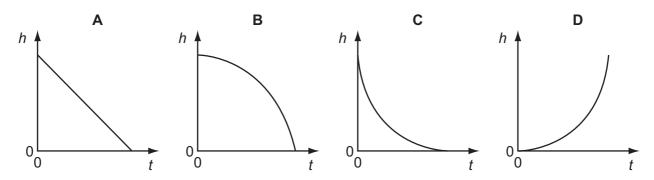
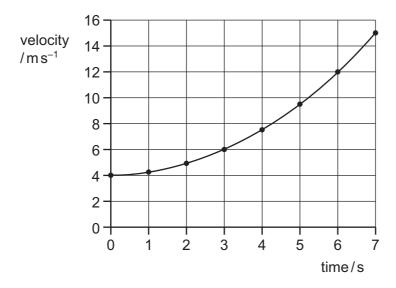
8 A small steel ball falls freely under gravity after being released from rest.

Which graph best represents the variation of the height *h* of the ball with time *t*?



**9** The diagram shows a velocity-time graph for a vehicle.



The vehicle, moving at  $4.0 \,\mathrm{m\,s^{-1}}$ , begins to accelerate at time = 0.

What is the vehicle's acceleration at time = 3.0 s?

- **A**  $0.67 \,\mathrm{m\,s^{-2}}$
- **B**  $1.0 \,\mathrm{m\,s^{-2}}$
- **C** 1.3 m s<sup>-2</sup>
- **D**  $2.0 \,\mathrm{m\,s^{-2}}$

Space for working