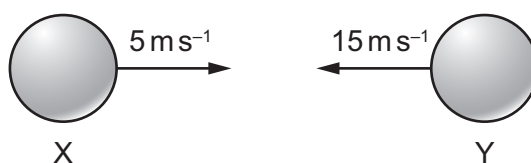


- 10** Two balls X and Y are moving towards each other with speeds of 5 m s^{-1} and 15 m s^{-1} respectively.



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

- 11** Two forces form a couple.

Which statement describes the two forces?

- A** They are in the same direction.
- B** They are perpendicular to each other.
- C** They have the same magnitude.
- D** They pass through the same point.