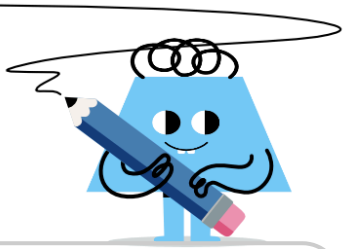
Name

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



1 Given this equation for the height of a soccer ball kicked from ground, when is it at its highest point?

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

A	$t = 1s$	B	$t = 1.25s$
C	$t = 0s$		

2 Given this equation for the height of a soccer ball kicked from ground, when is it at its highest point?

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

A	$t = 0.182s$	B	$t = 2.682s$
C	$t = 1.818s$		

3 Given this equation for the height of a rocket as a function of time, when is it at its highest point?

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

A	$t = 0.35s$	B	$t = 1.85s$
C	$t = 2.85s$		

4 Given this equation for the height of a soccer ball kicked from ground, when is it at its highest point?

$$h(t) = -11t^2 + 9t + 3$$

A	$t = 1.409s$	B	$t = 1.591s$
C	$t = 0.409s$		

5 Given this equation for the height of a ball thrown from a window, when is it at its highest point?

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

A	$t = 0.417s$	B	$t = 2.167s$
C	$t = 0.583s$		

6 Given this equation for the height of a rocket as a function of time, when is it at its highest point?

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

A	$t = 0.563s$	B	$t = 0.188s$
C	$t = 0.938s$		

7 Given this equation for the height of a ball thrown from a window, when is it at its highest point?

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

A	$t = 1.65s$	B	$t = 0.6s$
C	$t = 2.85s$		

8 Given this equation for the height of a ball thrown from a window, when is it at its highest point?

$$h(t) = -6t^2 + 8t + 3$$

A	$t = 0.667s$	B	$t = 0.083s$
C	$t = 2.167s$		