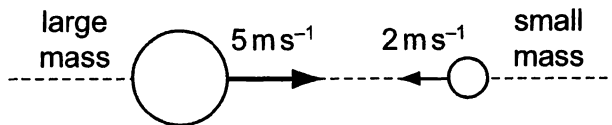


- 8 A large mass moving at a velocity of  $5 \text{ m s}^{-1}$  collides head-on with a small mass moving at a velocity of  $2 \text{ m s}^{-1}$  in the opposite direction.



The collision is elastic.

After the collision, both masses move to the right. The large mass has a velocity  $v_1$  and the small mass has a velocity  $v_2$ .

Which pair of values  $v_1$  and  $v_2$  is possible?

	$v_1$	$v_2$
<b>A</b>	$2 \text{ m s}^{-1}$	$5 \text{ m s}^{-1}$
<b>B</b>	$3 \text{ m s}^{-1}$	$10 \text{ m s}^{-1}$
<b>C</b>	$4 \text{ m s}^{-1}$	$4 \text{ m s}^{-1}$
<b>D</b>	$5 \text{ m s}^{-1}$	$12 \text{ m s}^{-1}$