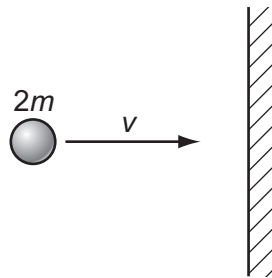


- 8 A moving body undergoes uniform acceleration while travelling in a straight line between points X, Y and Z. The distances XY and YZ are both 40 m. The time to travel from X to Y is 12 s and from Y to Z is 6.0 s.

What is the acceleration of the body?

- A  $0.37 \text{ m s}^{-2}$       B  $0.49 \text{ m s}^{-2}$       C  $0.56 \text{ m s}^{-2}$       D  $1.1 \text{ m s}^{-2}$

- 9 A particle of mass  $2m$  and velocity  $v$  strikes a wall.



The particle rebounds along the same path after colliding with the wall. The collision is inelastic.

What is a possible change in the momentum of the ball during the collision?

- A  $mv$       B  $2mv$       C  $3mv$       D  $4mv$

- 10 Which defines the weight of a body?

- A the amount of matter in the body  
B the force of gravity on the body  
C the number of particles in the body  
D the product of the body's volume and density

**Space for working**