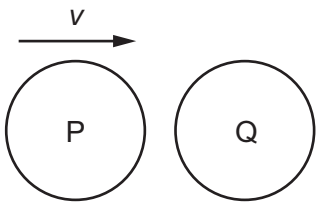
10 The diagram shows a particle P, travelling at speed v, about to collide with a stationary particle Q of the same mass. The collision is perfectly elastic.



Which statement describes the motion of P and of Q immediately after the collision?

A P and Q both travel in the same direction with speed $\frac{1}{2}v$.

B P comes to rest and Q acquires speed v.

C P rebounds with speed $\frac{1}{2}v$ and Q acquires speed $\frac{1}{2}v$.

D P rebounds with speed v and Q remains stationary.

11 A particle is in a uniform field. The particle experiences a force in the opposite direction to the field.

In which type of field is the particle, and on which property of the particle is the field acting?

	type of field	property of particle on which the field acts
A	electric	charge
B	electric	current
C	gravitational	mass
D	gravitational	weight