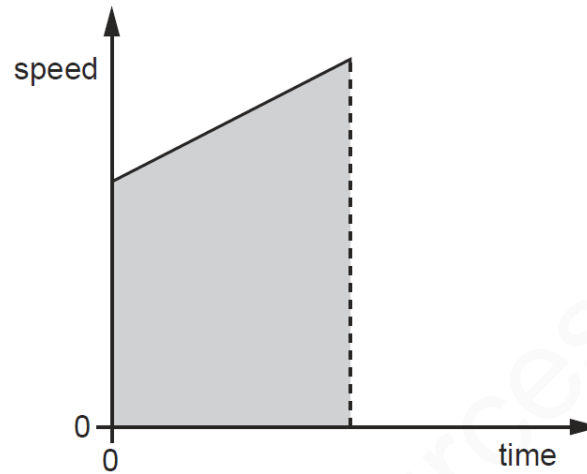


SPEED-TIME-SET-1-QP

1

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

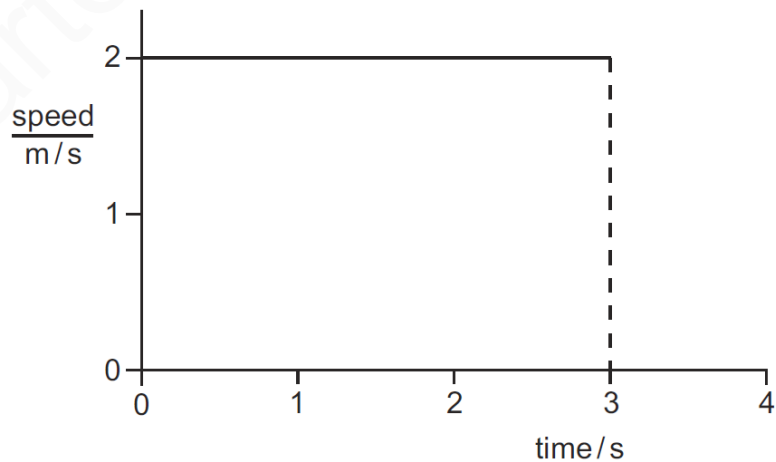


What is represented by the shaded area under the graph?

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

2

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

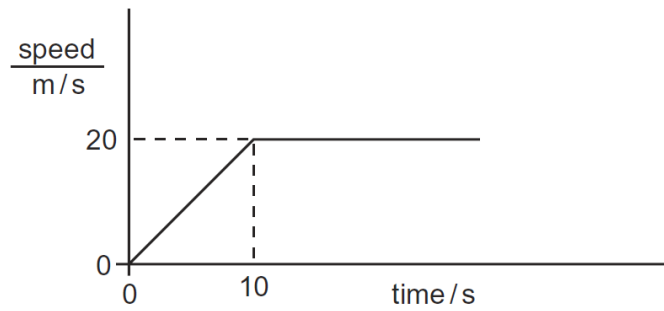


What is the distance travelled by the object in the first 3 s?

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

3

A car accelerates from traffic lights. The graph shows how the car's speed changes with time.

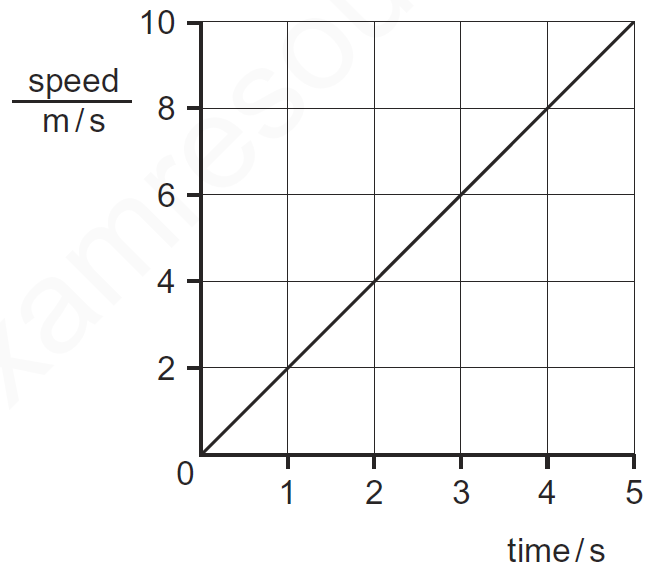


How far does the car travel before it reaches a steady speed?

