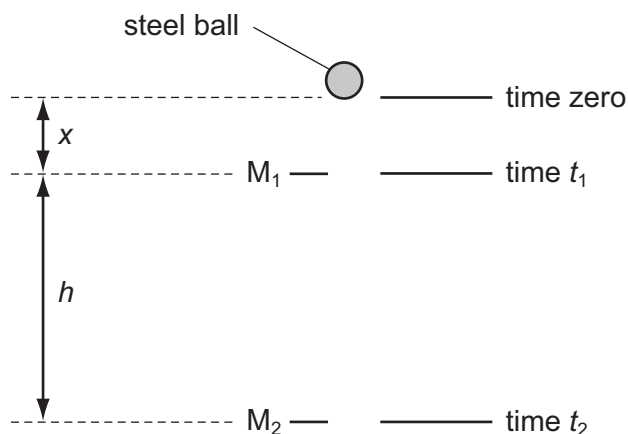


- 8 Two markers M_1 and M_2 are set up a vertical distance h apart.



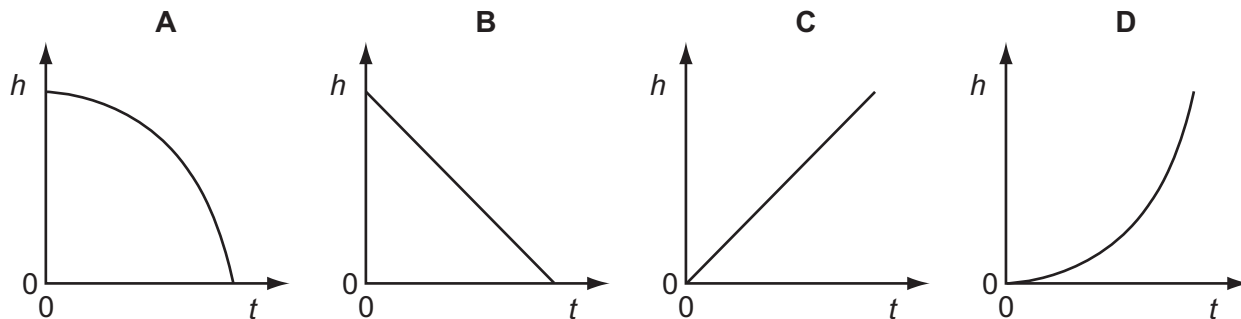
A steel ball is released at time zero from a point a distance x above M_1 . The ball reaches M_1 at time t_1 and reaches M_2 at time t_2 . The acceleration of the ball is constant.

Which expression gives the acceleration of the ball?

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

- 9 A brick is dislodged from a building and falls vertically under gravity.

Which graph best represents the variation of its height h above the ground with time t if air resistance is negligible?



Space for working