Leave blank

6.

Figure 3
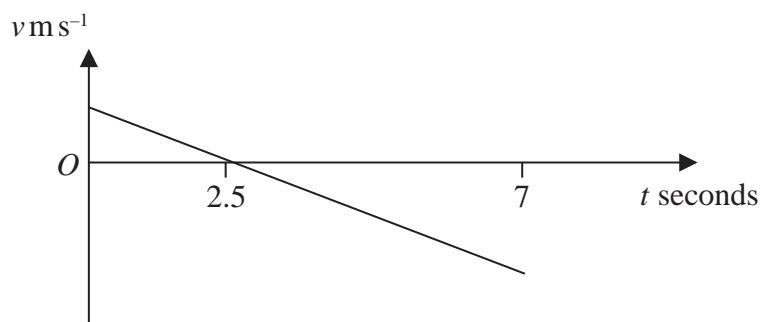
A small ball is thrown vertically upwards at time $t = 0$ from a point A which is above horizontal ground. The ball hits the ground 7 s later.

The ball is modelled as a particle moving freely under gravity.

The velocity-time graph shown in Figure 3 represents the motion of the ball for $0 \leqslant t \leqslant 7$

(a) Find the speed with which the ball is thrown.

(2)

(b) Find the height of A above the ground.

(3)

PMT

Leave blank

Question 6 continued

Q6

(Total 5 marks)

P 6 6 6 4 9 A 0 2 3 3 2