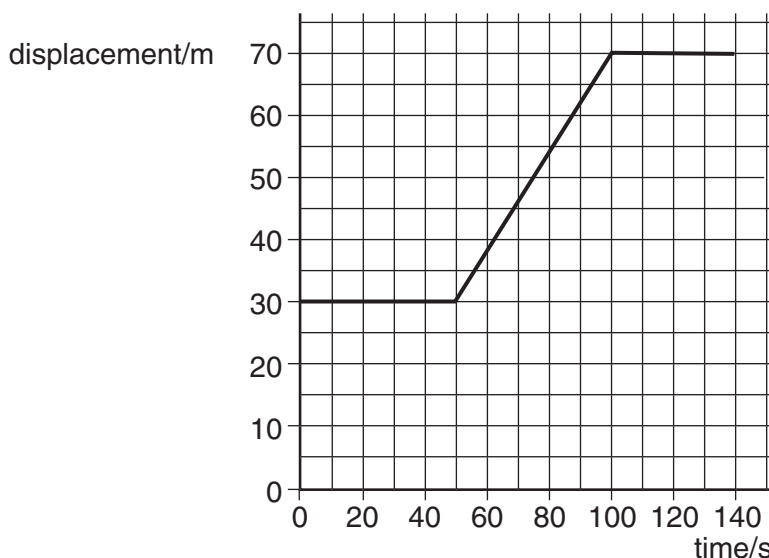


- 7 A car at rest in a traffic queue moves forward in a straight line and then comes to rest again. The graph shows the variation with time of its displacement.

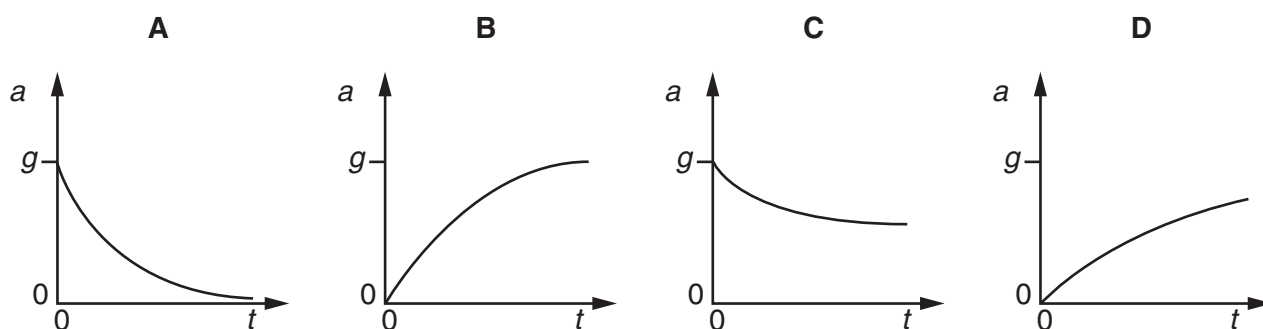


What is its speed while it is moving?

- A** 0.70 m s^{-1} **B** 0.80 m s^{-1} **C** 1.25 m s^{-1} **D** 1.40 m s^{-1}
- 8 An object is dropped from a great height and falls through air of uniform density.

The acceleration of free fall is g .

Which graph could show the variation with time t of the acceleration a of the object?



- 9 Which of the following is a statement of the principle of conservation of momentum?
- A** Momentum is the product of mass and velocity.
- B** In an elastic collision, momentum is constant.
- C** The momentum of an isolated system is constant.
- D** The force acting on a body is proportional to its rate of change of momentum.