$$

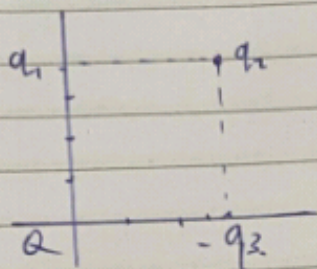
$$= kQ \left(\hat{j} \frac{q_1}{3^2} - \left(\frac{q_2}{5^2} - \frac{(-3)}{5} \right) \right)$$

$$- \hat{j} \left(\frac{q_1}{q^2} + \frac{q_2}{s^2} \right) \left(\frac{4}{5} \right)$$

No. _____

Date . . .

c. potensial.



$$V_P = k \left[\frac{q_1}{9} + \frac{q_2}{5} - \frac{q_3}{3} \right]$$

d. memindahkan q muatan

$$W_Q = V_1 Q + V_2 Q + V_3 Q$$

$$= k \frac{q_1 Q}{9} + k \frac{q_2 Q}{5} + \frac{q_3 Q}{3}$$

