

9 An object of mass 4.0kg moving with a speed of 3.0ms^{-1} strikes a stationary object in an inelastic collision.

Which statement is correct?

- A** After collision, the total kinetic energy is 18J.
- B** After collision, the total kinetic energy is less than 18J.
- C** Before collision, the total kinetic energy is 12J.
- D** Before collision, the total kinetic energy is less than 12J.

10 The graph shows how the momentum of a motorcycle changes with time.