Name

Quadratic Equation Word Problem To Optimization (y) - Height over Time

1 Given this equation for the height of a ball thrown from a window, what is its maximum height?

$$h(t) = -6t^2 + 10t + 3$$

A	$h = 6.417m$	B	$h = 6.167m$
C	$h = 7.167m$		

2 Given this equation for the height of a soccer ball kicked from ground, what is its maximum height?

$$h(t) = -11t^2 + 6t + 10$$

A	$h = 12.568m$	B	$h = 10.818m$
C	$h = 11.568m$		

3 Given this equation for the height of a ball thrown from a window, what is its maximum height?

$$h(t) = -6t^2 + 3t + 4$$

A	$h = 4.875m$	B	$h = 5.375m$
C	$h = 4.375m$		

4 Given this equation for the height of a soccer ball kicked from ground, what is its maximum height?

$$h(t) = -2t^2 + 10t + 6$$

A	$h = 18.5m$	B	$h = 16.5m$
C	$h = 20.25m$		

5 Given this equation for the height of a rocket as a function of time, what is its maximum height?

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

A	$h = 5.5m$	B	$h = 6.25m$
C	$h = 6.75m$		

6 Given this equation for the height of a rocket as a function of time, what is its maximum height?

$$h(t) = -6t^2 + 4t + 3$$

A	$h = 6.417m$	B	$h = 3.667m$
C	$h = 4.917m$		

7 Given this equation for the height of a rocket as a function of time, what is its maximum height?

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

A	$h = 13.393m$	B	$h = 11.143m$
C	$h = 9.143m$		

8 Given this equation for the height of a soccer ball kicked from ground, what is its maximum height?

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

A	$h = 10.286m$	B	$h = 12.286m$
C	$h = 10.786m$		