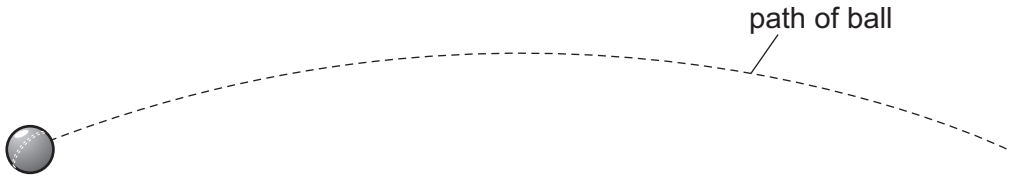
**8** A ball is thrown across a flat field.




Which statement describes the motion of the ball, when the effects of air resistance are ignored?

**A** The ball lands with the same velocity at which it is thrown.

**B** The horizontal component of acceleration is constant throughout the motion.

**C** The horizontal and vertical components of acceleration are both zero at the highest point of the motion.

**D** The horizontal and vertical components of velocity are both zero at the highest point of the motion.