

PQ 6 d

Questions

Q1

A window is 1.50 m high. A stone falling from above passes the top of the window with a speed of 3.00 m s^{-1} . When will it pass the bottom of the window? (Take the acceleration due to gravity to be 10.0 m s^{-2} .)

Q2

A ball is dropped from rest from a height of 20.0 m. One second later a second ball is thrown vertically downwards. If the two balls arrive on the ground at the same time, what must have been the initial velocity of the second ball?

Q3

Two balls are dropped from rest from the same height. One of the balls is dropped 1.00 s after the other. What distance separates the two balls 2.00 s after the second ball is dropped?