

Checkpoint



A positive test charge q is released from rest at distance r away from a charge of $+Q$ and a distance $2r$ away from a charge of $+2Q$. How will the test charge move immediately after being released?

8) How will the test charge move immediately after being released?

to the left to the right stay still other

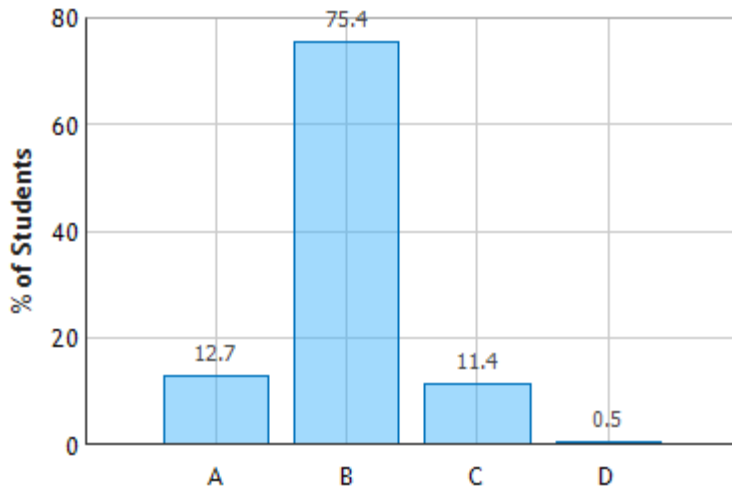
A

B

C

D

Motion of Test Charge: Question 1 (N = 859)



“(A LEFT) Since the radius is squared, the distance between the $2Q$ charge makes its pull smaller than that of the $1Q$ charge.”

“(B) Force from Q charge is greater than $2Q$ because $kQq/r^2 > 2kQq/4r^2 \Rightarrow 1 > 1/2$ and test charge is repelled”

“(C Still) the two electric field are equal in magnitude but opposite in direction”