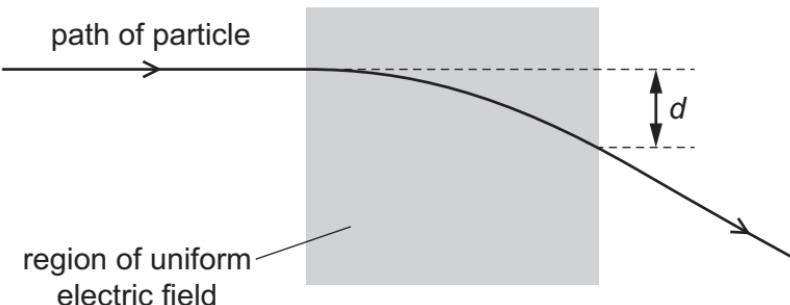


- 28** A particle having mass m and charge $+q$ enters a uniform electric field with speed v .

Initially, the particle is travelling at right-angles to the electric field.

During its movement through the field, the particle is deflected through distance d , as shown.



A second particle of mass $2m$, charge $+q$ and speed v enters the electric field along the same path.

What is the distance through which this particle is deflected in the electric field?

A $\frac{d}{4}$

B $\frac{d}{2}$

C $2d$

D $4d$