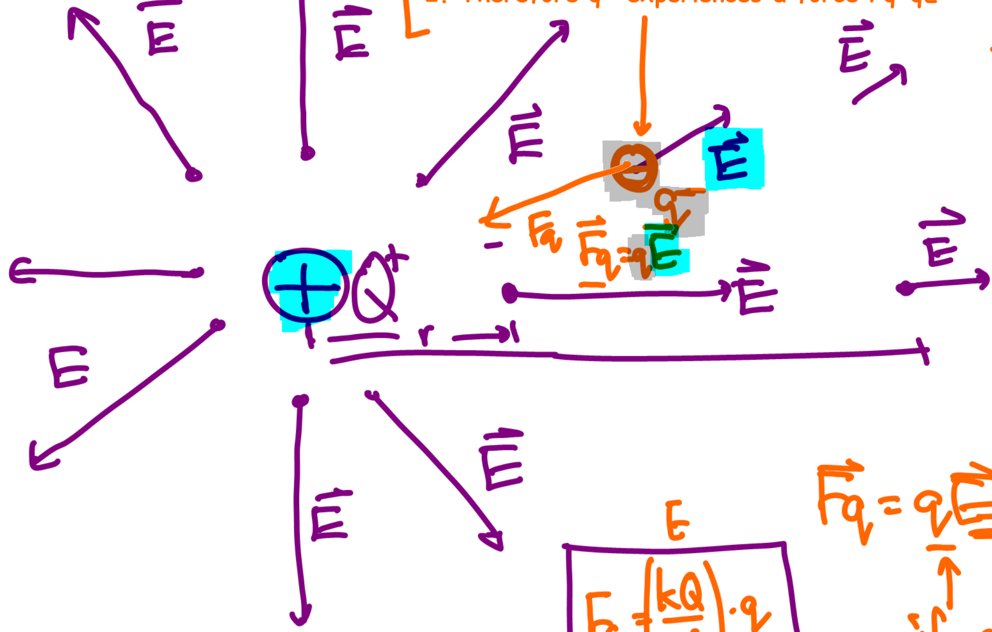
1. q- is inside the electric field E created by Q+
2. Therefore q- experiences a force Fq=qE



$$E: \quad F_q = \left(\frac{kQ}{r^2}\right)\cdot q$$

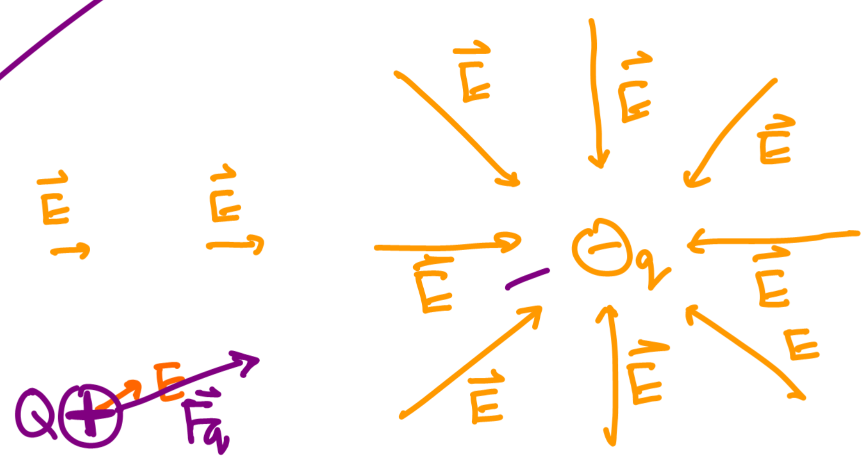
$\vec{F}_q = q\vec{E}$ (like $\vec{F}_g = m\vec{g}$)

if $q > 0$ $\vec{F}_q$, $\vec{E}$ in the same direction

if $q < 0$, $\vec{F}_q$, $\vec{E}$ are in opposite direction

Same force, opposite direction.

$$F_q = \left(\frac{kq}{r^2}\right) Q$$



Q is inside the electric $\vec{E}$ created by q

∴ Q experiences a force $\vec{F}_q = Q\vec{E}$ ← $Q > 0$ ∴ $\vec{F}_q$, $\vec{E}$ are in the same direction