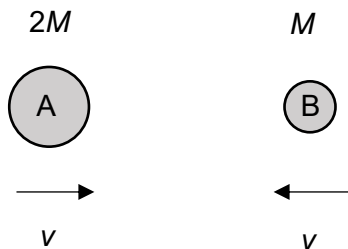


- 8 Two steel balls A and B of masses $2M$ and $1M$ respectively move towards each other with the same speed v and collide elastically.



What are the final velocities of the two balls in terms of v ? Take the rightward direction as positive.

	final velocity of ball A	final velocity of ball B
A	$\frac{4}{3}v$	$\frac{7}{3}v$
B	$-\frac{1}{3}v$	$\frac{5}{3}v$
C	$\frac{1}{3}v$	$\frac{2}{3}v$
D	$-v$	$2v$