6 A boy with a ball was in a stationary lift. When the lift starts to accelerate upwards at 1.2 m s^{-2}, the boy released the ball from a height of 1.5 m above the floor of the lift.

What is the time taken by the ball to hit the floor of the lift?

A   0.27 s   **B**   0.52 s   **C**   0.55 s   **D**   0.59 s