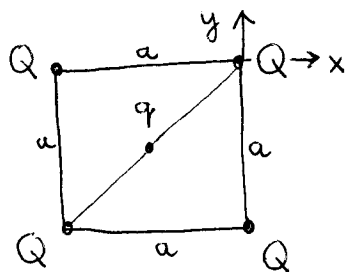


32.) egyensúly $q = ?$



$$\cos 45^\circ = \frac{\sqrt{2}}{2}$$

$$\sin 45^\circ = \frac{\sqrt{2}}{2}$$

$\vec{F}_Q = 0$ bármelyikre pl. jobb felső

$\vec{F}_q = 0$ ✓ szimmetria

$$F_c = \frac{kQq}{d^2}$$

$$(x) \quad k \frac{Q^2}{a^2} + k \frac{Q^2}{2a^2} \frac{\sqrt{2}}{2} + k \frac{Qq}{\frac{a^2}{2}} \frac{\sqrt{2}}{2} = 0$$

(y) ugyanaz az egyenlet...

$$Q + \frac{\sqrt{2}}{4} Q + \sqrt{2} q = 0$$

$$q = \frac{-Q(1 + \frac{\sqrt{2}}{4})}{\sqrt{2}} = -Q \left(\frac{\sqrt{2}}{2} + \frac{1}{4} \right) = -\frac{2\sqrt{2} + 1}{4} Q$$