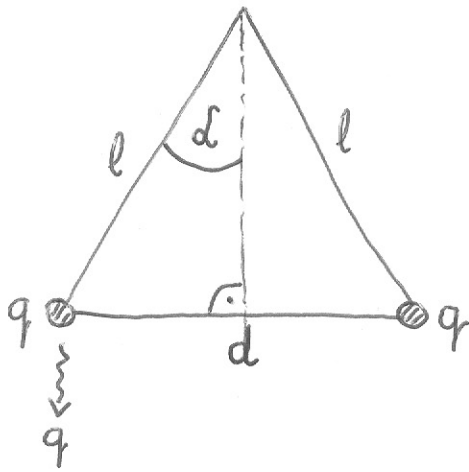
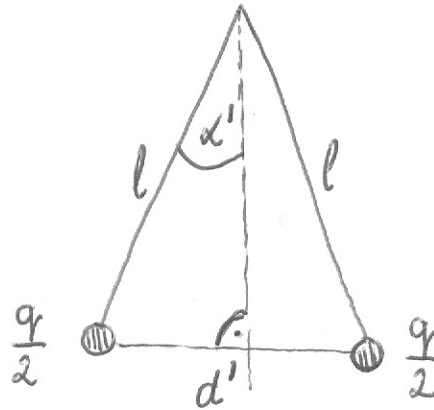
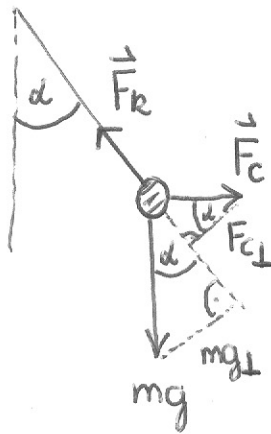


10.) $d \ll l$



Marad $q \rightarrow$ összedérnek \rightarrow megoszlik $\frac{q}{2} - \frac{q}{2}$

$$\vec{F}_C = k \frac{Q_1 Q_2}{r^2} \vec{e}_r$$



Egyensúly, ha: $mg_{\perp} = F_{C\perp}$

$$mg \sin \alpha = F_C \cos \alpha$$

$$F_C = mg \tan \alpha = mg \frac{d}{2l} \quad (d \ll l)$$

$$k \frac{q^2}{d^2} = mg \frac{d}{2l}$$

$$d^3 = \frac{kq^2 2l}{mg}$$

$$d = \sqrt[3]{\frac{2l k q^2}{mg}}$$

$$F_C' = mg \tan \alpha' = mg \frac{d'}{2l}$$

$$k \frac{q^2}{4d'^2} = mg \frac{d'}{2l}$$

$$\downarrow$$

$$d' = \dots$$

$$\underline{\underline{d' = f(d)}}$$