

- 2** An object is thrown vertically upwards in air. The times for the upward motion t_u and the downward motion t_d to return to the same height are compared.

Which statement is correct?

- A** t_d is greater because at a given speed the resultant force when the object is moving downwards is smaller than the retarding force when it is moving upwards.
- B** t_d is greater because the object moves faster on its downward motion and therefore the air resistance is greater.
- C** t_u is greater because at a given speed, the resultant force when the object is moving downwards is greater than the retarding force when it is moving upwards.
- D** t_u is greater because the object moves faster on its downward motion due to gravitational force acting in the same direction as its motion.