

**9** Which statement about a perfectly elastic collision between two bodies in an isolated system is correct?

**A** Both total kinetic energy and total momentum are conserved.

**B** Total kinetic energy is conserved, but total momentum is not conserved.

**C** Total momentum is conserved, but total kinetic energy is not conserved.

**D** Neither total kinetic energy nor total momentum is conserved.

**10** Two spheres approach each other along the same straight line. Their speeds are  $u$  and  $v$ .