No.
Date :

Nama : Putri Asnaul Karimah
NPM : 2013022014
Prodi : Pendidikan Fisika
Kelas : B.

Pemecahan.

1. N = 0 Jumlah atom

$$N = \frac{Na \times massa\ (gr)}{Mr}$$

$$N_{tot} = \frac{Na \times massa\ Ag}{Mr\ Ag} + \frac{Na \times massa\ Au}{Mr.\ Au}$$

$$= \frac{6,02 \cdot 10^{23} \times 4,2}{109,9} + \frac{6,02 \cdot 10^{23} \times 0,8}{197}$$

$$= 2,34 \cdot 10^{22} + 2,44 \cdot 10^{21}$$

$$= 2,58 \cdot 10^{22}.$$

•) Muatan total (Q)

Karena Ag punya 47 elektron dan Au 79 elektron, maka jumlah elektron atom tersebut 126 elektron.

$$Q = N \times \text{jumlah elektron} \times e$$

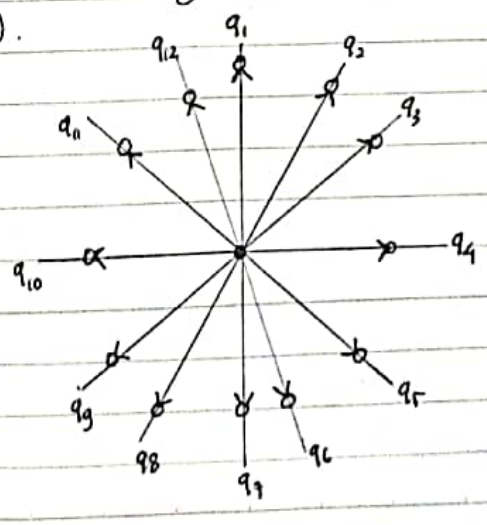
$$= 2,58 \cdot 10^{22} \times 126 \times 1,6 \cdot 10^{-19}$$

$$= 5,2 \cdot 10^{5} C.$$

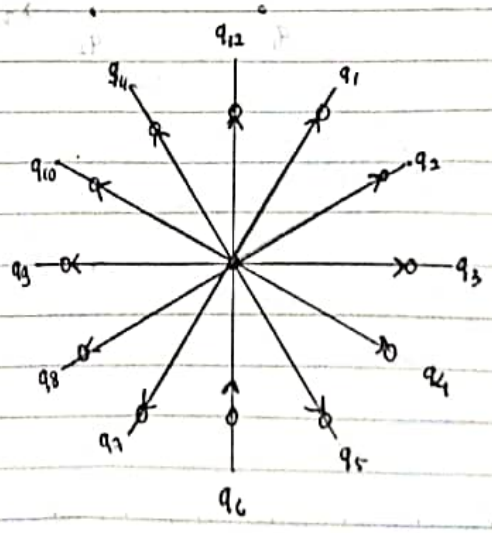
Jadi, pada cincin 5gr terdapat muatan $5,2 \cdot 10^{5} C$ dimana pada cincin 5gr terdapat $\frac{5,2 \cdot 10^{5} C}{1,6 \cdot 10^{-19}} = 3,25 \cdot 10^{24}$ elektron.

=> Kasus Gaya Listrik

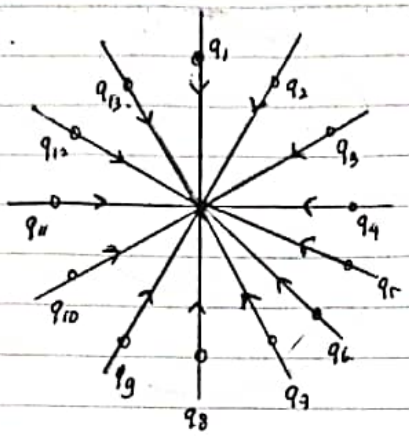
a).



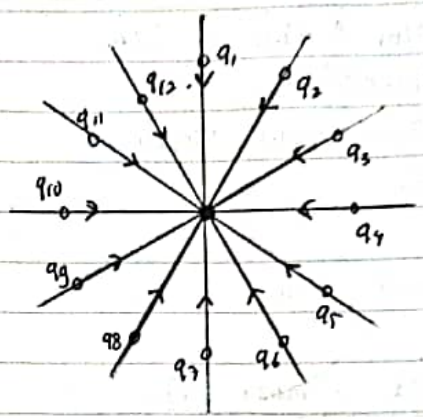
b).



c).



