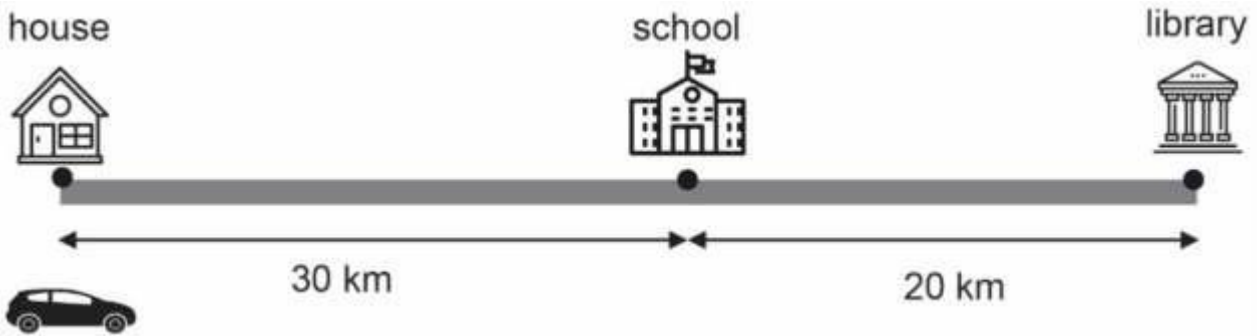


Curriculum Aligned Competency Based Test Items
Science
Class 9 – Chapter 8
Motion

The figure below shows the motion of a car along a straight path.
 The car moves from house to school and school to library.
 It then moves back to the school and stops.



SAS21S090801

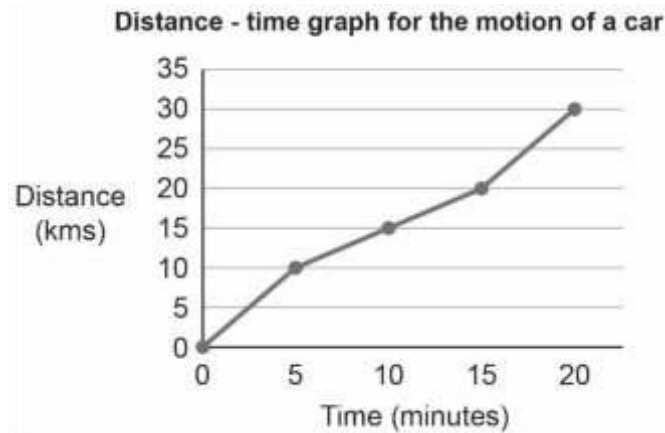
What is the net displacement of the car?

- A. 20 km
- B. 30 km
- C. 50 km
- D. 70 km

SAS21S090802

What is the total distance travelled by the car?

The graph below shows how the car travelled from house to school.



SAS21S090803

Did the car move with uniform motion from house to school? Explain your answer.

The table below shows the speed of a bus in three hours of its travel.

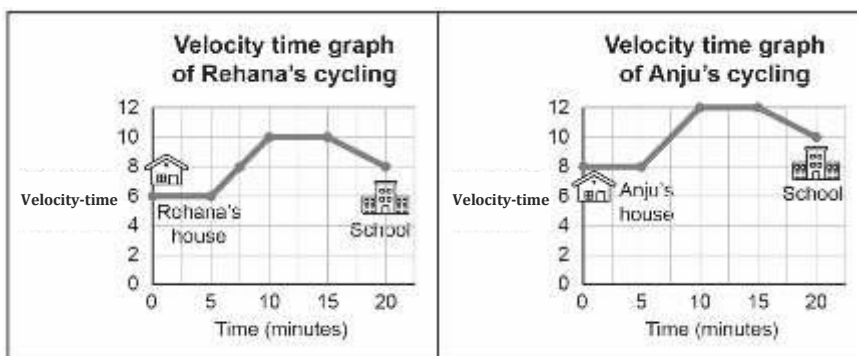
	First hour	Second hour	Third hour
Speed of the bus	35 km/hr	60 km/hr	40 km/hr

SAS21S090804

What was the average speed of the bus?

