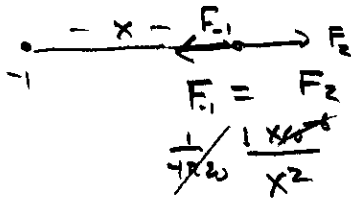


$2 \times 10^{-6} \text{ C}$        $-1 \times 10^{-6} \text{ C}$   
 • — 300 cm — •

2)

a)

2°



} can balance only on this side

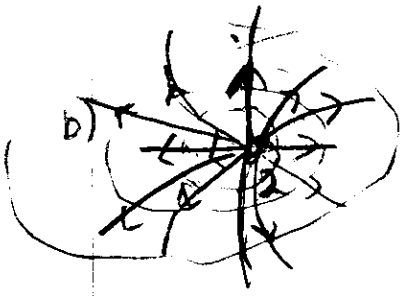
$$\frac{1}{4\pi\epsilon_0} \frac{1 \times 10^{-6}}{x^2} = \frac{1}{4\pi\epsilon_0} \frac{2 \times 10^{-6}}{(x+3)^2}$$

$$(x+3)^2 = 2x^2$$

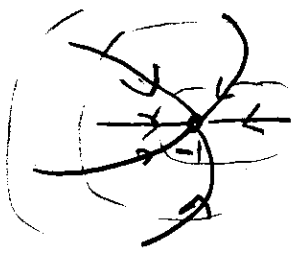
$$x+3 = \sqrt{2}x$$

$$(\sqrt{2}-1)x = 3$$

$$x = \frac{3}{\sqrt{2}-1} = \frac{3}{1.414} = \underline{2.12 \text{ m}}$$



12 lines



~6 lines

