

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

Which statement is correct?

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

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