5cm

0.05m → ←

#1 $F_e =$

$k_c = 8.99 \times 10^9 \ N \cdot m^2/C^2$

$q_1 = -8.0 \times 10^{-6} C$

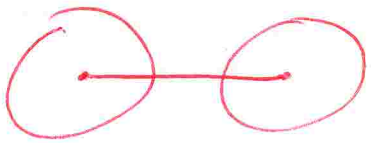
$q_2 = -8.0 \times 10^{-6} C$

$r = 0.05 m$

$F_e = 8.99 \times 10^9 \ N \cdot m^2/C^2 \cdot \frac{(-8.0 \times 10^{-6})(-8.0 \times 10^{-6})}{(0.05)^2}$

$= 230.14 \ N$

#2.



$r = 0.3 m$

$k_c = 8.99 \times 10^9 \ N \cdot m^2/C^2$

$q_1 = 12 \times 10^{-9} C$

$q_2 = -18 \times 10^{-9} C$

$r = 0.3 m$

$= 8.99 \times 10^9 \cdot \frac{(12EE-9)(-18EE-9)}{(0.3)^2}$

$F_e = \leftarrow \rightarrow 2.2 \times 10^{-5} N$

#3. $k_c = 8.99 \times 10^9 \ N \cdot m^2/C^2$

$q_1 = 6.0 \times 10^{-6} C$

$q_2 = -4.3 \times 10^{-6} C$

$r = 0.12 m$

$F_e =$

$= 8.99EE9 \cdot \frac{(6.0 \times 10^{-6}) \cdot (-4.3 \times 10^{-6})}{(0.12)^2}$

A) $F_e = 16 N$