

mobius

Quadratic Equation Word Problem To Solution - Height over Time



1	Given this equation for the height of a soccer ball
	kicked from ground, when does it land?

Given this equation for the height of a soccer ball kicked from ground, when does it land?

$$h(t) = -5t^2 + 3t + 7$$

$$h(t) = -5t^2 + 3t + 7h(t) = -5t^2 + 8t + 9$$

A	t=1.479s	В	t=4.521s	Α		В	
С	t=1.521s			t=	7.362s	t =	2.362 <i>s</i>

Given this equation for the height of a ball thrown from a window, when does it land?

$$h(t) = -10t^2 + 11t + 7$$

$$h(t) = -10t^2 + 11t + 7h(t) = -8t^2 + 11t + 2$$

Α	t=1.551s	В	t=2.551s	Α	t = 3.462s	В	t = 2.538s
С	t=1.449s			С	t=1.538s		

Given this equation for the height of a rocket as a function of time, when does it land?

$$h(t) = -9t^2 + 7t + 3h(t) =$$

$3h(t) = -6t^2 + 4t +$	- 2	
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A	t = 3.085s	В	t=1.085s	A		В	(C	
С	t=0.085s			t =	1s	t=2	s_{7}	t =	6 <i>s</i>

7 Given this equation for the height of a soccer ball kicked from ground, when does it land?

Given this equation for the height of a ball thrown from a window, when does it land?

$$h(t) = -3t^2 + 3t + 2h(t) = -2t^2 + 11t + 6$$

Α	t=5.457s	В	t = 3.457s
С	t=1.457s		

$$\hat{} t = 6s$$

$$t=6s$$
 $t=3s$