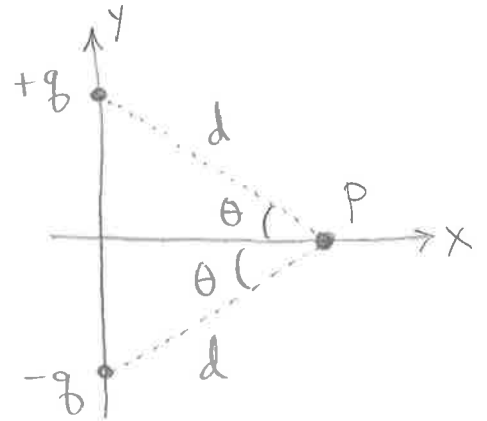


Quiz 2

Consider the system of fixed point charges shown below.

What are the x and y components of the electric field produced at point P?



X

Y

(a) $\frac{1}{2\pi\epsilon_0} \frac{q}{d^2} \cos\theta$ $\frac{1}{2\pi\epsilon_0} \frac{q}{d^2} \sin\theta$

(b) $\frac{1}{2\pi\epsilon_0} \frac{q}{d^2} \cos\theta$ 0

(c) 0 $-\frac{1}{2\pi\epsilon_0} \frac{q}{d^2} \sin\theta$

(d) $-\frac{1}{2\pi\epsilon_0} \frac{q}{d^2} \cos\theta$ $-\frac{1}{2\pi\epsilon_0} \frac{q}{d^2} \sin\theta$

(e) None of above

Quiz 2

An electric field with constant magnitude E_0 points in the direction θ with respect to the x-axis. A charge q is placed on a frictionless wire along the y-axis. What is the y-component of the electric force q experiences?

(a) $qE_0 \cos \theta$

(b) $qE_0 \sin \theta$

(c) $-qE_0 \cos \theta$

(d) $-qE_0 \sin \theta$

(e) None of above

