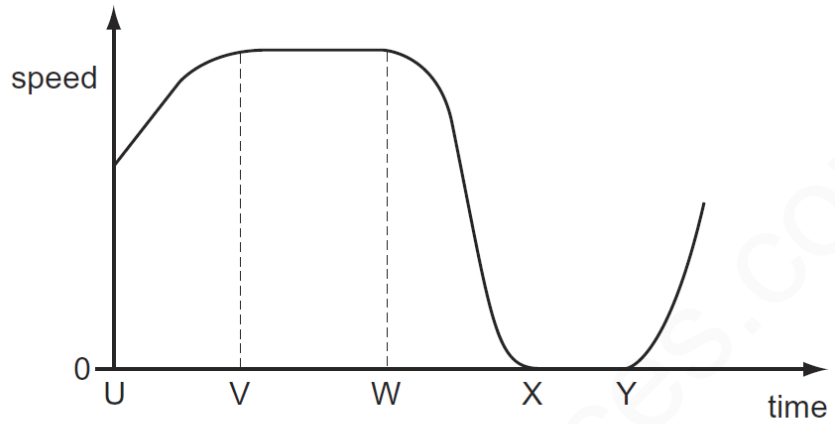


SPEE-TIME-SET-4

1

The graph shows how the speed of a car changes with time.



Between which two times is the car stationary?

- A** U and V **B** V and W **C** W and X **D** X and Y

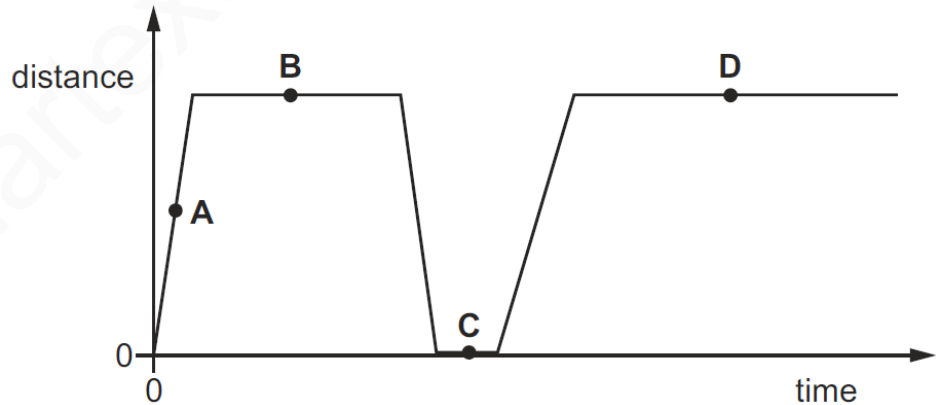
MS-1

D

2

The diagram shows the distance-time graph for a car.

At which labelled point is the car moving with constant speed?

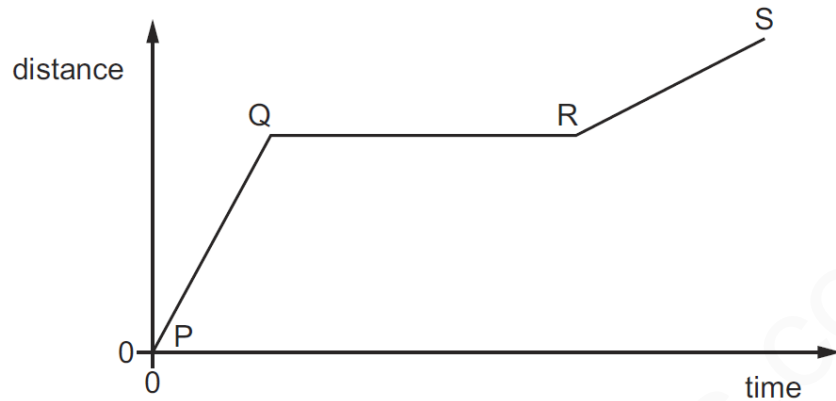


MS-2

A

3

The graph shows how the distance travelled by a vehicle changes with time.



Which row describes the speed of the vehicle in each section of the graph?

