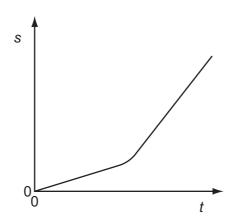
7 A stone of mass m is dropped from a tall building. There is significant air resistance. The acceleration of free fall is g.

When the stone reaches its terminal velocity, which information is correct?

| | magnitude of the acceleration of the stone | magnitude of the force of gravity on the stone | magnitude of the force of air resistance on the stone |
|---|--|--|---|
| Α | g | mg | mg |
| В | zero | mg | mg |
| С | zero | zero | mg |
| D | zero | zero | zero |

8 The variation with time *t* of the distance *s* moved by a body is shown below.



What can be deduced from the graph about the motion of the body?

- A It accelerates continuously.
- **B** It starts from rest.
- **C** The distance is proportional to time.
- **D** The speed changes.

Space for working