

9 Which statement about a perfectly elastic collision between two objects is correct?

- A Total kinetic energy is conserved and the relative speed of approach equals the relative speed of separation.
- B Total kinetic energy is conserved but the relative speed of approach does **not** equal the relative speed of separation.
- C Total kinetic energy is **not** conserved and the relative speed of approach does **not** equal the relative speed of separation.
- D Total kinetic energy is **not** conserved but the relative speed of approach does equal the relative speed of separation.