

Questions (LEVEL-2)

Que 1. Draw a velocity-time graph to show that -
A car accelerates uniformly from rest for 5 seconds then it travels at a steady velocity for 5 seconds.

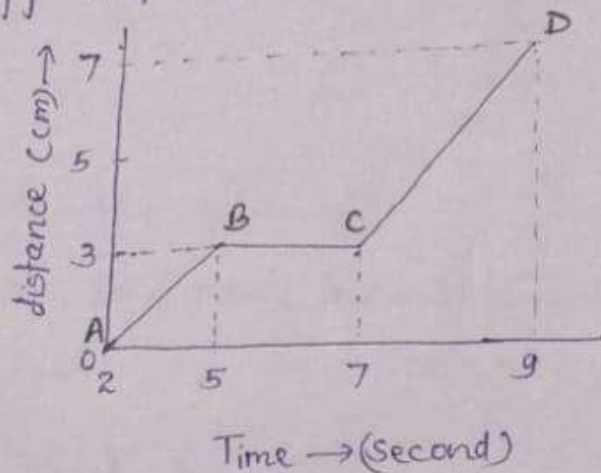
Que 2. A motorcycle is being driven at a speed of 20 m/s when brakes are applied to bring it to rest in five seconds. The deceleration produced in this case will be -

Que 3. The graph given alongside shows the positions of a body at different times.

(i) A to B

(ii) B to C

(iii) C to D



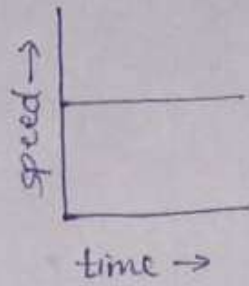
Que 4. A body is moving uniformly in a straight line with a velocity of 5 m/s. Find the graphically the distance covered by it in 5 seconds.

Que 5. A car is travelling along the road at 8 m/s. It accelerates at 1 m/s^2 for a distance of 18 m. How fast is it then travelling?

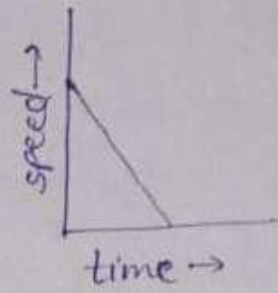
Que 6. What type of motion is represented by each one of the following graphs?



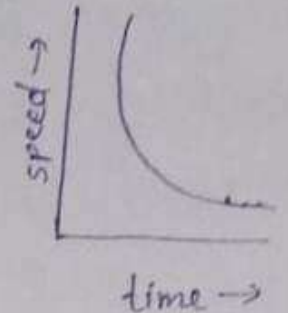
(a)



(b)

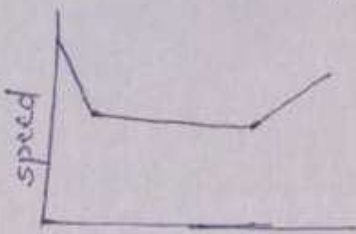


(c)

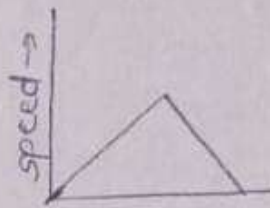


(d)

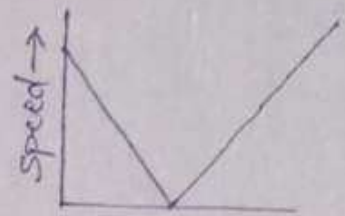
Que 7. Three speed-time graphs are given below:-



(a)



(b)



(c)

which graph represents the case of:-

- (i) a cricket ball thrown vertically upwards and returning to the hands of the thrower?
- (ii) A trolley decelerating to a constant speed and then accelerating uniformly?

Que 8. What conclusion can you draw about the acceleration of a body from the speed-time graph shown below?

