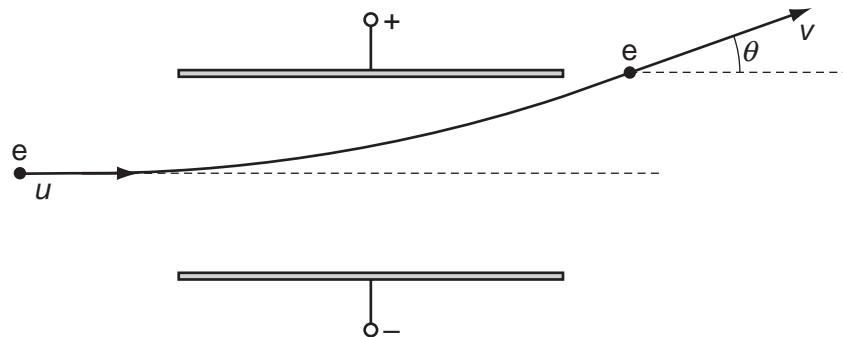**30** An electron enters the space between two parallel charged plates with an initial velocity u.

While in the electric field, its direction changes by θ and it emerges with a velocity v.

What is the relation between v and u?

A $v = \dfrac{u}{\cos\theta}$ **B** $v = u\cos\theta$ **C** $v = \dfrac{u}{\sin\theta}$ **D** $v = u\sin\theta$