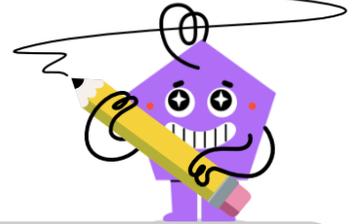# mobius

Quadratic Equation Word Problem To Solution - Height over Ground

1 Given this equation for the height of a long jumper as a function of distance from the line, where do they land?

$$h(x) = -3x^2 + 6x + 3$$

A	$x = 2.414m$	B	$x = 3.664m$
C	$x = 0.164m$		

2 Given this equation for the height of a water jet as a function of distance from the fountain, where does it land?

$$h(x) = -2x^2 + 10x + 2$$

A	$x = 5.193m$	B	$x = 7.943m$
C	$x = 7.693m$		

3 Given this equation for the height of a long jumper as a function of distance from the line, where do they land?

$$h(x) = -6x^2 + 7x + 6$$

A	$x = 1.741m$	B	$x = 2.491m$
C	$x = 4.491m$		

4 Given this equation for the height of a water jet as a function of distance from the fountain, where does it land?

$$h(x) = -11x^2 + 10x + 9$$

A	$x = 1.717m$	B	$x = 3.717m$
C	$x = 1.467m$		

5 Given this equation for the height of a water jet as a function of distance from the fountain, where does it land?

$$h(x) = -7x^2 + 6x + 2$$

A	$x = 1.114m$	B	$x = 1.136m$
C	$x = 0.636m$		

6 Given this equation for the height of a long jumper as a function of distance from the line, where do they land?

$$h(x) = -10x^2 + 8x + 6$$

A	$x = 0.478m$	B	$x = 1.272m$
C	$x = 0.272m$		

7 Given this equation for the height of a water jet as a function of distance from the fountain, where does it land?

$$h(x) = -10x^2 + 8x + 9$$

A	$x = 3.68m$	B	$x = 1.43m$
C	$x = 0.07m$		

8 Given this equation for the height of a water jet as a function of distance from the fountain, where does it land?

$$h(x) = -7x^2 + 11x + 3$$

A	$x = 0.558m$	B	$x = 2.308m$
C	$x = 1.808m$		