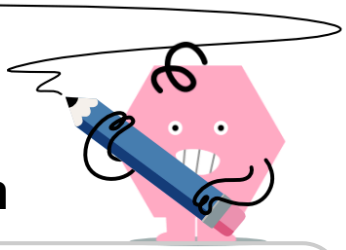
Name



Quadratic Equation Word Problem To Quadratic Solution Type - Volume from Sheet

1 Given this equation for the volume of a box cut from a sheet of cardboard, what would you use to find the x dimension that maximizes volume?

$$V(x) = 4x^2 + 16x + 12$$

A The x value of the vertex	B The y value of the vertex
C The root of the quadratic	

2 Given this equation for the volume of a box cut from a sheet of cardboard, what would you use to find the x dimension that maximizes volume?

$$V(x) = 4x^2 + 18x + 18$$

A The root of the quadratic	B The x value of the vertex
C The y value of the vertex	

3 Given this equation for the volume of a box cut from a sheet of cardboard, what would you use to find the x dimension that maximizes volume?

$$V(x) = 4x^2 + 30x + 50$$

A The x value of the vertex	B The root of the quadratic
C The y value of the vertex	

4 Given this equation for the volume of a box cut from a sheet of cardboard, what would you use to find the x dimension that maximizes volume?

$$V(x) = 4x^2 + 42x + 110$$

A The x value of the vertex	B The y value of the vertex
C The root of the quadratic	

5 Given this equation for the volume of a box cut from a sheet of cardboard, what would you use to find the x dimension that maximizes volume?

$$V(x) = 4x^2 + 28x + 45$$

A The x value of the vertex	B The y value of the vertex
C The root of the quadratic	

6 Given this equation for the volume of a box cut from a sheet of cardboard, what would you use to find the maximum volume possible?

$$V(x) = 4x^2 + 26x + 36$$

A The y value of the vertex	B The root of the quadratic
C The x value of the vertex	

7 Given this equation for the volume of a box cut from a sheet of cardboard, what would you use to find the x dimension that maximizes volume?

$$V(x) = 4x^2 + 26x + 42$$

A The x value of the vertex	B The root of the quadratic
C The y value of the vertex	

8 Given this equation for the volume of a box cut from a sheet of cardboard, what would you use to find the x dimension that maximizes volume?

$$V(x) = 4x^2 + 26x + 30$$

A The x value of the vertex	B The y value of the vertex
C The root of the quadratic	