- A** 10 m **B** 20 m **C** 100 m **D** 200 m

4

The graph represents the movement of a body accelerating from rest.

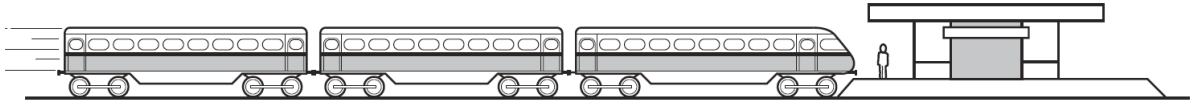


After 5 seconds how far has the body moved?

- A** 2 m **B** 10 m **C** 25 m **D** 50 m

5

A child is standing on the platform of a station, watching the trains.



A train travelling at 30 m/s takes 3 s to pass the child.

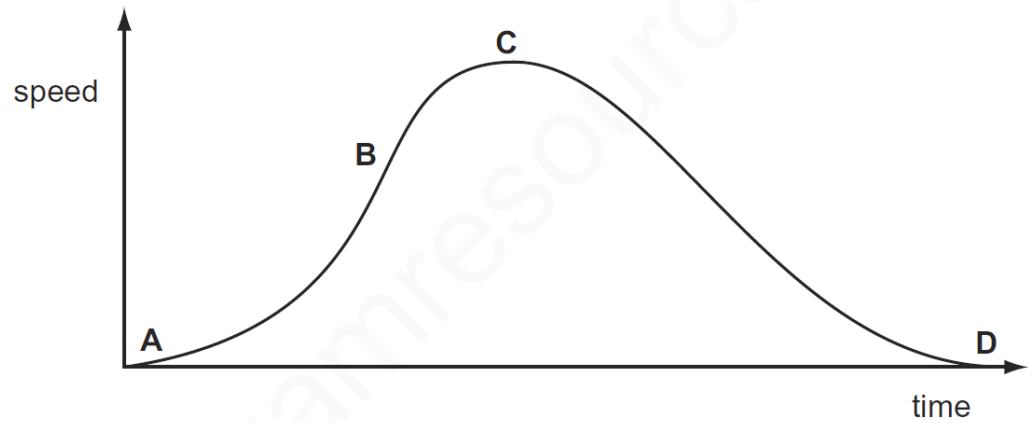
What is the length of the train?

- A** 10 m **B** 30 m **C** 90 m **D** 135 m

6

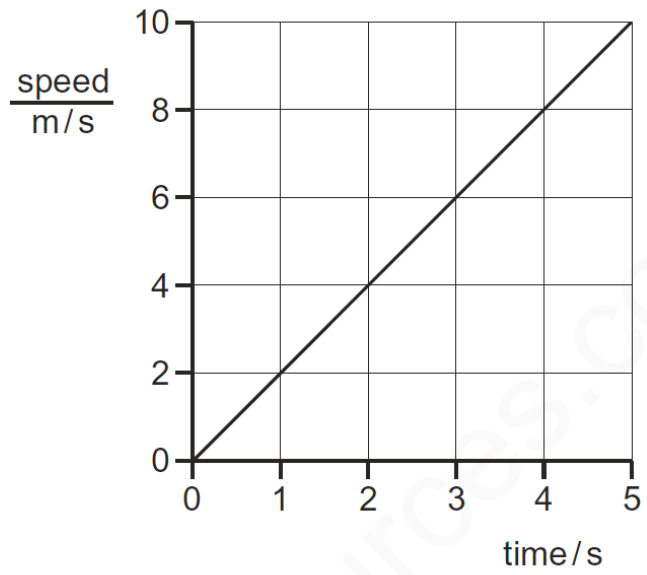
The speed-time graph shown is for a bus travelling between stops.