	P to Q	Q to R	R to S
A	constant	zero	constant
B	constant	zero	decreasing
C	increasing	constant	decreasing
D	increasing	zero	constant

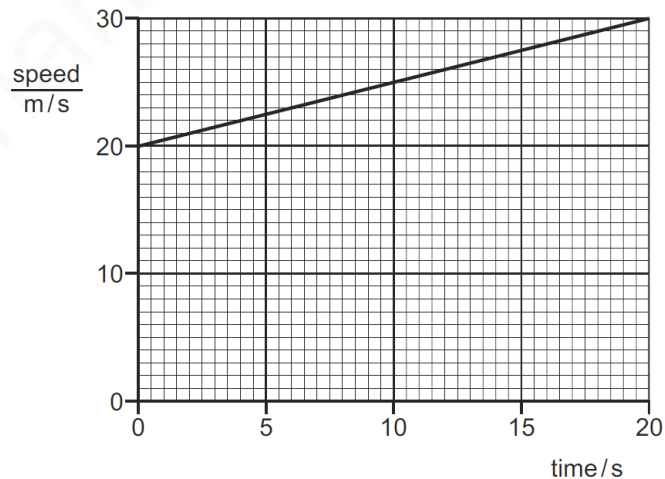
MS-3

A

4

A car travels along a horizontal road in a straight line. The driver presses the accelerator to increase the speed of the car.

The speed-time graph for the car is shown.



What is the acceleration of the car?

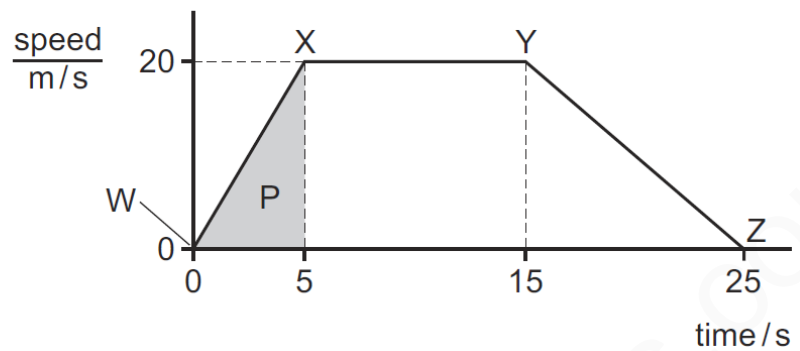
- A** 0.50 m/s^2 **B** 1.00 m/s^2 **C** 1.50 m/s^2 **D** 2.00 m/s^2

MS-4

A

5

The speed-time graph for an object is shown.



Below are four statements about the acceleration of the object.

Which statement is correct?

- A** The acceleration in the first 5 s is given by area P.
- B** The acceleration increases between W and X.
- C** The acceleration is negative between Y and Z.
- D** The deceleration between Y and Z is $(20 \div 25) \text{ m/s}^2$.

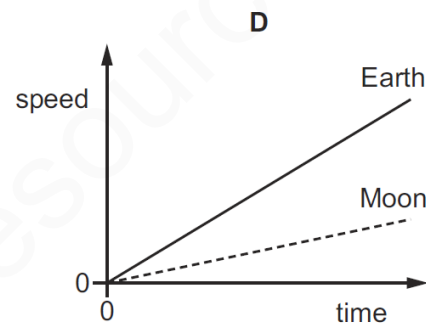
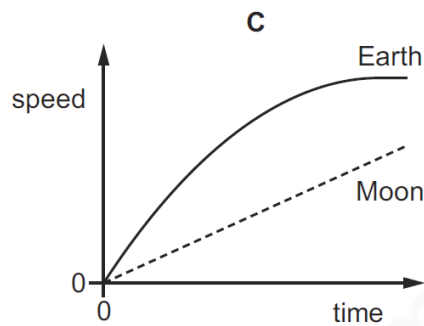
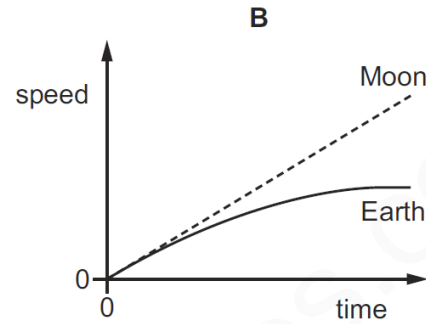
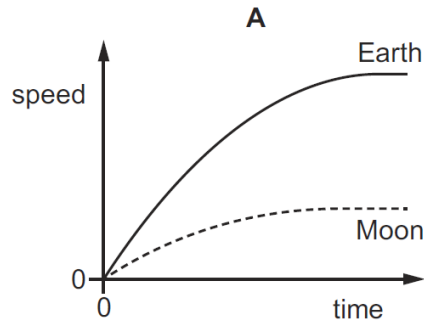
MS-5

C

6

The gravitational field strength on the Earth is greater than the gravitational field strength on the Moon. The Earth has an atmosphere, but the Moon does not.

Which speed-time graph represents the motion of a light ball dropped from a great height near the surface of the Earth and near the surface of the Moon?



