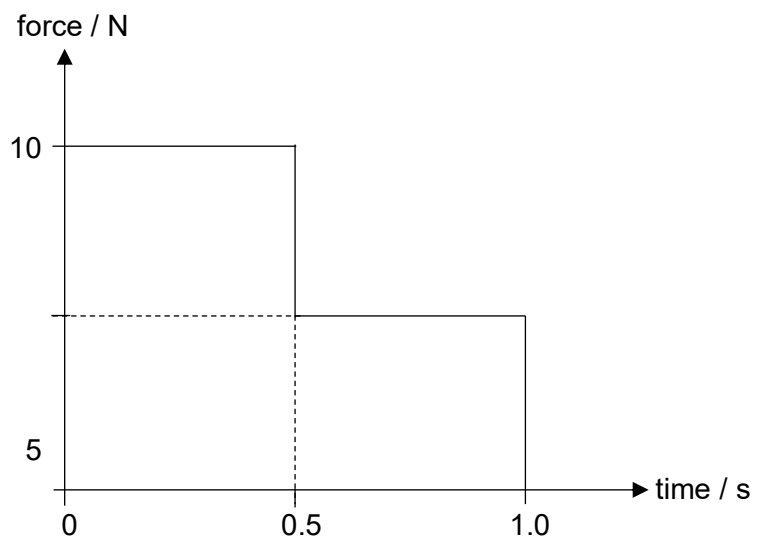


- 3 The force acting on a 3.0 kg mass varies with time as shown.

The object is initially moving at a velocity of  $0.50 \text{ m s}^{-1}$  in the same direction as the force.



What is the speed of the mass after 1.0 s?

- A**  $2.5 \text{ m s}^{-1}$       **B**  $3.0 \text{ m s}^{-1}$       **C**  $5.0 \text{ m s}^{-1}$       **D**  $7.5 \text{ m s}^{-1}$