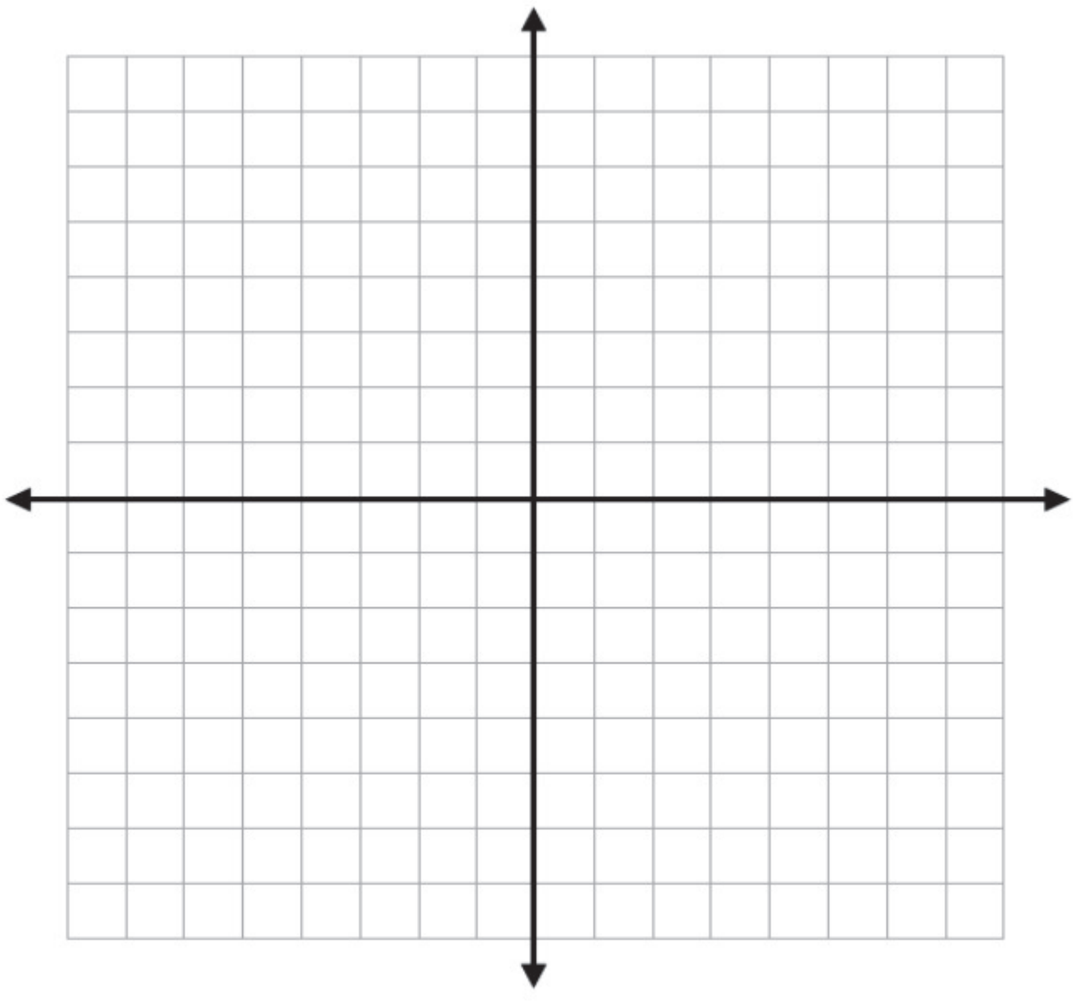
Practice

$$f(x) = \frac{1}{2}\sqrt{x+5}$$

x			
$f(x)$			



Shifts:

Stretch/Shrink:

Flip:

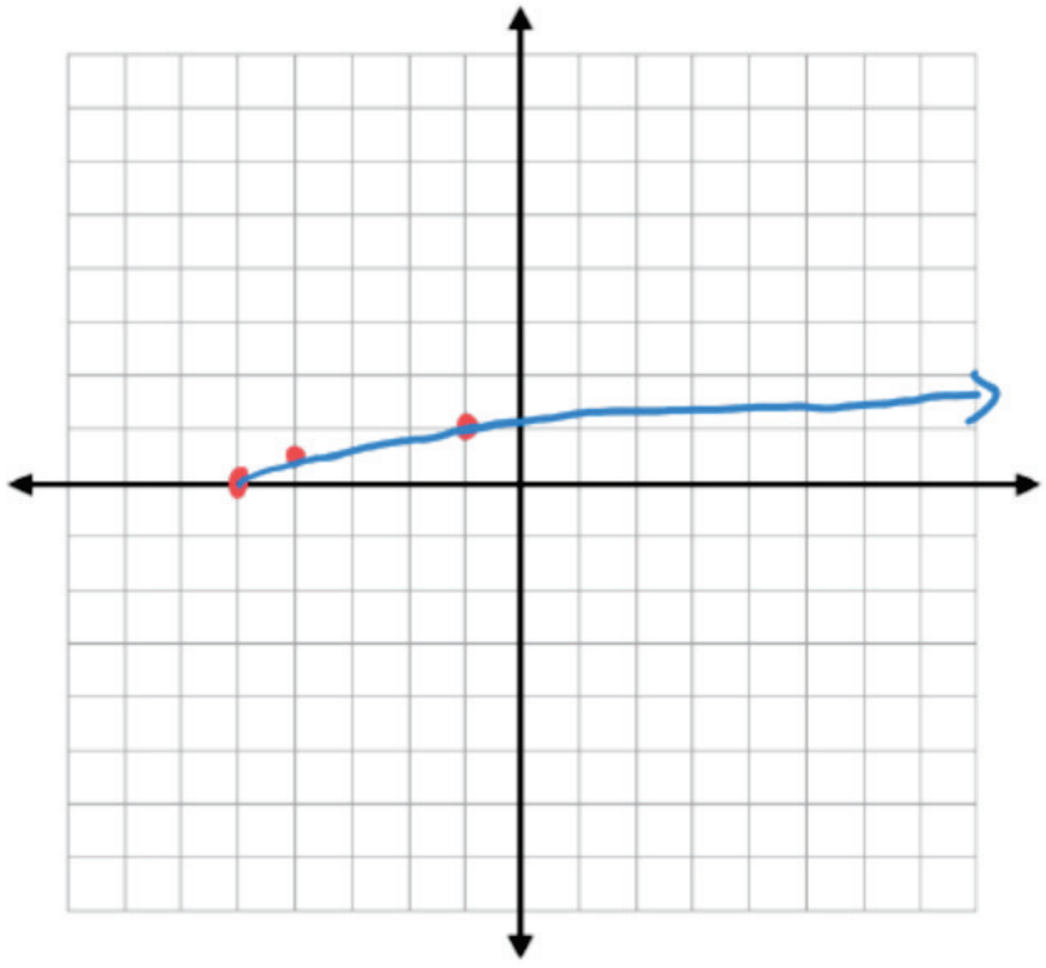
Domain:

