8 A bicycle brakes so that it undergoes uniform deceleration from a speed of $8\,m\,s^{-1}$ to $6\,m\,s^{-1}$ over a distance of 7 m.

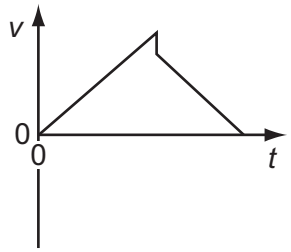
If the deceleration of the bicycle remains constant, what further distance will it travel before coming to rest?

A 7 m **B** 9 m **C** 16 m **D** 21 m

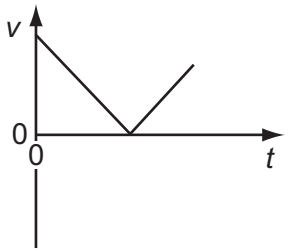
9 A ball is released from rest above a horizontal surface. It bounces once and is caught.

Which graph represents the variation with time *t* of the velocity *v* of the ball?

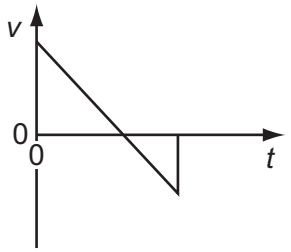
A



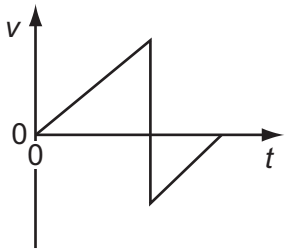
B



C



D



Space for working