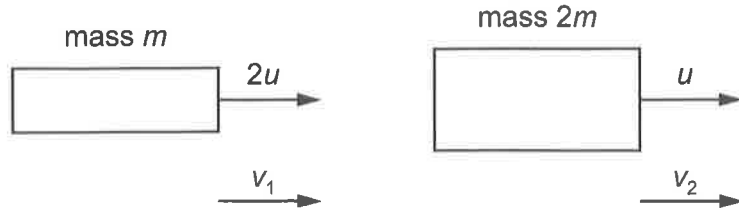


- 8 A mass  $m$  travelling at speed  $2u$  collides elastically with a mass  $2m$  travelling at speed  $u$  in the same direction. After collision, the masses travel at speeds  $v_1$  and  $v_2$  respectively.



What are  $v_1$  and  $v_2$ ?

	$v_1$	$v_2$
<b>A</b>	$0.67u$	$1.67u$
<b>B</b>	$1.00u$	$2.00u$
<b>C</b>	$1.33u$	$1.33u$
<b>D</b>	$1.50u$	$2.50u$

- 9 A football of mass  $0.42\text{ kg}$  is travelling towards a player at  $3.0\text{ ms}^{-1}$