

Displacement/Velocity/Acceleration quiz

Sunday, November 17, 2013

9:00 AM

The vertical displacement (height) ^{in metres} of a ball is modelled by $h(t) = -t^3 + 8t^2$ where t is the time in seconds after the ball has been thrown.

a) Find the initial height of the ball.

b) Find the highest point reached by the ball
(When the velocity = 0)

c) When does the ball land on the ground?

d) What is the acceleration of the ball when the object is at rest? (when $v=0$)