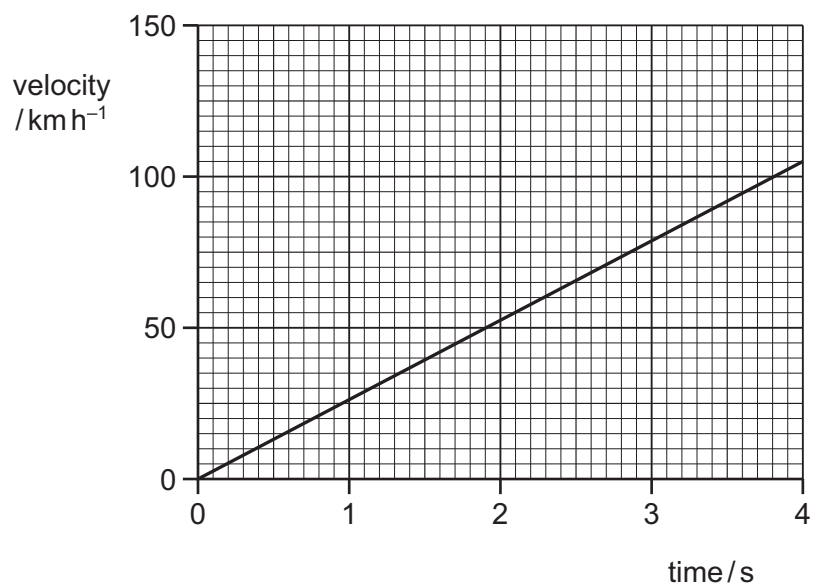
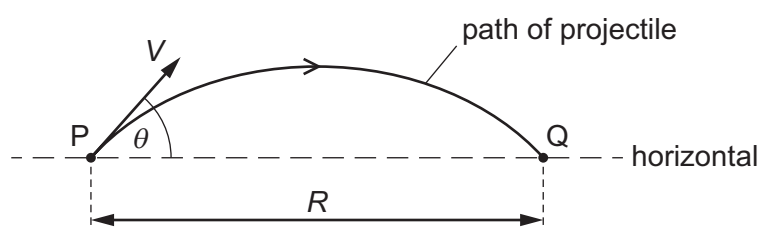


- 6 The velocity of an electric car changes as shown.



What is the acceleration of the car?

- A**  $210 \text{ ms}^{-2}$       **B**  $58 \text{ ms}^{-2}$       **C**  $26 \text{ ms}^{-2}$       **D**  $7.3 \text{ ms}^{-2}$
- 7 A projectile is fired from point P with velocity  $V$  at an angle  $\theta$  to the horizontal. It lands at point Q, a horizontal distance  $R$  from P, after time  $T$ .



The acceleration of free fall is  $g$ . Air resistance is negligible.

Which equation is correct?

- A**  $R = VT \cos \theta$   
**B**  $R = VT \sin \theta$   
**C**  $R = VT \cos \theta - \frac{1}{2} g T^2$   
**D**  $R = VT \sin \theta - \frac{1}{2} g T^2$