C12 - 2.1 - Radical Translations Notes

$y = \sqrt{x}$

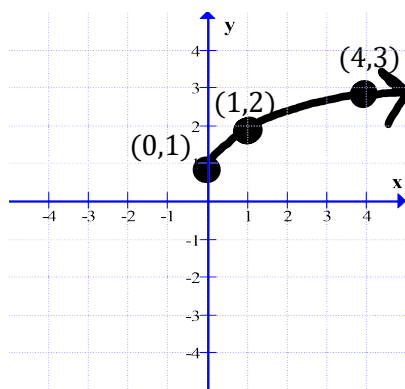| x	y
-1	und
0	0
1	1
4	2
9	3

(4,2)
(1,1)
(0,0)
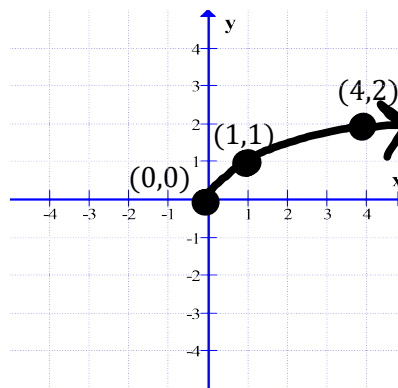
$y = \sqrt{x}$

Notice it's half a parabola!

Remember: Choose increments of x in your table of values that square root easily.

(4,3)
(1,2)
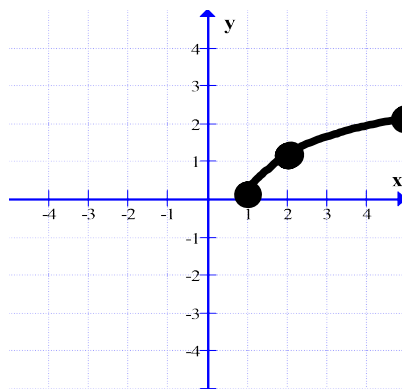(0,1)

$y = \sqrt{x} + 1$ Up 1   *Domain: Set Underneath root $\geq$ zero and solve*   *Range*

$x \geq 0$ $y \geq 1$
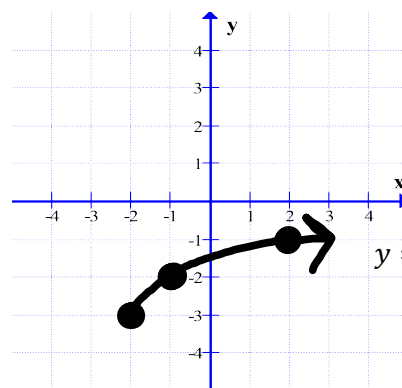
$y = \sqrt{x - 1}$ Right 1 $x - 1 \geq 0$ $y \geq 0$

$x \geq 1$

Left 2, Down 3 $x + 2 \geq 0$ $y \geq -3$

$x \geq -2$

$y = \sqrt{x + 2} - 3$ $y = \sqrt{x - h} + k$

Vertex (h, k)

Vertex $(-2, -3)$