

- 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