Where on the graph is the acceleration of the bus the greatest?



7

The graph represents the movement of a body.



How far has the body moved after 5 s?

A 2m

B 10m

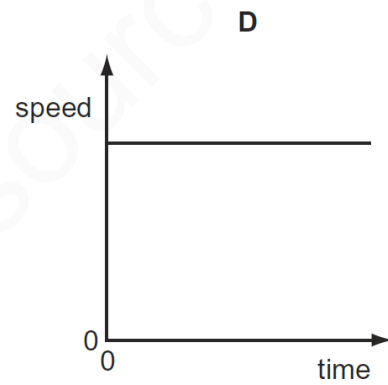
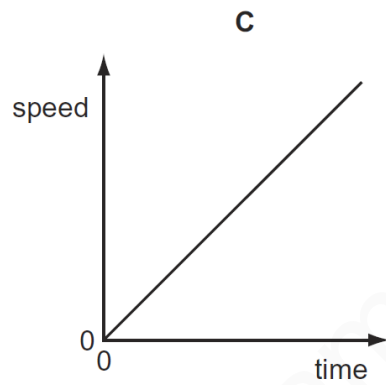
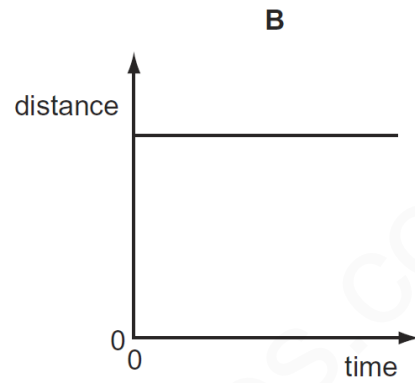
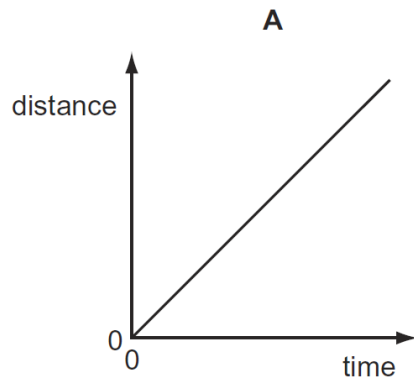
C 25m

D 50m

8

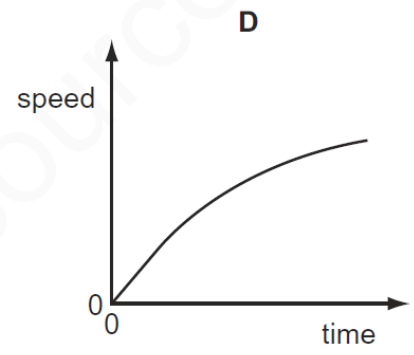
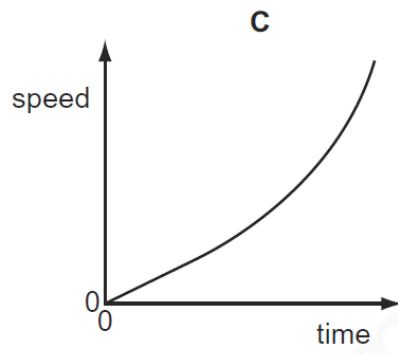
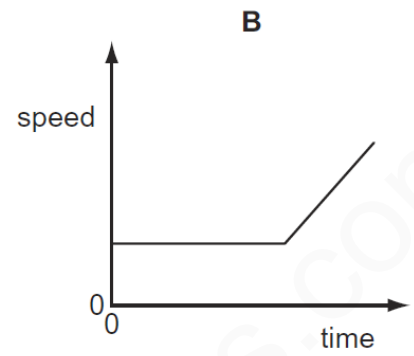
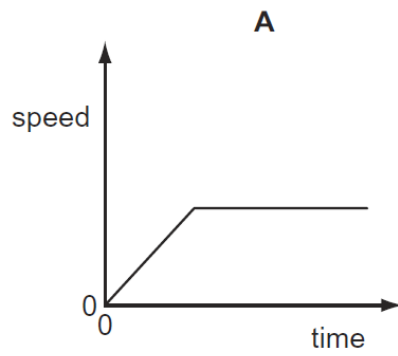
Two distance/time graphs and two speed/time graphs are shown.