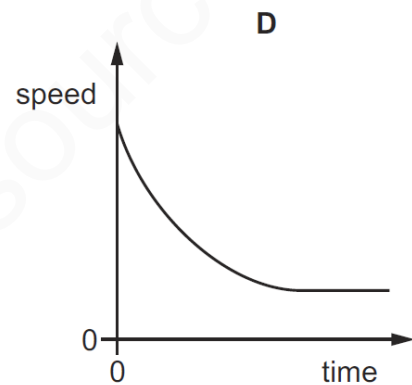
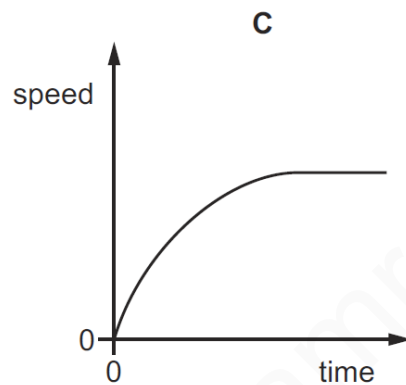
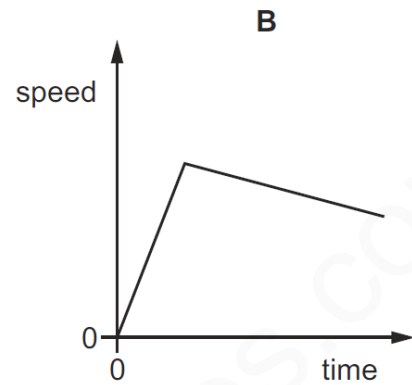
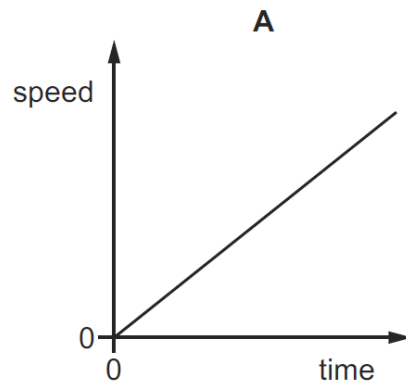
MS-6

C

7

A small, light ball is dropped from the top of a tall building.

Which graph shows how the speed of the ball changes with time?



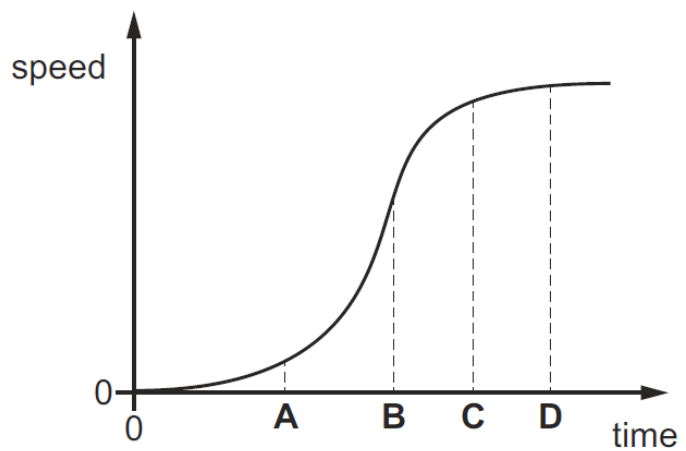
MS-7

C

8

The speed-time graph shows the motion of a car.

At which time is its acceleration greatest?

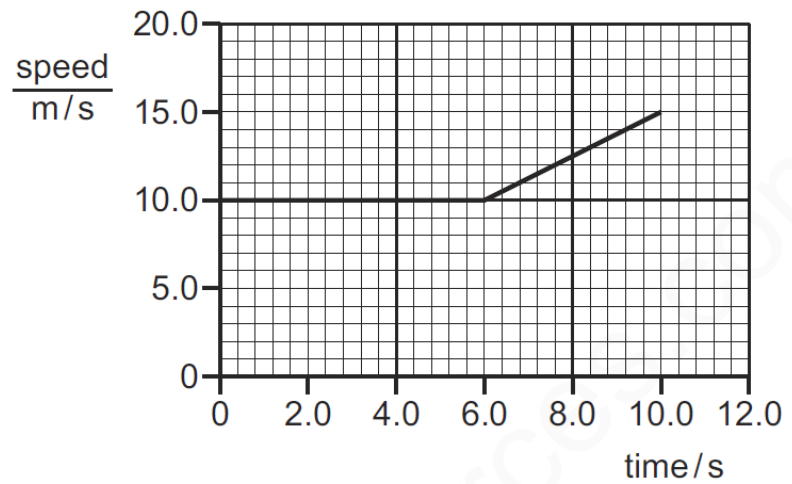


MS-8

B

9

The graph shows how the speed of a car varies during part of a journey.



What is the acceleration of the car between 6.0 s and 10.0 s?

- A** 0.50 m/s^2 **B** 0.80 m/s^2 **C** 1.25 m/s^2 **D** 1.50 m/s^2

MS-9

C