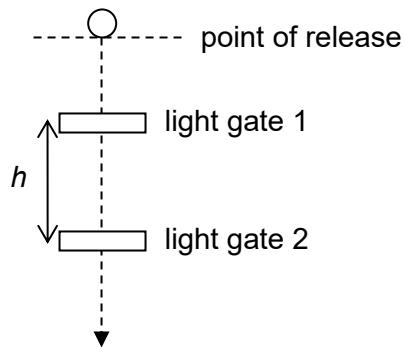


- 4 To determine the acceleration of free fall, a steel ball is dropped above two light gates as shown.

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 $\frac{2h}{\left(\frac{t_2 + t_1}{2}\right)^2}$

