



## Quadratic Equation Word Problem To Quadratic Solution Type - Height over Time

1 Given this equation for the height of a soccer ball kicked from ground, what would you use to find when the ball lands?

$$h(t) = -10t^2 + 11t + 4$$

- A The y value of the vertex    B The x value of the vertex  
 C The root of the quadratic

2 Given this equation for the height of a ball thrown from a window, what would you use to find the max height of the ball?

$$h(t) = -5t^2 + 3t + 4$$

- A The y value of the vertex    B The x value of the vertex  
 C The root of the quadratic

3 Given this equation for the height of a rocket as a function of time, what would you use to find the max height of the rocket?

$$h(t) = -4t^2 + 7t + 4$$

- A The root of the quadratic    B The y value of the vertex  
 C The x value of the vertex

4 Given this equation for the height of a ball thrown from a window, what would you use to find the max height of the ball?

$$h(t) = -2t^2 + 2t + 4$$

- A The root of the quadratic    B The y value of the vertex  
 C The x value of the vertex

5 Given this equation for the height of a rocket as a function of time, what would you use to find when the rocket lands?

$$h(t) = -8t^2 + 6t + 5$$

- A The root of the quadratic    B The x value of the vertex  
 C The y value of the vertex

6 Given this equation for the height of a rocket as a function of time, what would you use to find when the rocket lands?

$$h(t) = -4t^2 + 5t + 11$$

- A The root of the quadratic    B The y value of the vertex  
 C The x value of the vertex

7 Given this equation for the height of a soccer ball kicked from ground, what would you use to find the time when the ball is at its max height?

$$h(t) = -5t^2 + 9t + 2$$

- A The x value of the vertex    B The y value of the vertex  
 C The root of the quadratic

8 Given this equation for the height of a soccer ball kicked from ground, what would you use to find when the ball lands?

$$h(t) = -4t^2 + 7t + 6$$

- A The y value of the vertex    B The x value of the vertex  
 C The root of the quadratic