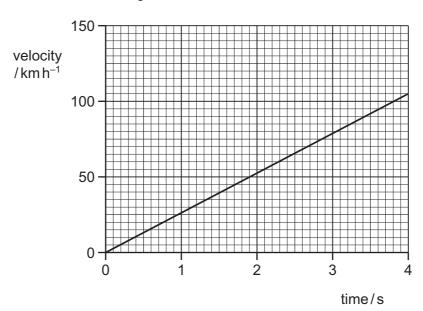
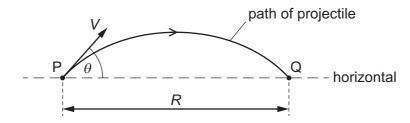
6 The velocity of an electric car changes as shown.



What is the acceleration of the car?

- **A** $210 \,\mathrm{m \, s^{-2}}$
- **B** $58 \,\mathrm{m \, s^{-2}}$
- $C 26 \, \text{m s}^{-2}$
- **D** $7.3 \,\mathrm{m \, s^{-2}}$
- 7 A projectile is fired from point P with velocity V at an angle θ 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** $R = VT\cos\theta \frac{1}{2}gT^2$
- **D** $R = VT\sin\theta \frac{1}{2}gT^2$