

**Self-Test Solution:** (Scroll down to Page 2 for solution)

## **Kinematics Lesson 1 – What is Speed and Average Speed?**

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Having completed lesson 1, you are now ready to try the following question taken from past examinations:

**GCE “O” Level Physics (6091 syllabus), November 2011, Paper 1, Question 4**

A car driver takes a total of two hours to make a journey of 75 km. During the journey, she takes a break of half an hour and spends a quarter of an hour stationary in a traffic jam.

At what average speed must she travel during the rest of the time for the whole journey to take two hours?

- (A) 38 km/h
- (B) 50 km/h
- (C) 60 km/h
- (D) 75 km/h

(Scroll down for solution)

## Solution

Total distance travelled = 75 km

Total travelling time = 2 hours – (1/2 hour break) – (1/4 hour at traffic jam)

= 1 ¼ hour

Hence,

Average Speed = 75 km/ (1 ¼ hour)

= 60 km/h

Answer : C