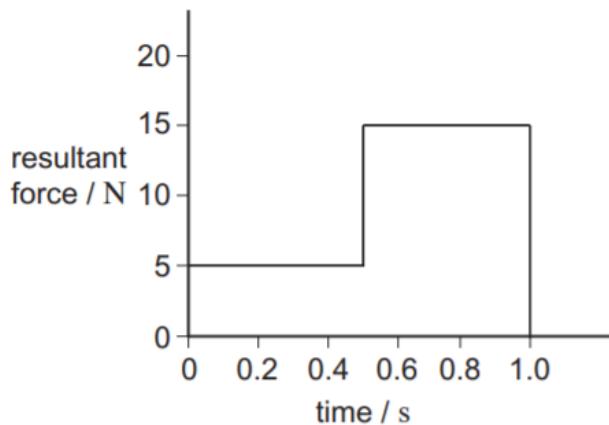


## 4

The graph shows how the resultant force applied to an object of mass 4.0 kg varies with time. The force is applied in the same direction as the initial velocity.



Given that the initial speed of the object is  $2.5 \text{ m s}^{-1}$ , what is the speed of the object after 1.0 s?

**A**

$$2.5 \text{ m s}^{-1}$$

**B**

$$5.0 \text{ m s}^{-1}$$

**C**

$$10 \text{ m s}^{-1}$$

**D**

$$15 \text{ m s}^{-1}$$

