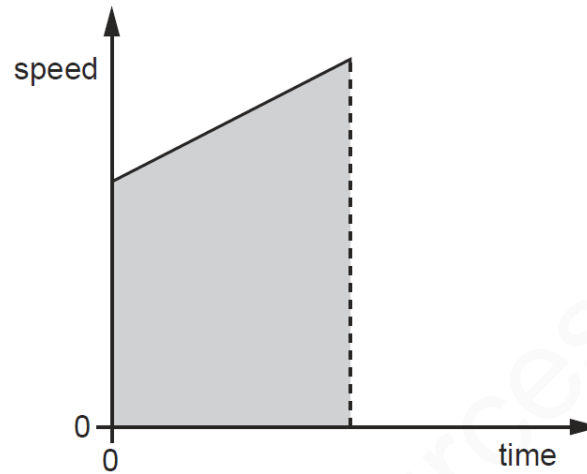


## SPEED-TIME-SET-1-MS

1

The diagram shows a speed-time graph for a body moving with constant acceleration.



What is represented by the shaded area under the graph?

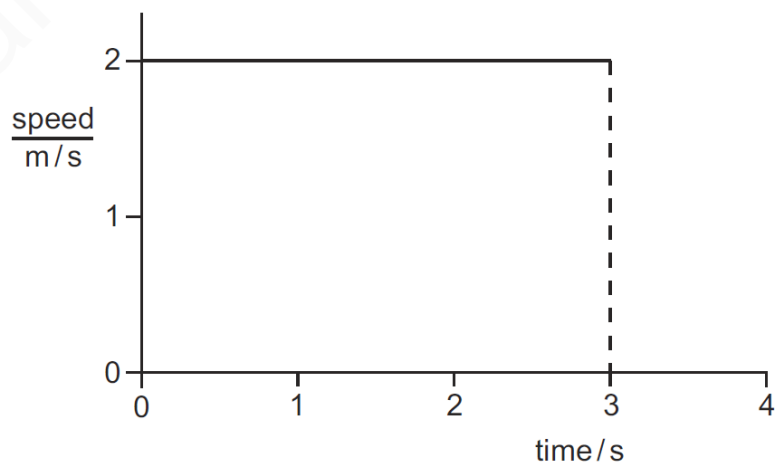
- A acceleration
- B distance
- C speed
- D time

MS-1

B

2

The diagram shows the speed-time graph for an object moving at constant speed.

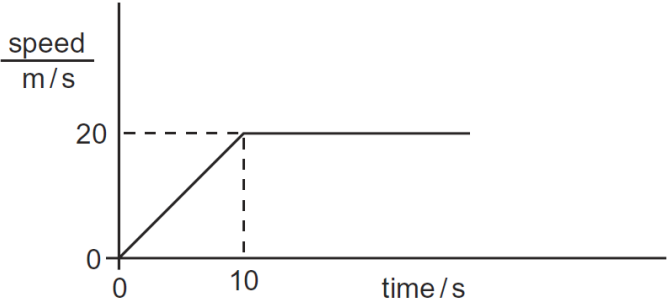
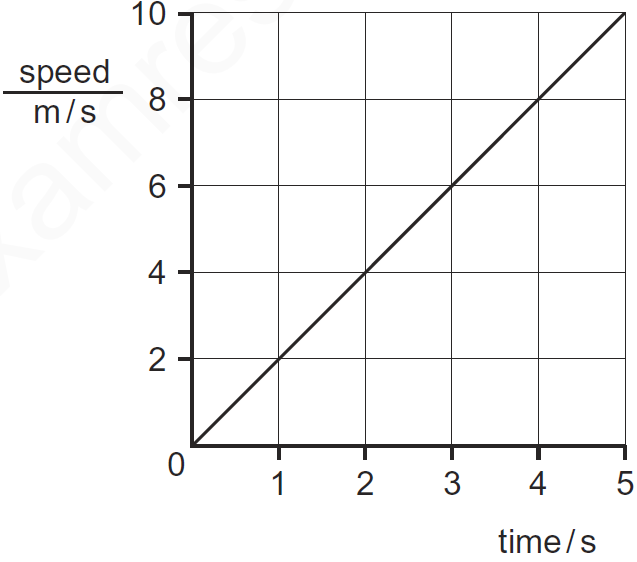


