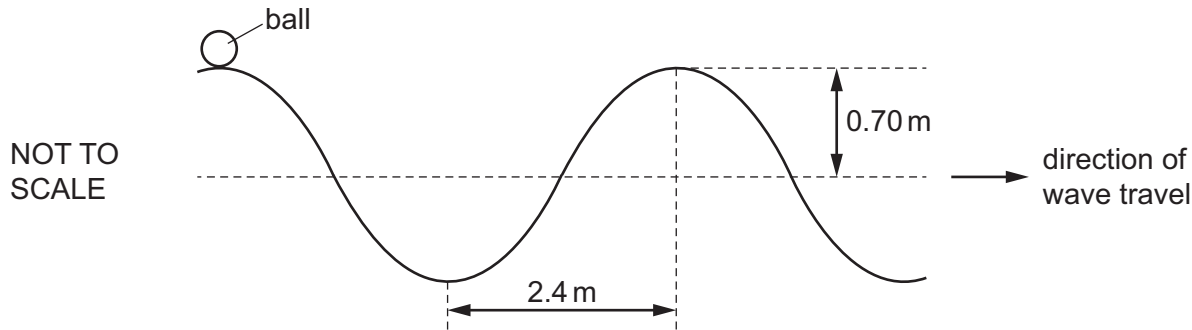


- 22** A transverse water wave is moving along the surface of some water. This causes a ball to move vertically without moving horizontally as it floats upon the surface. At one instant, the ball is at the position shown.



The wave has a frequency of 0.20 Hz and an amplitude of 0.70 m . The distance between a trough and an adjacent peak is 2.4 m .

What is the distance travelled by the ball in a time of 20 s ?

- A** 5.6 m **B** 9.6 m **C** 11.2 m **D** 19.2 m