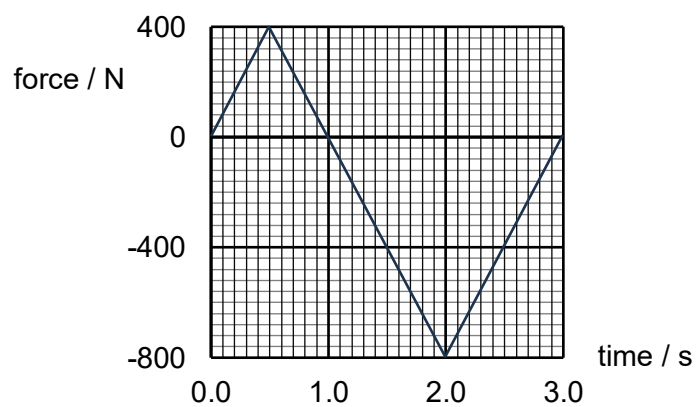


- 6 A motorcycle of mass 400 kg is travelling at a speed of  $4.5 \text{ m s}^{-1}$  when it experiences an accelerating force for 1.0 s, followed by a retarding force for 2.0 s as shown.



What is the speed of the motorcycle after 3.0 s?

- A**  $1.5 \text{ m s}^{-1}$       **B**  $3.0 \text{ m s}^{-1}$       **C**  $4.5 \text{ m s}^{-1}$       **D**  $6.0 \text{ m s}^{-1}$