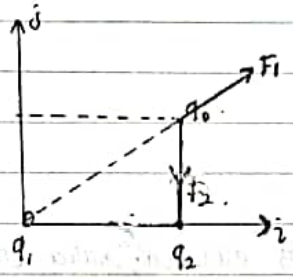
D).



e) $q_1 = 25\ \mu C \rightarrow (0,0)\ m$

$q_2 = -10\ \mu C \rightarrow (4,0)\ m$

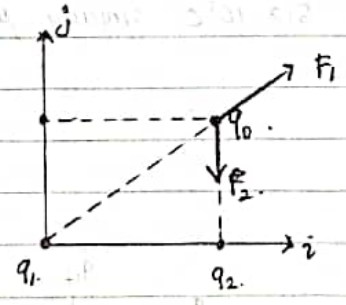
$q_0 = 10\ \mu C \rightarrow (4,3)\ m$.



f) $q_1 = 25\ \mu C \rightarrow (0,0)$

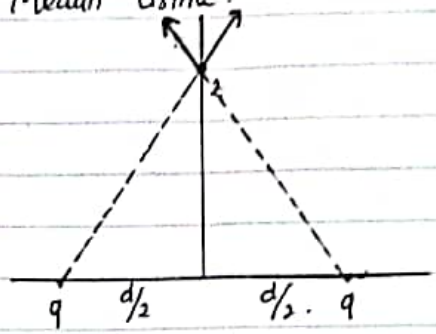
$q_2 = -15\ \mu C \rightarrow (4,0)$

$q_0 = 10\ \mu C \rightarrow (4,3)$



⇒ Kuat Medan Listrik.

a).

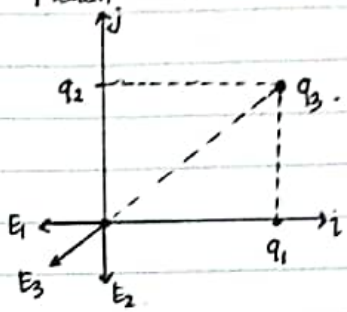


b). $q_1 = 2C \rightarrow (4,0)$

$q_2 = 5C \rightarrow (0,3)$

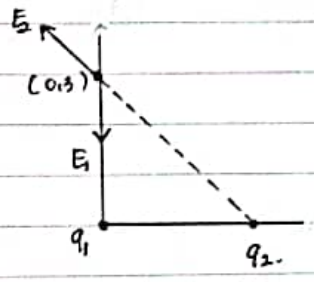
$q_3 = 10C \rightarrow (4,3)$.

Medan Listrik.

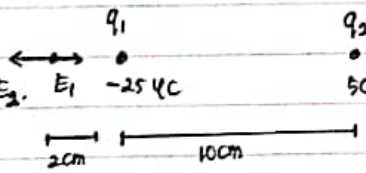


c). $q_1 = -5\ \mu C \rightarrow (0,0)$

$q_2 = 10\ \mu C \rightarrow (4,0)$



D).

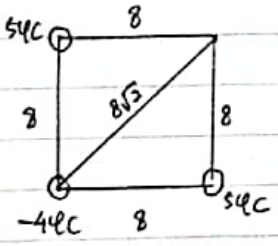


$q_1 = -25\mu C$

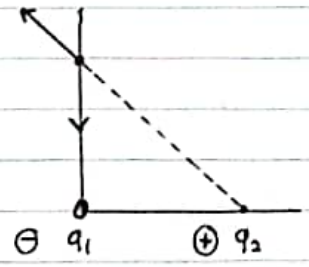
$q_2 = 10\mu C$.

⇒ potensial listrik.

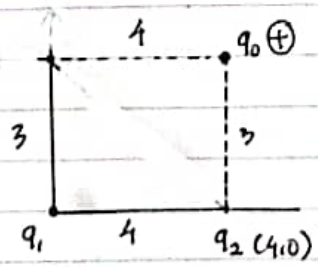
1.)



2)



3)



$q_1 = 25\mu C \rightarrow (0,0)$

$q_2 = -15\ \mu C \rightarrow (4,0)$

$q_0 = 20\mu C \rightarrow (4,3)$