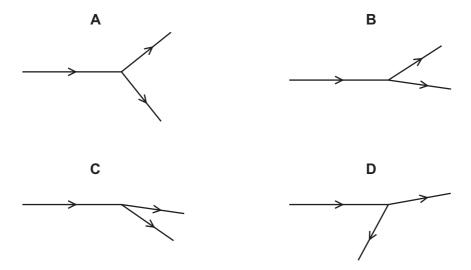
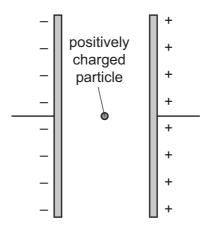
9 A nucleus collides with a stationary nucleus in a vacuum. The diagrams show the paths of the nuclei before and after the collision.

No other particles are involved in the collision.

Which diagram is **not** possible?



10 A uniform electric field is created by two parallel vertical plates. A positively charged particle is in the vacuum between the plates, as shown.



Which statement is correct?

- **A** The electric field makes the particle move towards the negative plate with a constant speed.
- **B** The electric field makes the particle move towards the negative plate with a constant acceleration.
- **C** The electric field produces a uniform rate of decrease in the particle's acceleration.
- **D** The electric field produces a uniform rate of increase in the particle's acceleration.