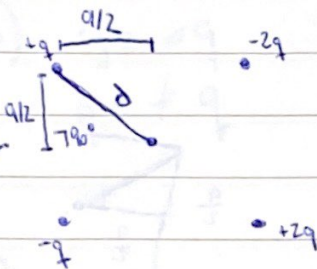
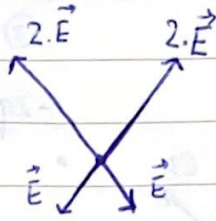
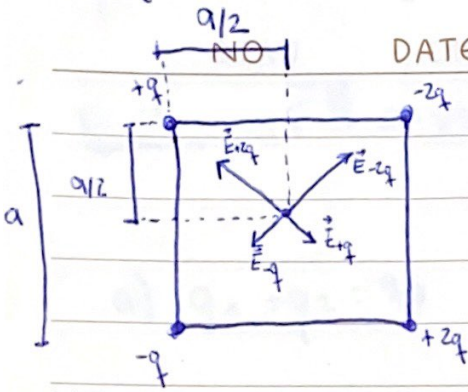


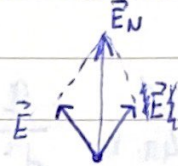
DATE



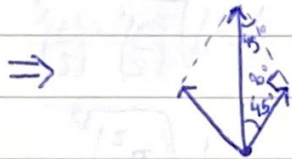
$$|\vec{E}_{-2q}| = |\vec{E}_{+2q}| = \frac{1}{2} |\vec{E}_{-q}| = \frac{1}{2} |\vec{E}_{+q}|$$

$$\rightarrow \text{Notacion Auxiliar } |\vec{E}_{-q}| = |\vec{E}_{+q}| = |\vec{E}|$$

\Rightarrow Suma Vectorial = ~~suma~~



\vec{E}_N = campo neto
(lo que me piden)



Por trigonometria:

$$\text{Sen } (45) = \frac{E}{E_N}$$

$$\frac{1}{\sqrt{2}} = \frac{E}{E_N}$$

$$\left(\frac{a}{2}\right)^2 + \left(\frac{a}{2}\right)^2 = d^2$$

$$\frac{a^2}{2} = d^2$$

$$|\vec{E}_N| = |\vec{E}| \cdot \sqrt{2} = \frac{1}{4\pi \cdot \epsilon_0} \cdot \frac{q}{d^2} \cdot \sqrt{2}$$

$$|\vec{E}_N| = \frac{1}{4\pi \cdot \epsilon_0} \cdot \frac{q}{a^2} \cdot \sqrt{2} \cdot 2$$

$$\vec{E}_N = \frac{1}{4\pi \cdot \epsilon_0} \cdot \frac{q}{a^2} \cdot \sqrt{2} \cdot 2 \cdot \hat{j}$$