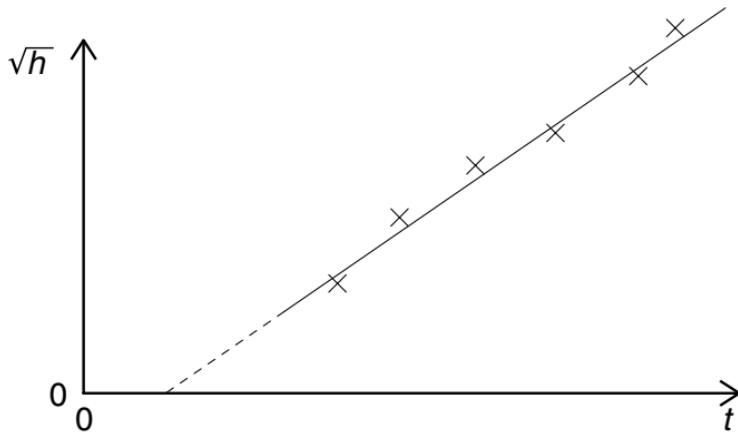


- 4 A student measures the time t for a ball to fall from rest through a vertical distance h . Knowing that the equation $h = \frac{1}{2} gt^2$ applies, the student plots the graph shown.



Which of the following is an explanation for the intercept on the t axis?

- A Air resistance has not been taken into account for larger values of h .
- B There is a constant delay between starting the timer and releasing the ball.
- C There is an error in the timer that consistently makes it run fast.
- D The student should have plotted h against t^2 .

- 5 The power loss P in a resistor is calculated using the formula $P = V^2/R$.