

Section A

Answer **all** the questions in the space provided

- 1 The velocity-time graph in Fig. 1.1 shows the first 1.6 s of the motion of a ball which is thrown vertically downwards at an initial speed of 4.0 m s^{-1} .

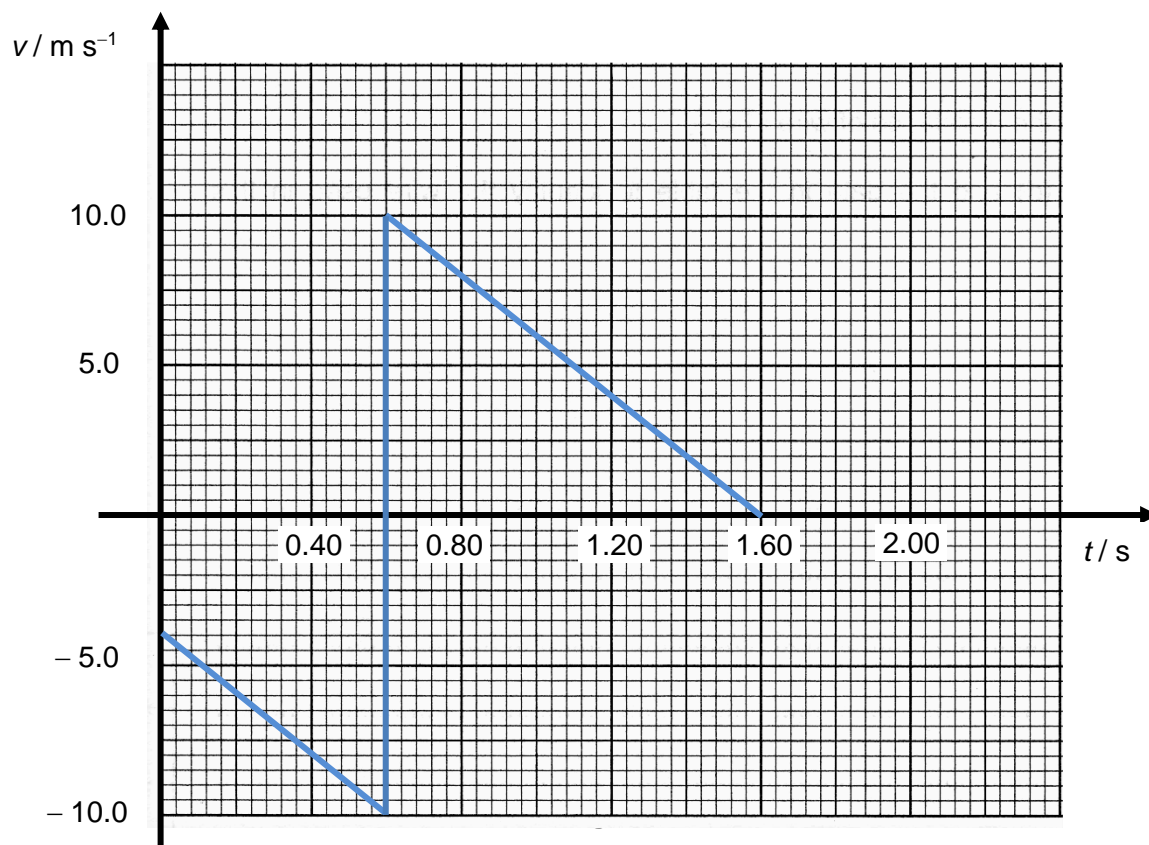


Fig. 1.1

- (a) Calculate the distance travelled by the ball before hitting the ground.

distance travelled m [2]

- (b) Determine the maximum height attained by the ball above its original release position after it hits the ground.

height = m [2]