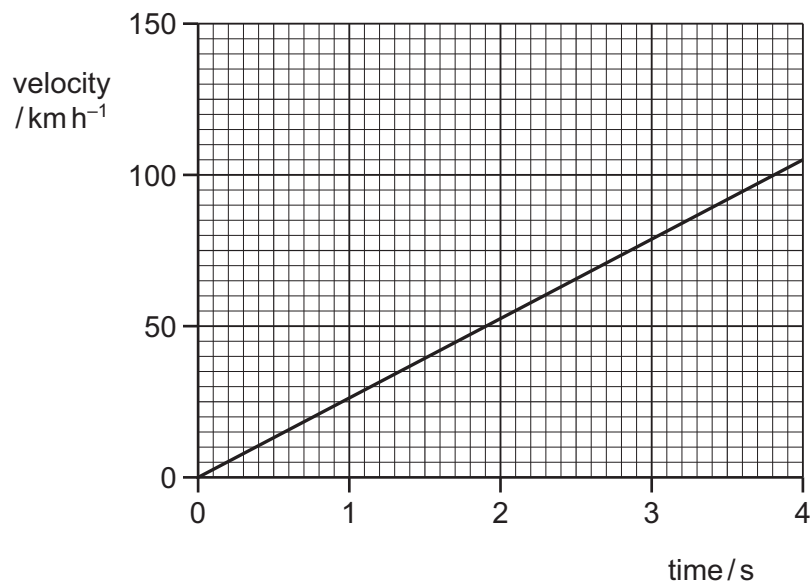


- 8 The velocity of an electric car changes as shown.



What is the acceleration of the car?

- A**  $210 \text{ ms}^{-2}$       **B**  $58 \text{ ms}^{-2}$       **C**  $26 \text{ ms}^{-2}$       **D**  $7.3 \text{ ms}^{-2}$
- 9 A body falling in a uniform gravitational field encounters air resistance. The air resistance increases until terminal velocity is reached.
- Which factor does **not** affect its terminal velocity?
- A** the density of the air  
**B** the height from which the body falls  
**C** the mass of the body  
**D** the shape of the body
- 10 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.