

- 4 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.

Neglecting air resistance, what is the ratio

$$\frac{\text{horizontal displacement of ball A from the point of projection}}{\text{horizontal displacement of ball B from the point of projection}}?$$

**A** 2.83

**B** 1.41

**C** 1.00

**D** 0.353