

**Function:**  $f(x) = \sqrt{x}$

**Family:**

**Key Points**

x	f(x)
0	0
1	1
4	2
9	3

**Graph the Axes and the Function**

*Remember to pick locations for your axes that give you the best picture of your function and then label your axes.*

Domain	
Written Description	Interval Notation
	$[0, \infty)$
Range	
Written Description	Interval Notation
	$[0, \infty)$
Intercepts:	$(0, 0)$
Symmetry:	none
Why is this a function?	
Write at least one thing that describes this function that will help you remember it. ex. a description of the shape, where it crosses the x-axis, how it's different from another similar function	

**Function:**  $f(x) = \sqrt[3]{x}$

**Family:** cube root

**Key Points**

x	f(x)
-8	-2
-1	-1
0	0
1	1
8	2
27	3

**Graph the Axes and the Function**

*Remember to pick locations for your axes that give you the best picture of your function and then label your axes.*

Domain	
Written Description	Interval Notation
	$(-\infty, \infty)$
Range	
Written Description	Interval Notation
	$(-\infty, \infty)$
Intercepts:	$(0, 0)$
Symmetry:	origin
Why is this a function?	
Write at least one thing that describes this function that will help you remember it. <i>ex. a description of the shape, where it crosses the x-axis, how it's different from another similar function</i>	

$$\textcircled{1} \quad y = \sqrt{x-2} + 5$$

$$D: [2, \infty)$$

$$R: [5, \infty)$$

$$\textcircled{10} \quad y = \frac{1}{2} \sqrt[3]{x+1} + 4$$

Parent

-1	-1
0	0
1	1
8	2

#10

x	y
-2	$3\frac{1}{2}$
-1	4
0	$4\frac{1}{2}$
7	5