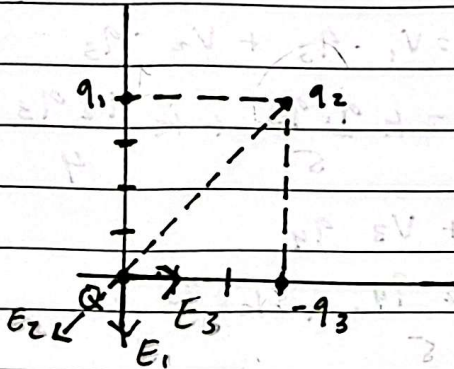


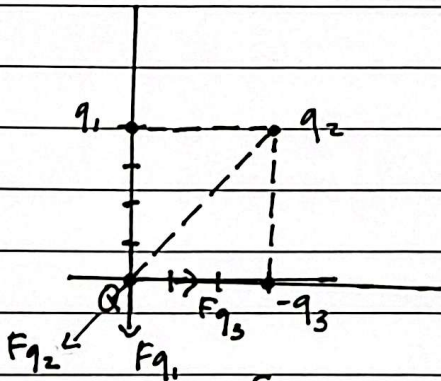
- Hitung medan listrik di titik (0,0)
- Hitung gaya listrik di titik (0,0)
- Hitung potensial listrik di titik (0,0)
- Hitung usaha untuk memindahkan ke 4 muatan tersebut!



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

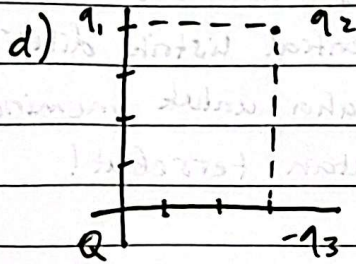
$$= k \left[\right]$$

b.



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

$$c) V_p = k \left[\frac{q_1}{4} + \frac{q_2}{5} - \frac{q_3}{3} \right]$$



$$W_1 = 0$$

$$W_2 = V_1 \cdot q_2$$

$$= k \frac{q_1 \cdot q_2}{3}$$

$$W_3 = V_1 \cdot q_3 + V_2 \cdot q_3$$

$$= k \frac{q_1 \cdot q_3}{5} + k \frac{q_2 \cdot q_3}{4}$$

$$W_4 = V_1 \cdot q_4 + V_2 \cdot q_4 + V_3 \cdot q_4$$

$$= k \frac{q_1 \cdot q_4}{4} + k \frac{q_2 \cdot q_4}{5} + k \frac{q_3 \cdot q_4}{3}$$

