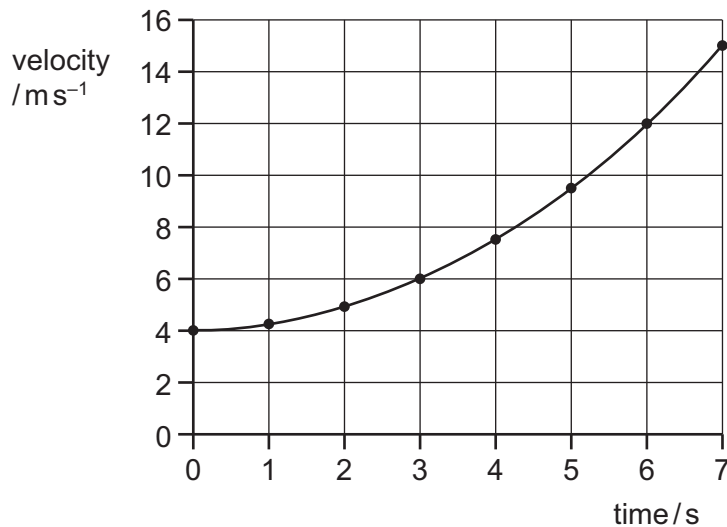The diagram shows a velocity-time graph for a vehicle.



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**  $2.0\,\mathrm{m\,s^{-2}}$