



Quadratic Equation Word Problem To Optimization (x) - Volume from Sheet

1

What value of x would maximize the volume of the box?

A box is made from a 8cm by 4cm sheet of cardboard by cutting x cm into each side and folding up.

A	$x = 3cm$	B	$x = 3.5cm$
C	$x = 2.25cm$		

2

What value of x would maximize the volume of the box?

A box is made from a 6cm by 9cm sheet of cardboard by cutting x cm into each side and folding up.

A	$x = 3.75cm$	B	$x = 1cm$
C	$x = 5.75cm$		

3

What value of x would maximize the volume of the box?

A box is made from a 5cm by 2cm sheet of cardboard by cutting x cm into each side and folding up.

A		B	
	$x = 1.25cm$		$x = 1.75cm$

4

What value of x would maximize the volume of the box?

A box is made from a 9cm by 3cm sheet of cardboard by cutting x cm into each side and folding up.

A	$x = 3cm$	B	$x = 1.5cm$
C	$x = 4.25cm$		

5

What value of x would maximize the volume of the box?

A box is made from a 3cm by 7cm sheet of cardboard by cutting x cm into each side and folding up.

A	$x = 1.75cm$	B	$x = 2.5cm$
C	$x = 2.25cm$		

6

What value of x would maximize the volume of the box?

A box is made from a 8cm by 8cm sheet of cardboard by cutting x cm into each side and folding up.

A		B	
	$x = 4cm$		$x = 6.5cm$

7

What value of x would maximize the volume of the box?

A box is made from a 11cm by 8cm sheet of cardboard by cutting x cm into each side and folding up.

A	$x = 4.5cm$	B	$x = 7cm$
C	$x = 4.75cm$		

8

What value of x would maximize the volume of the box?

A box is made from a 8cm by 10cm sheet of cardboard by cutting x cm into each side and folding up.

A	$x = 4.25cm$	B	$x = 4.5cm$
C	$x = 7cm$		