

- 7 Trolleys X and Y of masses  $m$  and  $3m$  respectively are travelling at the same speed towards each other. The trolleys collide and move off together.



Which of the following statements is correct?

- ☐ A The force of X on Y during the collision is greater than the force of Y on X.
- ☐ B The force of X on Y during the collision is less than the force of Y on X.
- ☐ C The speed of X after the collision is greater than  $v$ .
- ☐ D The speed of X after the collision is less than  $v$ .

(Total for Question 7 = 1 mark)