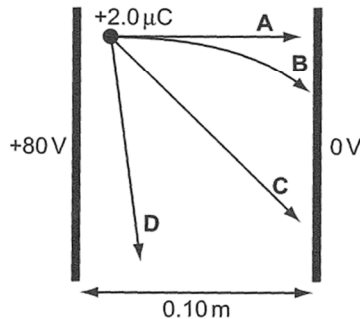


- 9 A sphere of weight $1.6 \times 10^{-3} \text{ N}$ has an electric charge of $+2.0 \mu\text{C}$. It is released from rest, in vacuum, between two parallel, vertical metal plates. The separation of the plates is 0.10 m and the potential difference between them is 80 V . The point of release of the sphere is within the region of uniform electric field between the plates. The arrangement is shown in the diagram.

Which path does the sphere follow after release?



- 10 A car of mass $1.2 \times 10^3 \text{ kg}$ travels along a horizontal road at a speed of 10 m s^{-1} . It then