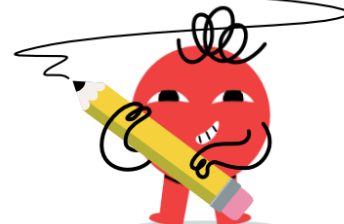




Quadratic Equation Word Problem To Optimization (y) - Height over Ground



1 Given this equation for the height of a water jet as a function of distance from the fountain, what is the maximum height it reaches?

$$h(x) = -10x^2 + 4x + 7$$

A $h = 5.4m$

B $h = 9.4m$

C $h = 7.4m$

2 Given this equation for the height of a water jet as a function of distance from the fountain, what is the maximum height it reaches?

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

A $h = 2.091m$

B $h = 3.091m$

C $h = 6.091m$

3 Given this equation for the height of a long jumper as a function of distance from the line, what is the maximum height they reach?

$$h(x) = -11x^2 + 9x + 5$$

A $h = 5.841m$

B $h = 10.841m$

C $h = 6.841m$

4 Given this equation for the height of a water jet as a function of distance from the fountain, what is the maximum height it reaches?

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

A $h = 17.75m$

B $h = 22.75m$

C $h = 19.75m$

5 Given this equation for the height of a long jumper as a function of distance from the line, what is the maximum height they reach?

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

A $h = 12.778m$

B $h = 11.778m$

C $h = 9.778m$

6 Given this equation for the height of a water jet as a function of distance from the fountain, what is the maximum height it reaches?

$$h(x) = -2x^2 + 7x + 4$$

A $h = 5.125m$

B $h = 10.125m$

C $h = 12.125m$

7 Given this equation for the height of a long jumper as a function of distance from the line, what is the maximum height they reach?

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

A $h = 12.125m$

B $h = 9.125m$

8 Given this equation for the height of a long jumper as a function of distance from the line, what is the maximum height they reach?

$$h(x) = -4x^2 + 3x + 7$$

A $h = 7.563m$

B $h = 2.563m$

C $h = 10.563m$