

- 10 Two equal masses travel towards each other on a frictionless track at speeds of  $60\text{ cm s}^{-1}$  and  $30\text{ cm s}^{-1}$ . They stick together on impact.



What is the speed of the masses after impact?

A  $15\text{ cm s}^{-1}$

B  $20\text{ cm s}^{-1}$

C  $30\text{ cm s}^{-1}$

D  $45\text{ cm s}^{-1}$