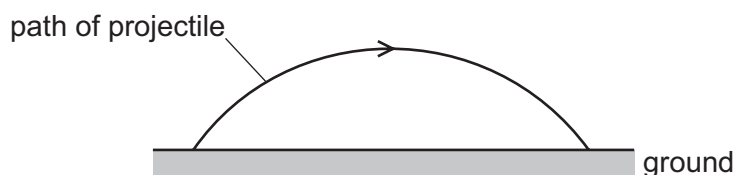
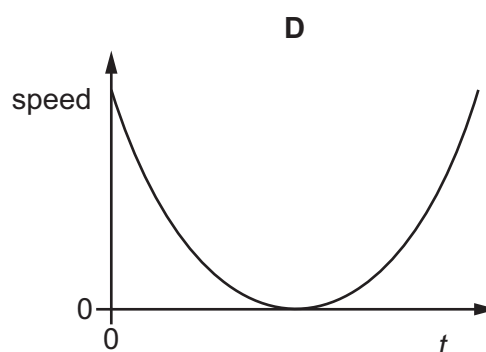
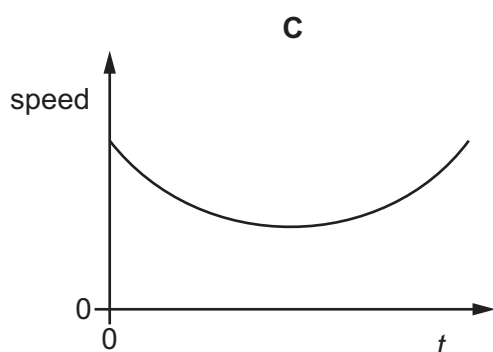
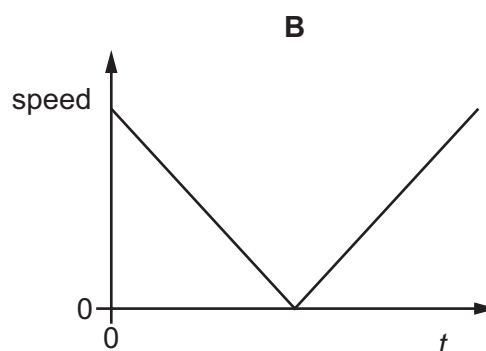
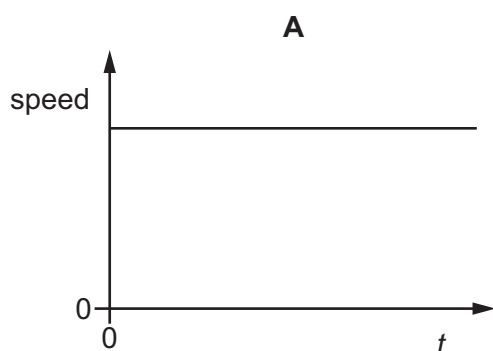


- 6 A projectile is launched at an angle to the horizontal at time $t = 0$. It travels over horizontal ground, as shown.



Air resistance is negligible.

Which graph best shows the variation with t of the speed of the projectile from when it is launched to when it lands on the ground?



- 7 A train, initially at rest at a station, has a uniform acceleration of 0.20 ms^{-2} until it reaches a speed of 20 ms^{-1} . It travels for a time at this constant speed and then has a uniform deceleration of 0.40 ms^{-2} until it comes to rest at the next station. The distance between the two stations is 3000 m.

What is the time taken by the train to travel between the two stations?

- A** 75 s **B** 150 s **C** 230 s **D** 300 s