

- 3** An elevator is moving downwards with a downward acceleration of  $5.8 \text{ m s}^{-2}$ . A ball, held  $2.0 \text{ m}$  above the floor of the elevator and at rest with respect to the elevator, is released.

How long does it take for the ball to reach the floor of the elevator?

- A**  $0.51 \text{ s}$                       **B**  $0.64 \text{ s}$                       **C**  $0.83 \text{ s}$                       **D**  $1.0 \text{ s}$