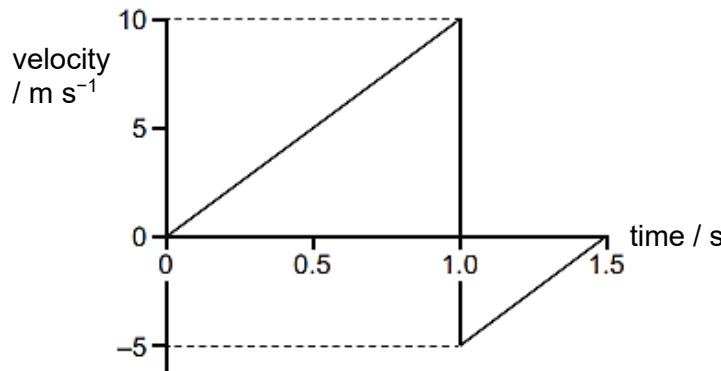


- 2 A ball is released from rest at a position X above a horizontal surface initially. At 1.0 s, it bounces inelastically from the horizontal surface and rebounds, reaching the top of its bounce at 1.5 s.

The graph shows the variation with time of velocity of the ball.



What is the ratio  $\frac{\text{magnitude of displacement of the ball from X at } 1.5 \text{ s}}{\text{height of X above horizontal surface}}$ ?

- A** 0.25
- B** 0.50
- C** 0.75
- D** 1.0