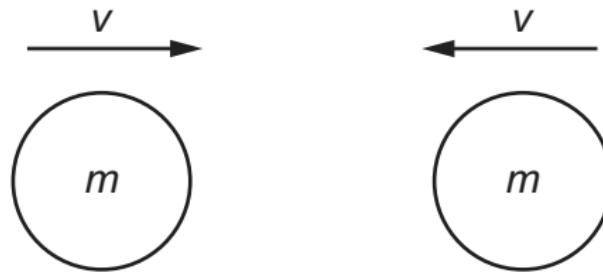


- 9** Two similar spheres, each of mass m and travelling with speed v , are moving towards each other.



The spheres have a head-on elastic collision.

Which statement is correct?

- A** The spheres stick together on impact.
- B** The total kinetic energy after impact is mv^2 .
- C** The total kinetic energy before impact is zero.
- D** The total momentum before impact is $2mv$.

- 10** A horizontal metal bar PQ of length 50.0 cm is hinged at end P. The diagram shows the metal bar