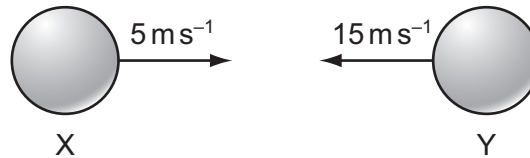


- 12** Two balls X and Y are moving towards each other with speeds of 5 m s^{-1} and 15 m s^{-1} respectively.



They make a perfectly elastic head-on collision and ball Y moves to the right with a speed of 7 m s^{-1} .

What is the speed and direction of ball X after the collision?

- A** 3 m s^{-1} to the left
- B** 13 m s^{-1} to the left
- C** 3 m s^{-1} to the right
- D** 13 m s^{-1} to the right