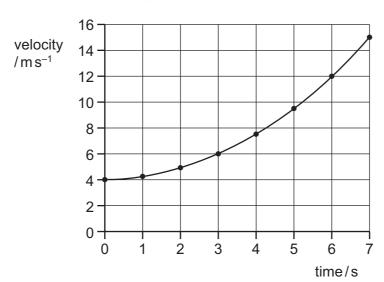
14 The diagram shows a velocity-time graph for a vehicle.



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** $1.0 \,\mathrm{m\,s^{-2}}$
- $C 1.3 \,\mathrm{m\,s^{-2}}$
- **D** $2.0 \,\mathrm{m\,s^{-2}}$
- 15 Atmospheric pressure at sea level has a value of $100 \, \text{kPa}$. The density of sea water is $1020 \, \text{kg m}^{-3}$.

At what depth in the sea would the total pressure be 110 kPa?

- **A** 1.0 m
- **B** 9.8 m
- **C** 10 m
- **D** 11 m

Space for working