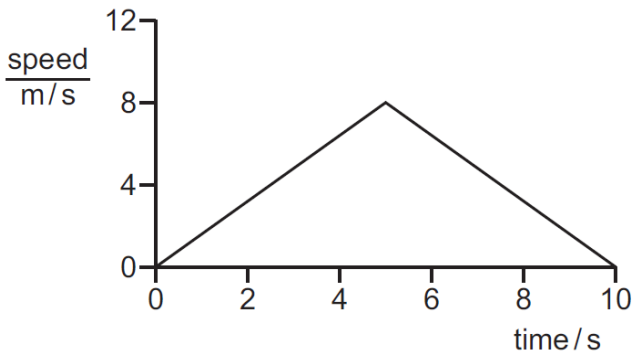
**Motion – 2019 Nov**

**1.** 0625/11/O/N/19/No.2

The graph shows how the speed of an object changes with time.




How far does the object travel in 10 seconds?

**A** 8 m **B** 10 m **C** 40 m **D** 80 m

**2.** 0625/11, 12,13,21,22,23/O/N/19/No.3

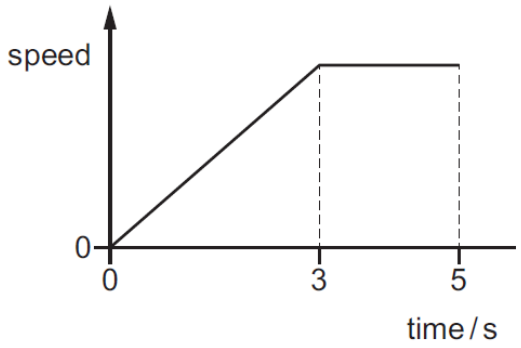
A car travels at an average speed of 60 km/h for 15 minutes.

How far does the car travel in 15 minutes?

**A** 4.0 km **B** 15 km **C** 240 km **D** 900 km

**3.** 0625/12/O/N/19/No.2

The graph shows the motion of a car for a five-second period.




Which row is correct?

| | the car is at rest at | the car is moving at a constant speed at |
|---|---|---|
| **A** | 0.0 s | 2.0 s |
| **B** | 0.0 s | 4.0 s |
| **C** | 4.0 s | 0.0 s |
| **D** | 4.0 s | 2.0 s |

**4.** 0625/13/O/N/19/No.2

An object begins to fall close to the Earth's surface. Air resistance can be ignored.

Which statement about the object's acceleration is correct?

**A** The acceleration is constant.

**B** The acceleration decreases as the body falls.

**C** The acceleration increases as the body falls.

**D** The acceleration is zero.

**5.** 0625/21/O/N/19/No.2

A light object is dropped from rest. It falls a large distance vertically through air.

How can the motion of the object be described?

**A** constant acceleration

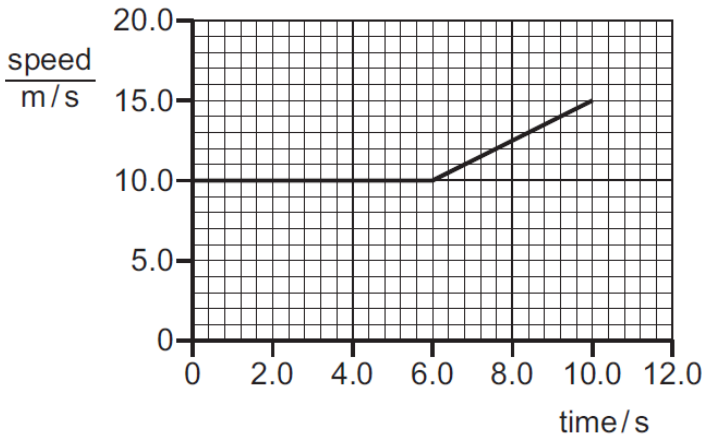
**B** increasing acceleration

**C** decreasing acceleration and then moving at terminal velocity

**D** increasing acceleration and then moving at terminal velocity

**6.** 0625/22/O/N/19/No.2

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$^2$



**7.** 0625/23/O/N/19/No.2

The graph shows how the speed of an object varies with time.

At which labelled time is the object decelerating?