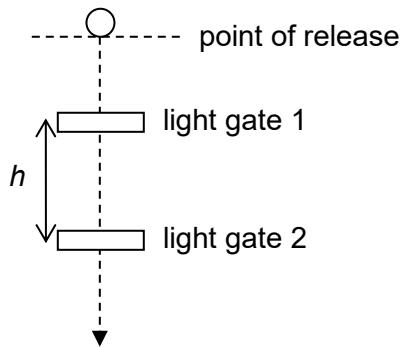


- 4 To determine the acceleration of free fall, a steel ball is dropped above two light gates as shown. The ball passes light gate 1 and 2 at times t_1 and t_2 after release.



What is the acceleration of free fall?

- A** $\frac{2h}{t_2 - t_1}$ **B** $\frac{2h}{(t_2 - t_1)^2}$ **C** $\frac{2h}{{t_2}^2 - {t_1}^2}$ **D** $\frac{2h}{\left(\frac{t_2 + t_1}{2}\right)^2}$