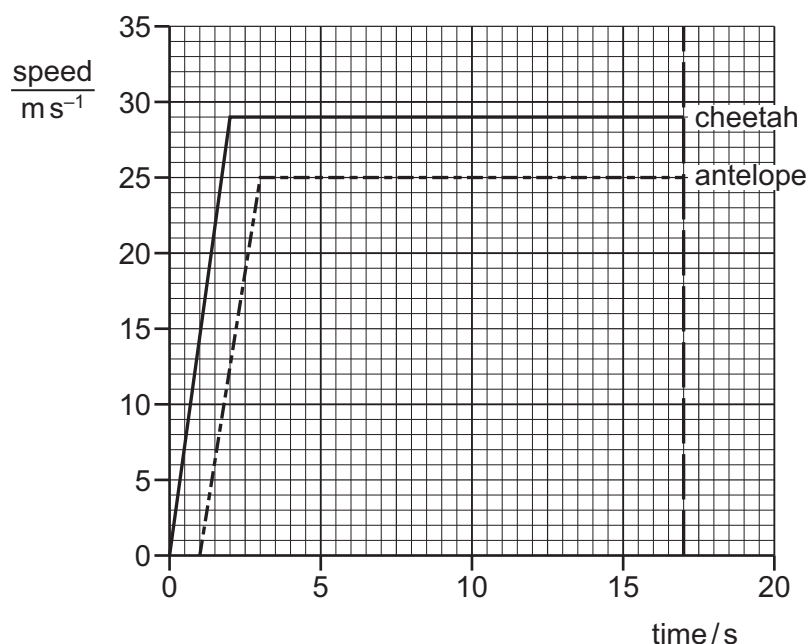
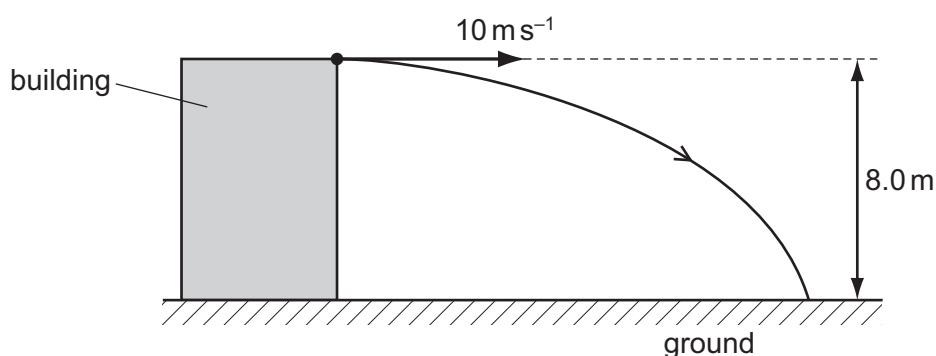


- 8 A cheetah and an antelope are 100 m apart. The cheetah spots the antelope and runs towards it. The antelope reacts to the cheetah after one second and runs directly away from the cheetah. Both animals take 2 seconds to reach their top speeds. The graph shows how the speeds of the two animals vary with time.



How far apart are the animals, 17 seconds after the cheetah began running?

- A** 4 m **B** 11 m **C** 54 m **D** 89 m
- 9 A boy throws a stone with a horizontal velocity of 10 m s^{-1} from the top of a building. The height of the building is 8.0 m. The stone travels along a curved path until it hits the ground, as shown in the diagram.



How long does it take the stone to reach the ground? (Air resistance can be neglected.)

- A** 0.61 s **B** 0.80 s **C** 1.3 s **D** 1.6 s