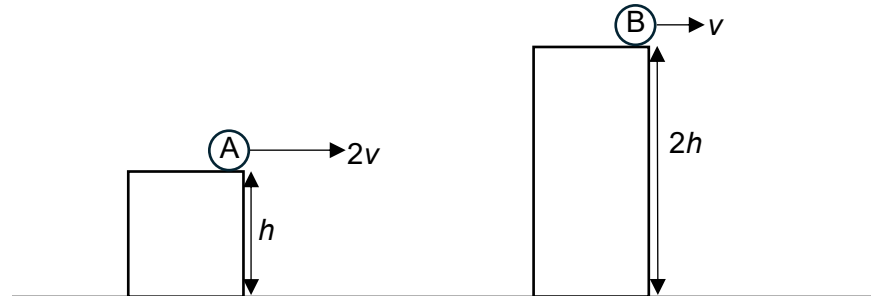


- 3 Ball A is projected horizontally with an initial velocity  $2v$  from a height  $h$  above ground, while ball B is projected horizontally with an initial velocity  $v$  from a height  $2h$  above ground.



If  $x_A$  is the horizontal displacement of ball A from the point of projection to the point of landing and  $x_B$  is the corresponding quantity for ball B, what is the ratio  $\frac{x_A}{x_B}$ ?

- A** 0.35      **B** 1.00      **C** 1.41      **D** 2.83