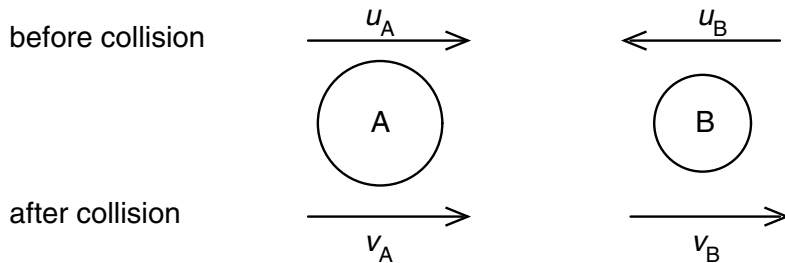


- 11 Two spheres A and B approach each other along the same straight line with speeds  $u_A$  and  $u_B$ . The spheres collide and move off with speeds  $v_A$  and  $v_B$ , both in the same direction as the initial direction of sphere A, as shown below.



Which equation applies to an elastic collision?

- A**  $u_A + u_B = v_B - v_A$
- B**  $u_A - u_B = v_B - v_A$
- C**  $u_A - u_B = v_B + v_A$
- D**  $u_A + u_B = v_B + v_A$

- 12 Two equal masses travel towards each other on a frictionless air track at speeds of  $60 \text{ cm s}^{-1}$  and