

Name: _____

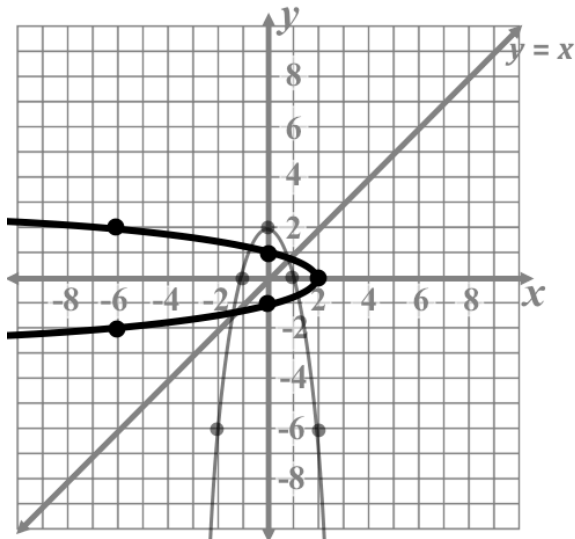
Inverse of a Quadratic Graph

To invert a graph, you must first identify the most important points on the original quadratic:

1. The vertex
2. The x-intercept(s)
3. The y-intercept & its mirrored point

Once you have these points in the xy table, simply switch the x -value and the y -value (do not change the numbers or negatives – just switch the sides of the table), and graph the new points. If you graphed them correctly, each point will be reflected over the line $y = x$.

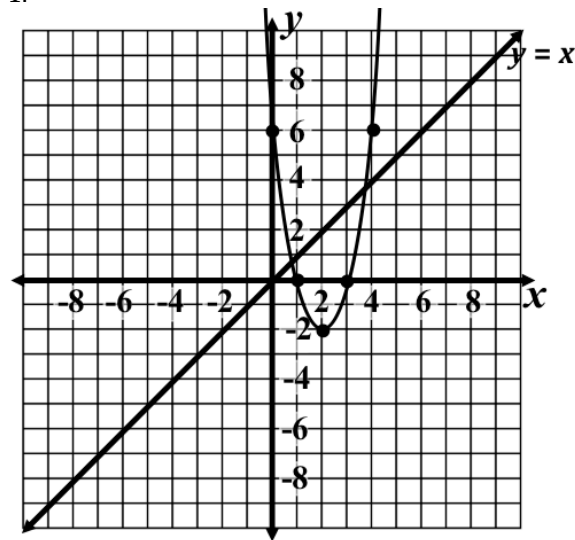
EXAMPLE



x	$f(x)$ means y		x	$f^{-1}(x)$ means inverse of y
-2	-6	What is the Inverse? →	-6	-2
-1	0		0	-1
0	2		2	0
1	0		0	1
2	-6		-6	2

The original function: $f(x)$	Vertex: (0, 2)	x-intercept(s): (-1, 0) & (1, 0)	y-intercept: (0, 2)
The inverse function: $f^{-1}(x)$	Inverted Vertex: (2, 0)	y-intercept(s): (0, -1) & (0, 1)	x-intercept: (2, 0)

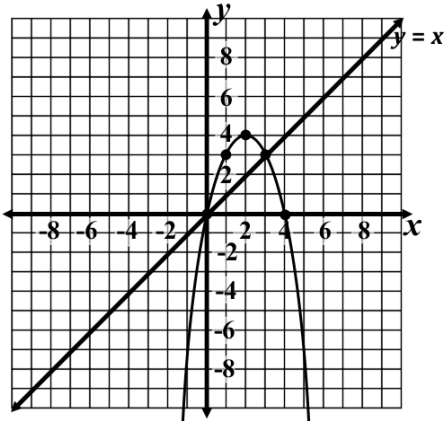
1.



x	$f(x)$ means y		x	$f^{-1}(x)$ means inverse of y
		What is the Inverse? →		

The original function: $f(x)$	Vertex:	x-intercept(s):	y-intercept:
The inverse function: $f^{-1}(x)$	Inverted Vertex:	y-intercept(s):	x-intercept:

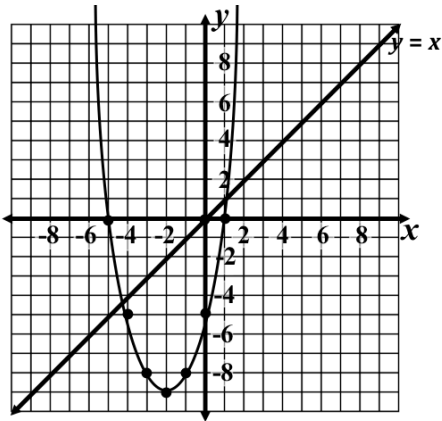
2.



x	$f(x)$ means y	x	$f^{-1}(x)$ means inverse of y
What is the Inverse? →			

The original function: $f(x)$	Vertex:	x -intercept(s):	y -intercept:
The <i>inverse</i> function: $f^{-1}(x)$	Inverted Vertex:	y -intercept(s):	x -intercept:

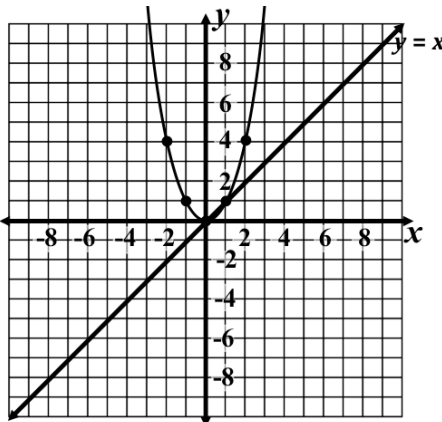
3.



x	$f(x)$ means y	x	$f^{-1}(x)$ means inverse of y
What is the Inverse? →			

The original function: $f(x)$	Vertex:	x -intercept(s):	y -intercept:
The <i>inverse</i> function: $f^{-1}(x)$	Inverted Vertex:	y -intercept(s):	x -intercept:

4.



x	$f(x)$ means y	x	$f^{-1}(x)$ means inverse of y
What is the Inverse? →			

The original function: $f(x)$	Vertex:	x -intercept(s):	y -intercept:
The <i>inverse</i> function: $f^{-1}(x)$	Inverted Vertex:	y -intercept(s):	x -intercept: