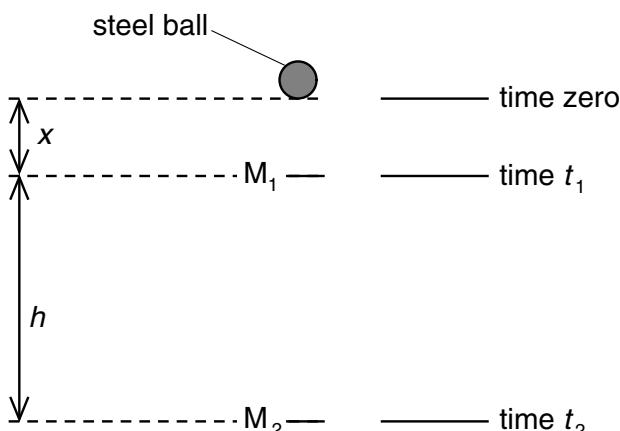


- 9 Two markers  $M_1$  and  $M_2$  are set up a vertical distance  $h$  apart.



When a steel ball is released from rest from a point a distance  $x$  above  $M_1$ , it is found that the ball takes time  $t_1$  to reach  $M_1$  and time  $t_2$  to reach  $M_2$ .

Which expression gives the acceleration of the ball?

A  $\frac{2h}{t_2^2}$

B  $\frac{2h}{(t_2 + t_1)}$

C  $\frac{2h}{(t_2 - t_1)^2}$

D  $\frac{2h}{(t_2^2 - t_1^2)}$