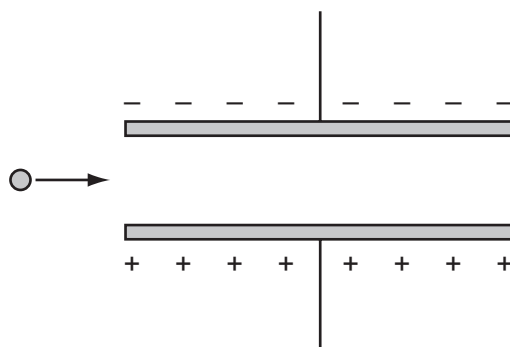


- 29 The diagram shows a charged particle as it approaches a pair of charged parallel plates in a vacuum.



Which row describes the horizontal and vertical components of its motion as it travels between the plates?

	horizontal component	vertical component
A	constant acceleration	constant acceleration
B	constant acceleration	constant velocity
C	constant velocity	constant acceleration
D	constant velocity	constant velocity

- 30 Two parallel plates, a distance 25 mm apart, have a potential difference between them of 12 kV.

What is the force on an electron when it is in the uniform electric field between the plates?

- A** $4.8 \times 10^{-20} \text{ N}$
- B** $7.7 \times 10^{-20} \text{ N}$
- C** $4.8 \times 10^{-17} \text{ N}$
- D** $7.7 \times 10^{-14} \text{ N}$

Space for working