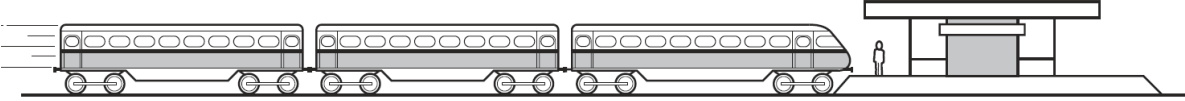
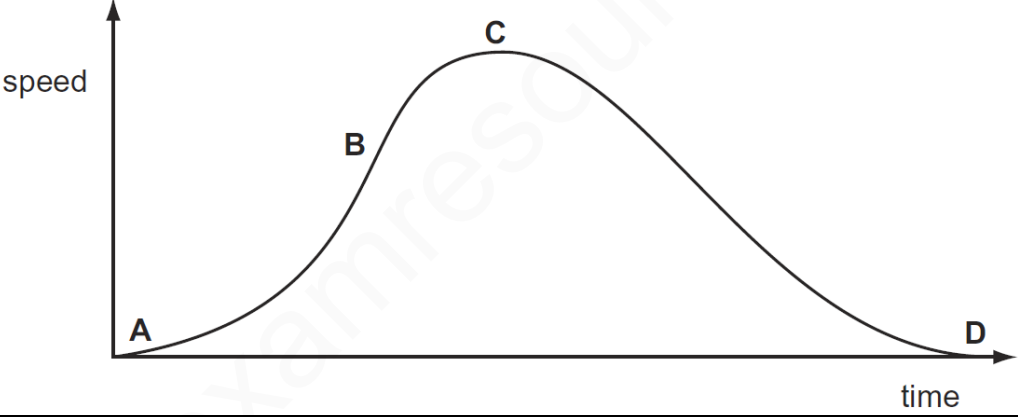
What is the distance travelled by the object in the first 3 s?

- A 1.5m
- B 2.0m
- C 3.0m
- D 6.0m

MS-2

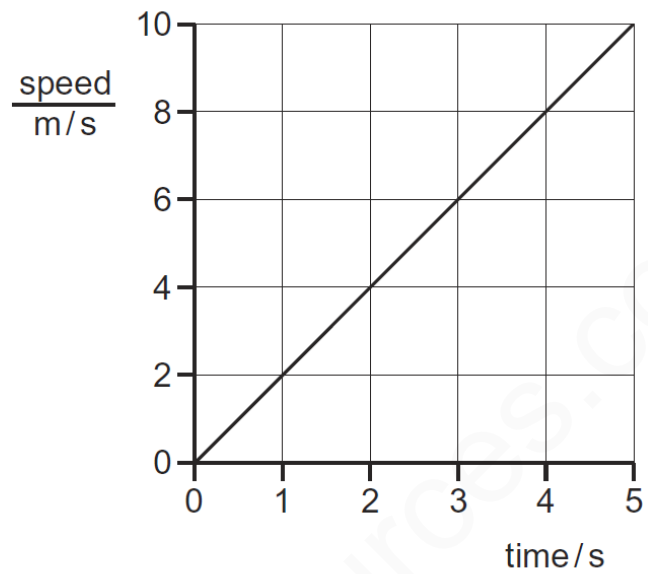
D

3	<p>A car accelerates from traffic lights. The graph shows how the car's speed changes with time.</p>  <p>How far does the car travel before it reaches a steady speed?</p> <p><b>A</b> 10 m      <b>B</b> 20 m      <b>C</b> 100 m      <b>D</b> 200 m</p>
MS-3	C
4	<p>The graph represents the movement of a body accelerating from rest.</p>  <p>After 5 seconds how far has the body moved?</p> <p><b>A</b> 2 m      <b>B</b> 10 m      <b>C</b> 25 m      <b>D</b> 50 m</p>
MS-4	C

5	<p>A child is standing on the platform of a station, watching the trains.</p>  <p>A train travelling at 30 m/s takes 3 s to pass the child.</p> <p>What is the length of the train?</p> <p><b>A</b> 10 m      <b>B</b> 30 m      <b>C</b> 90 m      <b>D</b> 135 m</p>
MS-5	C
6	<p>The speed-time graph shown is for a bus travelling between stops.</p> <p>Where on the graph is the acceleration of the bus the greatest?</p> 
MS-6	B

7

The graph represents the movement of a body.



