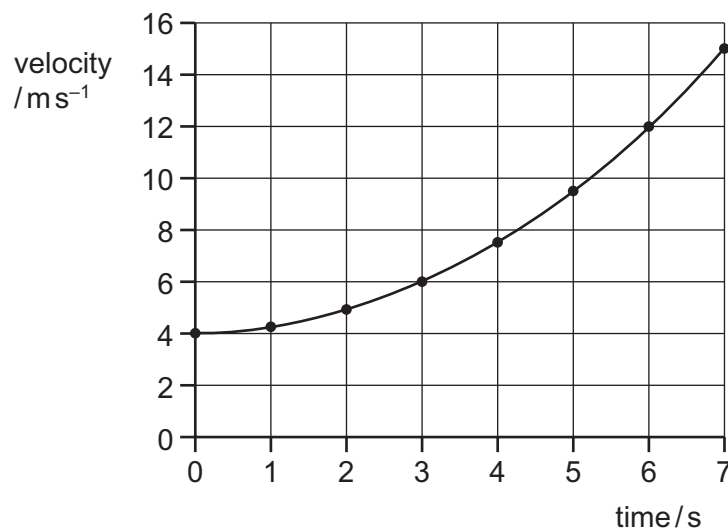


- 14 The diagram shows a velocity-time graph for a vehicle.



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

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

- A**  $0.67 \text{ ms}^{-2}$       **B**  $1.0 \text{ ms}^{-2}$       **C**  $1.3 \text{ ms}^{-2}$       **D**  $2.0 \text{ ms}^{-2}$

- 15 Atmospheric pressure at sea level has a value of 100 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**