The height above ground of an object thrown upward from an initial height of s ft with an initial velocity of v ft/sec is modeled by $h(t) = -16t^2 + vt + s$. Javier throws a baseball upward at 82 ft/sec from a platform 71 ft above the ground. To the nearest tenth of a second, when will the baseball hit the ground?

A rectangular painting has dimensions x and $x+8$. The painting is in a frame 2 in. wide. The total area of the picture and the frame is 900 in^2. What are the dimensions of the painting?

Find two consecutive even integers whose product is 360.

The Grays have a triangular pennant of area 620 in.^{2} flying from the flagpole in their yard. The height of the triangle is 10 in. less than 5 times the base of the triangle. What are the dimensions of the pennant?

Jason jumped off of a cliff into the ocean in Acapulco while vacationing with some friends. His height as a function of time could be modeled by the function $h(t) = -16t2 +16t + 480$, where t is the time in seconds and h is the height in feet. Jason hit the water after how many seconds?

f a toy rocket is launched vertically upward from ground level with an initial velocity of 128 feet per second, then its height h after t seconds is given by the equation $h(t) = -16t^2 + 128t$ (if air resistance is neglected). How long will it take for the rocket to return to the ground?