How far has the body moved after 5 s?

**A** 2m

**B** 10m

**C** 25m

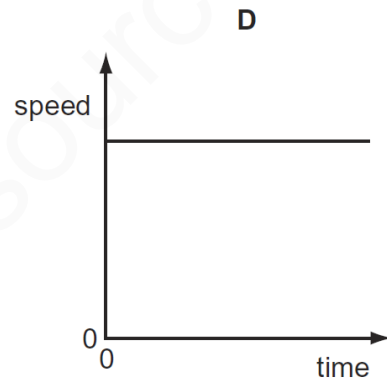
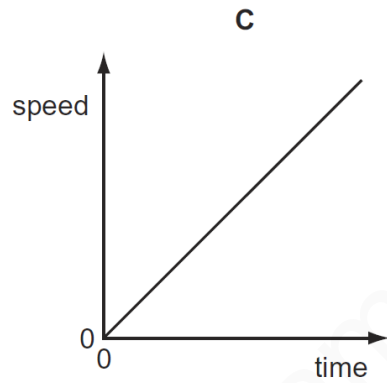
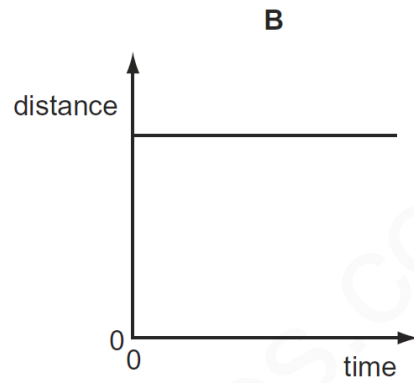
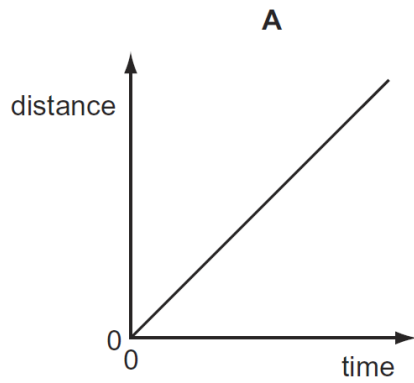
**D** 50m

MS-7

C

8

Two distance/time graphs and two speed/time graphs are shown.  
Which graph represents an object that is at rest?

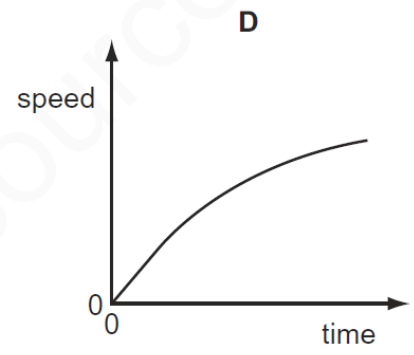
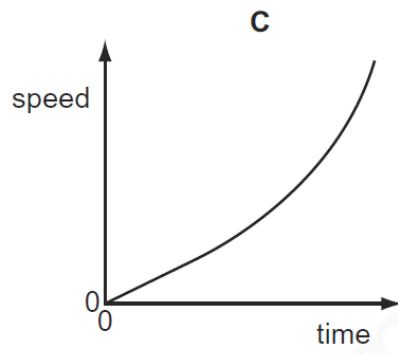
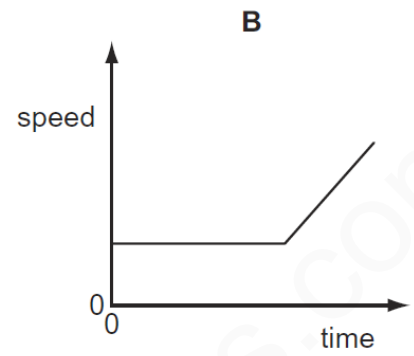
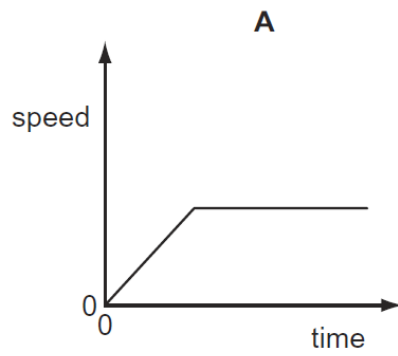


MS-8

B

9

An object moves initially with constant speed and then with constant acceleration.  
Which graph shows this motion?