Which graph represents an object that is at rest?



9

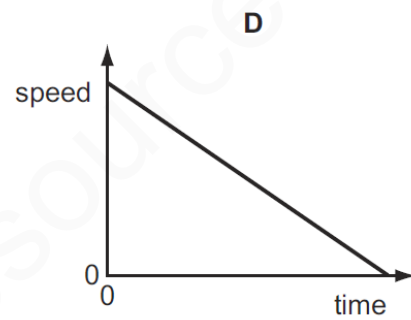
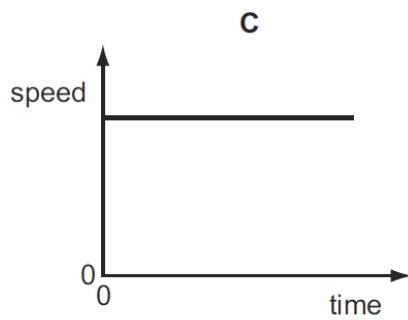
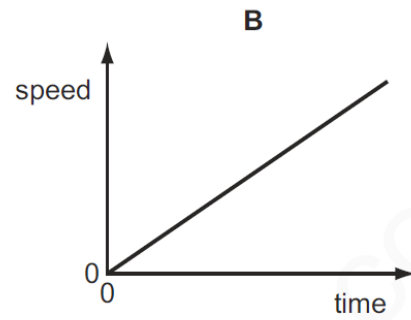
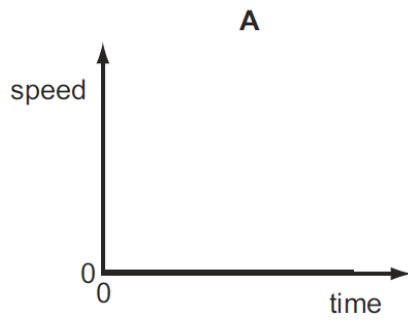
An object moves initially with constant speed and then with constant acceleration.
Which graph shows this motion?



10

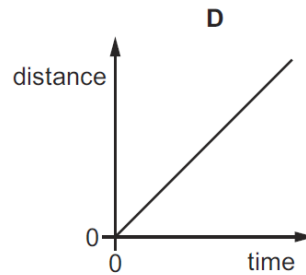
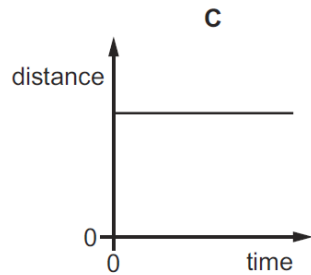
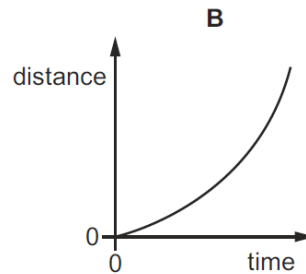
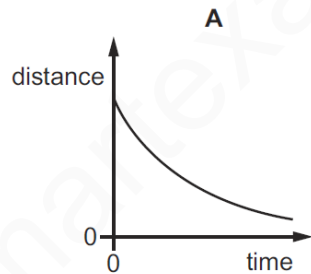
A car is moving downhill along a road at a constant speed.

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



11

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



MS-11

D