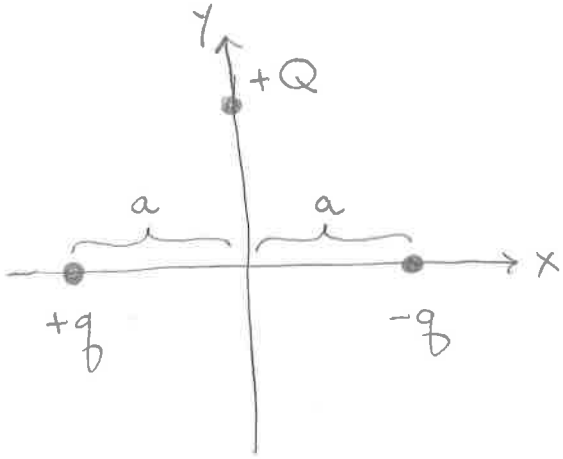
Quiz 1

Consider the three point charges shown below. What is the direction of the net force on Q?



(a) $+\hat{i}_x$

(b) $-\hat{i}_x$

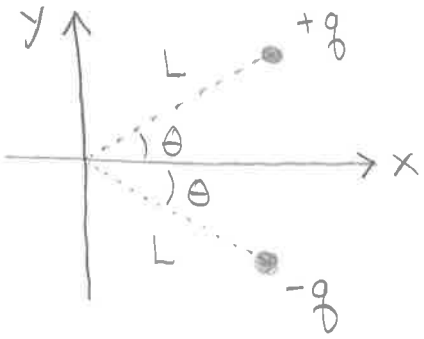
(c) $+\hat{i}_y$

(d) $-\hat{i}_y$

(e) None of the above

Quiz 1

Consider the two charges $+q$ and $-q$ shown below. Both L and θ are known. What is the electric force on charge $-q$ due to $+q$?



(a) $\frac{1}{4\pi\varepsilon_0}\frac{q^2}{L^2\sin^2\theta}\hat{\imath}_y$

(b) $\frac{-1}{4\pi\varepsilon_0}\frac{q^2}{L^2\sin^2\theta}\hat{\imath}_y$

(c) $\frac{1}{4\pi\varepsilon_0}\frac{q^2}{4L^2\sin^2\theta}\hat{\imath}_y$

(d) $\frac{-1}{4\pi\varepsilon_0}\frac{q^2}{4L^2\sin^2\theta}\hat{\imath}_y$

(e) None of above