

11 A moving object X collides with a stationary object Y.

The objects separate after the collision.

The collision is perfectly elastic and there are no external forces acting.

Which word equation is **not** correct?

- A during the collision, (force acting on object X) + (force acting on object Y) = zero
- B (relative speed of approach of X and Y) + (relative speed of separation of X and Y) = zero
- C (total kinetic energy before collision) = (total kinetic energy after collision)
- D (total momentum before collision) = (total momentum after collision)