5 One object moves directly from P to R.

R

Q

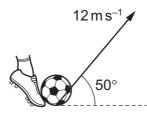
P

In a shorter time, a second object moves from P to Q to R.

Which statement about the two objects is correct for the journey from P to R?

- **A** They have the same average speed.
- **B** They have the same average velocity.
- **C** They have the same displacement.
- **D** They travel the same distance.
- **6** A ball is kicked so that it has an initial velocity of $12 \,\mathrm{m\,s^{-1}}$ at an angle of 50° to horizontal ground.

Assume that air resistance is negligible.



What is the maximum height above the ground that is reached by the ball?

- **A** 0.47 m
- **B** 3.0 m
- **C** 4.3 m
- **D** 7.3 m