

- 5 A ball is kicked upwards at an angle of  $45^\circ$  to horizontal ground. After a short flight, the ball returns to the ground.

It may be assumed that air resistance is negligible.

What is **never** zero during the flight of the ball?

- A the horizontal component of the ball's acceleration
- B the horizontal component of the ball's velocity
- C the vertical component of the ball's momentum
- D the vertical component of the ball's velocity