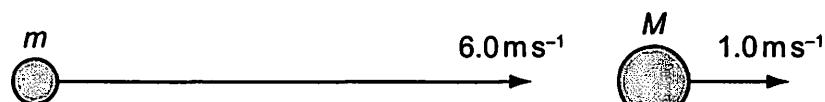


- 9 A ball of smaller mass m travelling at 6.0 ms^{-1} collides elastically with a ball of larger mass M travelling at 1.0 ms^{-1} .



Which diagram represents the velocities of the two balls after the collision?

- A
Ball m has a velocity of 1.0 ms^{-1} to the right. Ball M has a velocity of 6.0 ms^{-1} to the right.
- B
Ball m has a velocity of 1.5 ms^{-1} to the right. Ball M has a velocity of 1.5 ms^{-1} to the right.
- C
Ball m has a velocity of 3.0 ms^{-1} to the left. Ball M has a velocity of 2.0 ms^{-1} to the right.
- D
Ball m has a velocity of 4.0 ms^{-1} to the left. Ball M has a velocity of 3.0 ms^{-1} to the right.