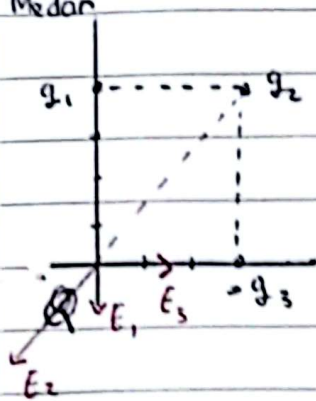
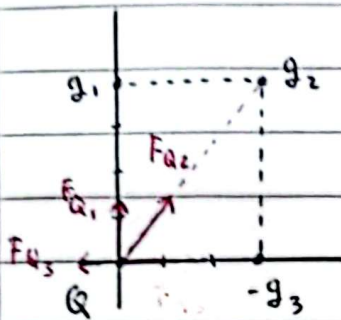


a. Medan



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

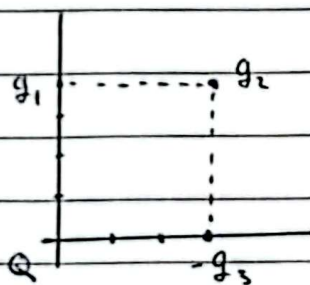
b. Gaya



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

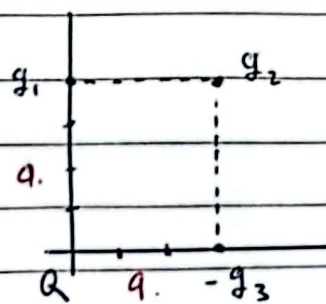
$$= kQ \left[\hat{i} \left(\frac{q_2}{5^2} \left(\frac{3}{5} \right) \right) + \hat{j} \left(\frac{q_1}{q^2} + \frac{q_2}{5^2} \left(\frac{4}{5} \right) \right) \right]$$

c. Potensial



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

d. Usaha



$$W_1 = 0$$

$$W_2 = V_1 \cdot q_2$$

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

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

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

$$Vq = V_1 \cdot q_1 + V_2 \cdot q_1 + V_3 \cdot q_1$$

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