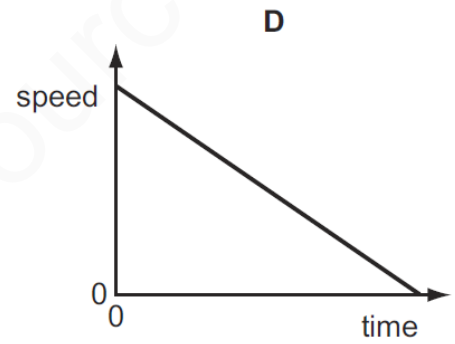
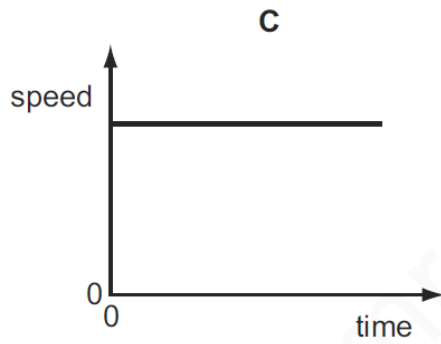
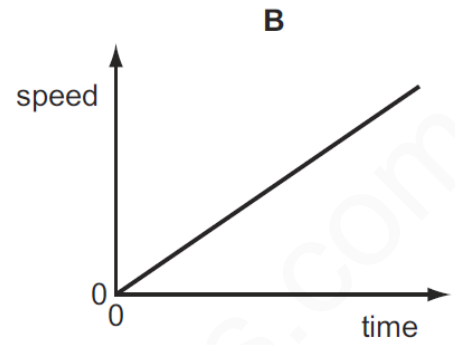
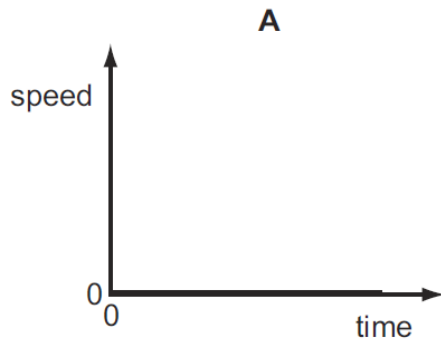
MS-9

B

10

A car is moving downhill along a road at a constant speed.

Which graph is the speed/time graph for the car?

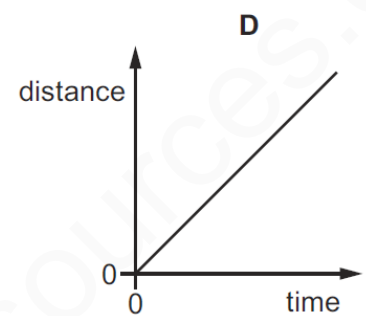
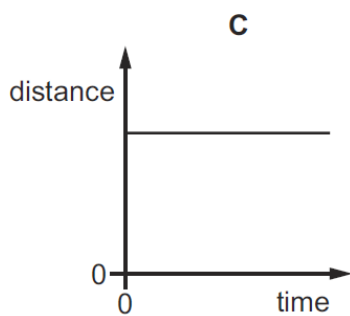
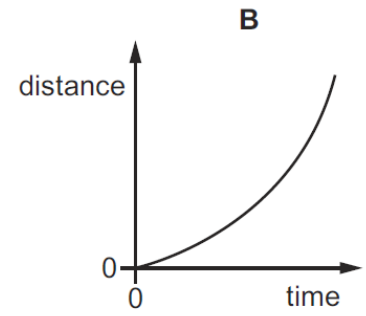
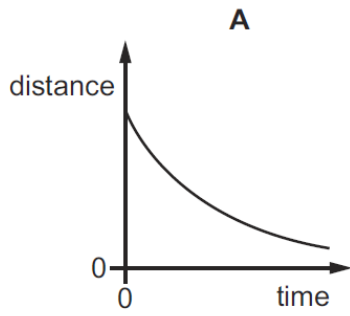


MS-10

C

11

Which distance/time graph represents the motion of an object moving at constant speed?



MS-11

D