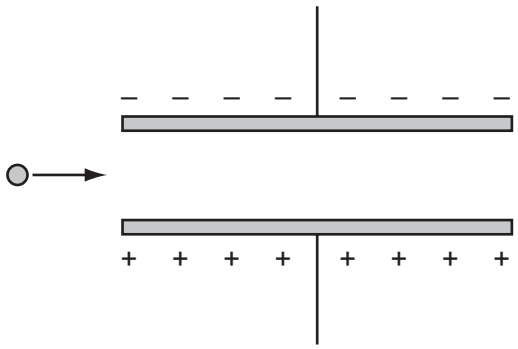
29 The diagram shows a charged particle as it approaches a pair of charged parallel plates in a vacuum.



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 4.8×10^{-20} N

B 7.7×10^{-20} N

C 4.8×10^{-17} N

D 7.7×10^{-14} N

Space for working