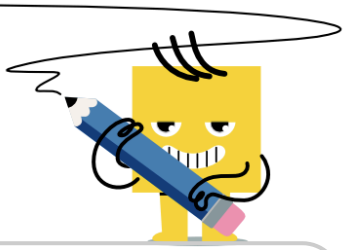
Name

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



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

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

A	$h = 13m$	B	$h = 9m$
C	$h = 14m$		

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

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

A	$h = 0.219m$	B	$h = 2.219m$
C	$h = 2.781m$		

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

$$h(t) = -5t^2 + 10t + 8$$

A	$h = 13m$	B	$h = 12m$
C	$h = 18m$		

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

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

A	$h = 13.25m$	B	$h = 10.25m$
C	$h = 7.25m$		

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

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

A	$h = 6.083m$	B	$h = 1.083m$
C	$h = 8.083m$		

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

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

A	$h = 9.5m$	B	$h = 13.5m$
C	$h = 10.5m$		

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

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

A	$h = 11.75m$	B	$h = 6.75m$

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

$$h(t) = -10t^2 + 4t + 6$$

A	$h = 3.4m$	B	$h = 6.4m$
C	$h = 8.4m$		