- A. 35 km/hr
- B. 40 km/hr
- C. 45 km/hr
- D. 60 km/hr

Rehana and Anju stay at different places but study in the same school. The velocity-time graph shows how Rehana and Anju bicycled from house to school.



SAS21S090805

Which statement can be concluded from Rehana's cycling graph?

- A. Rehana was at rest during the first 5 minutes.
- B. Rehana cycled the fastest between 5 minutes and 10 minutes.
- C. Rehana cycled with uniform acceleration between 15 minutes and 20 minutes.
- D. Rehana was cycling with a uniform velocity between 10 minutes and 15 minutes.

SAS21S090806

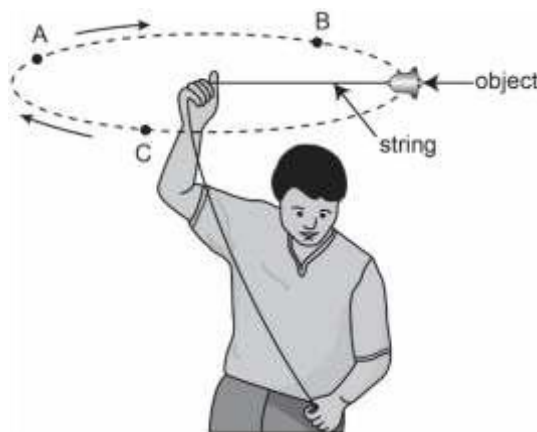
What was Rehana's maximum cycling velocity?

SAS21S090807

What can be concluded by comparing the velocity-time graphs of Rehana and Anju?

- A. Anju took lesser time to reach school than Rehana.
- B. Anju cycled faster than Rehana at the start of the journey.
- C. Anju and Rehana had the same maximum cycling velocity.
- D. Anju's cycling velocity in the first 5 minutes was lesser than that of Rehana.

The picture below shows a man swinging an object in a uniform circular motion. A, B and C are three different points on the path of motion of the object.

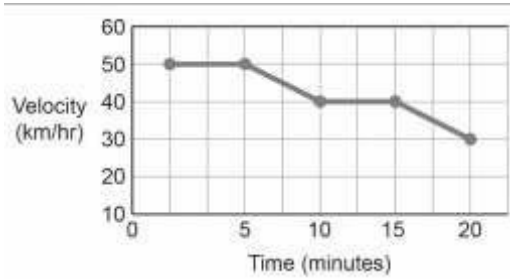


SAS21S090808

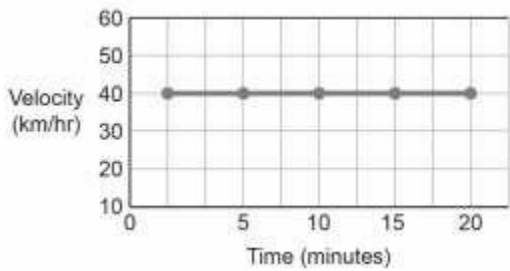
What is the net displacement of the object after one complete swing?

Which velocity-time graph shows a period of acceleration in the motion?

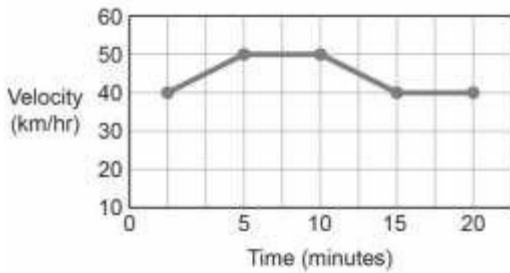
A.



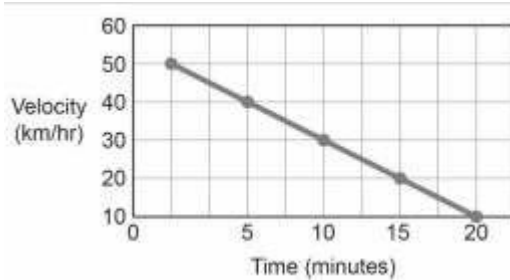
B.



C.



D.



What is the correct unit for measuring the acceleration of a moving object?

- A. m
- B. s
- C. m s^{-1}
- D. m s

