

- 4 A moving object X approaches head-on a stationary object Y with velocity  $v$ , as shown.



The two objects collide elastically. After the collision, Y moves to the right with speed  $0.67 v$ .

What is the speed of X after the collision?

A  $0$

B  $0.33 v$

C  $0.67 v$

D  $v$

- E A brick rests on the floor. The forces on the brick are its weight  $W$  and a support force  $S$  from the