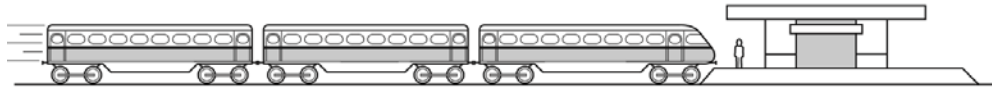


26.

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?

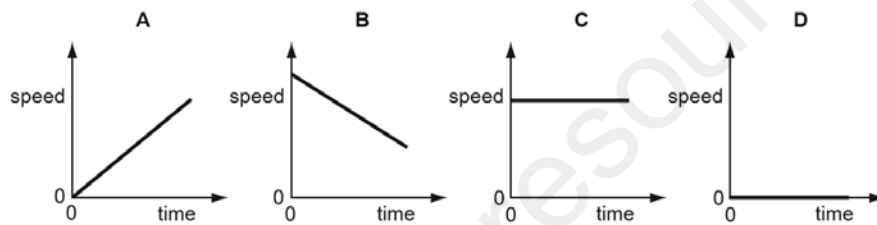
- A** 10m **B** 30m **C** 90m **D** 135m

Ans:

C

27.

Which speed/time graph applies to an object at rest?



Ans:

D

28.

Four students try to explain what is meant by acceleration.

Which student makes a correct statement?

- A** It is related to the changing speed of an object.
B It is the distance an object travels in one second.
C It is the force acting on an object divided by the distance it travels in one second.
D It is the force acting on an object when it is near to the Earth.

Ans:

A

29.

The circuit of a motor racing track is 3 km in length. In a race, a car goes 25 times round the circuit in 30 minutes.

What is the average speed of the car?

- A 75 km/hour
- B 90 km/hour
- C 150 km/hour
- D 750 km/hour

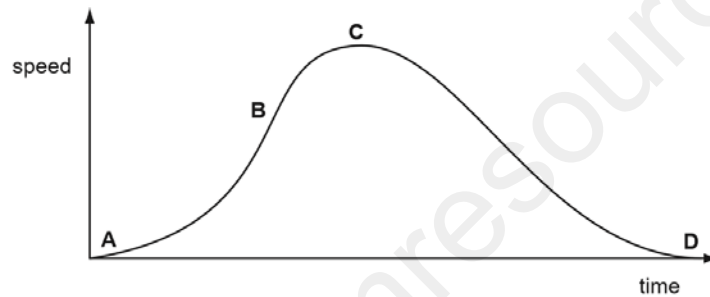
Ans:

C

30.

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

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



Ans:

B

31.

A car travels at various speeds during a short journey.

The table shows the distances travelled and the time taken during each of four stages P, Q, R and S.

stage	P	Q	R	S
distance travelled / km	1.8	3.6	2.7	2.7
time taken / minutes	2	2	4	3

During which two stages is the car travelling at the same speed?

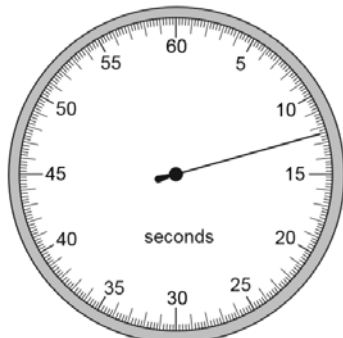
- A P and Q
- B P and S
- C Q and R
- D R and S

Ans:

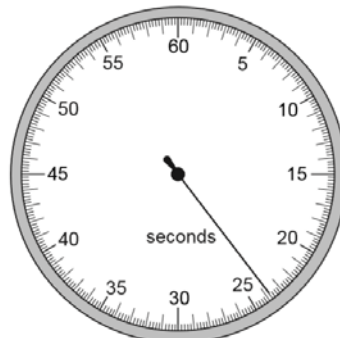
B

32.

A stopwatch is used to time an athlete running 100 m. The timekeeper forgets to reset the watch to zero before using it to time another athlete running 100 m.



stopwatch at end of first athlete's run



stopwatch at end of second athlete's run

How long does the second athlete take to run 100 m?

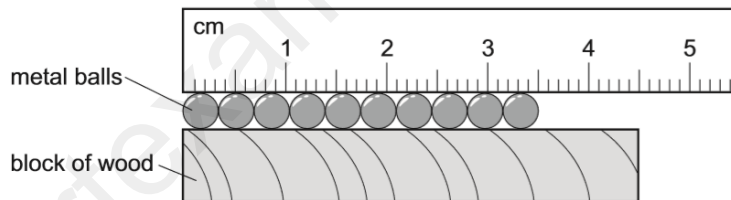
- A** 11.2s **B** 11.4s **C** 12.4s **D** 23.8s

Ans

B

33.

A ruler and a block of wood are used to find the diameter of some identical metal balls.



What is the diameter of a single ball?

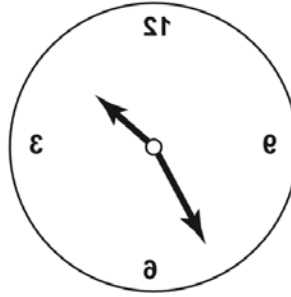
- A** 3.5 mm **B** 4.5 mm **C** 3.5 cm **D** 4.5 cm

Ans

A

34.

The image of a clock face as seen in a plane mirror is shown.



What is the time on the clock?

- A** 1.25 **B** 1.35 **C** 10.25 **D** 10.35

Ans

B