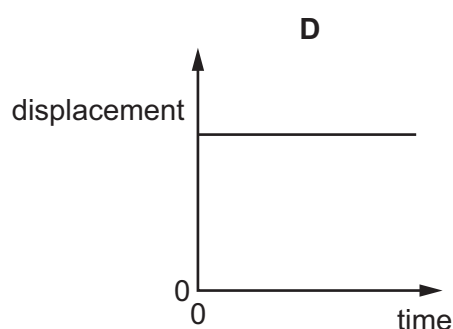
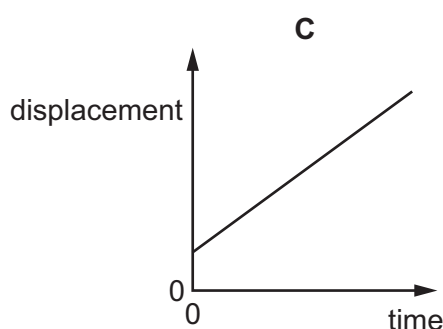
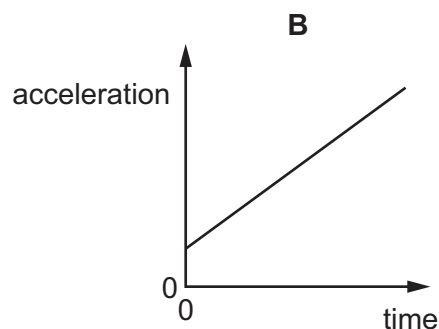
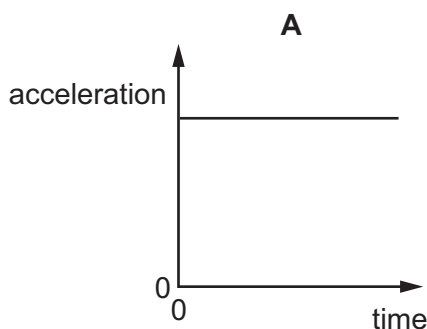


- 6 Which graph represents the motion of a car that is travelling along a straight road with a speed that increases uniformly with time?



- 7 What is the principle of conservation of momentum?

- A** Force is equal to the rate of change of momentum.
- B** Momentum is the product of mass and velocity.
- C** The total momentum of a system remains constant provided no external force acts on it.
- D** The total momentum of two bodies after collision is equal to their total momentum before collision.

- 8 Water is pumped through a hose-pipe at a rate of 90 kg per minute. It emerges from the hose-pipe horizontally with a speed of  $20 \text{ m s}^{-1}$ .

Which force is required from a person holding the hose-pipe to prevent it moving backwards?

- A** 30 N      **B** 270 N      **C** 1800 N      **D** 10 800 N

**Space for working**