

Solve the following quadratic equations. Use a variety of methods: factoring, square root property, completing the square, and the quadratic formula.

  

  

  

  

A ball is thrown vertically upward from the top of a

building 144 feet tall with an initial velocity of 96

feet per second. The distance s (in feet) of the ball

from the ground after t seconds is given by the

formula: . After how many

seconds does the ball strike the ground? Round to

the nearest tenth. [Hint: At ground level, s = 0.]