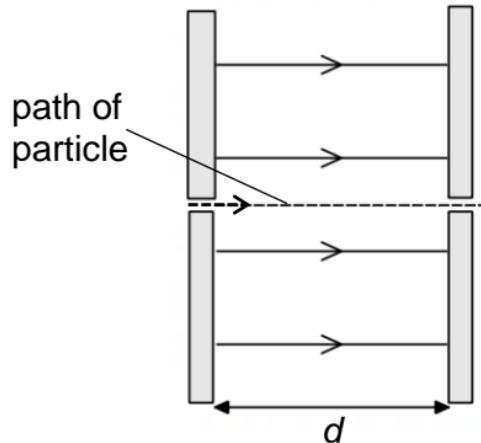


- 21 A particle of mass m and charge q is accelerated from rest in a uniform electric field between two parallel plates. After travelling a distance d between the plates, it leaves the field with a final speed v .



The electric field strength and the distance between the plates are doubled. A second particle of mass $3m$ and charge $3q$ is accelerated from rest between the plates.

What is the final speed of the second particle when it leaves the field?

A v

B $2v$

C $3.5v$

D $4v$