Inc/Dec:

$$f(x) = a\sqrt{x-h} + k$$

Practice

$$f(x) = \frac{1}{2}\sqrt{x+5}$$



x	-5	-4	-1
$f(x)$	0	$\frac{1}{2}$	1

Shifts: Left 5

Stretch/Shrink: Vertical shrink by $\frac{1}{2}$

Flip: NO

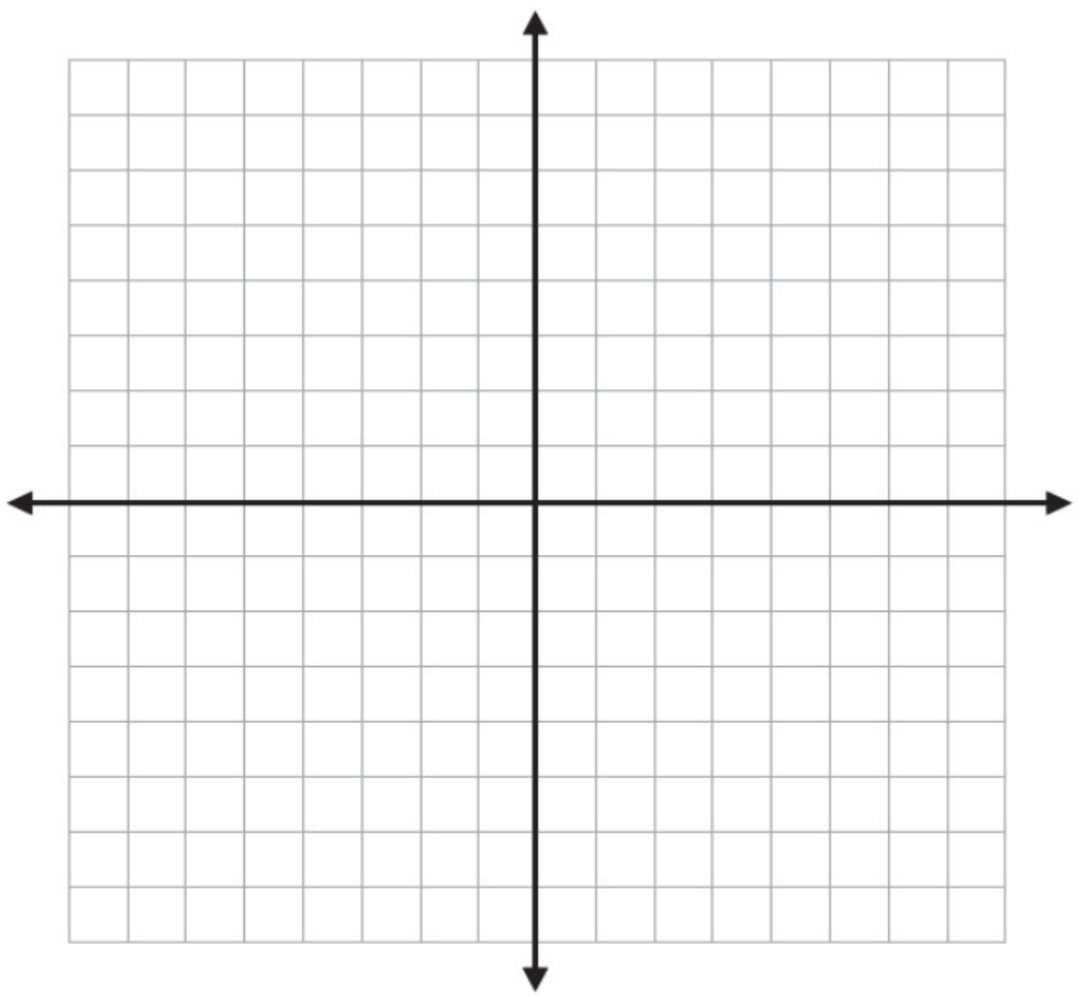
Domain: $x+5 \geq 0$, -5, $x \geq -5$

Inc/Dec: Increasing

$$f(x) = a\sqrt{x-h}+k$$

Practice

$$f(x) = -3\sqrt{x-1} + 6$$



x			
$f(x)$			

Shifts:

Stretch/Shrink:

Flip:

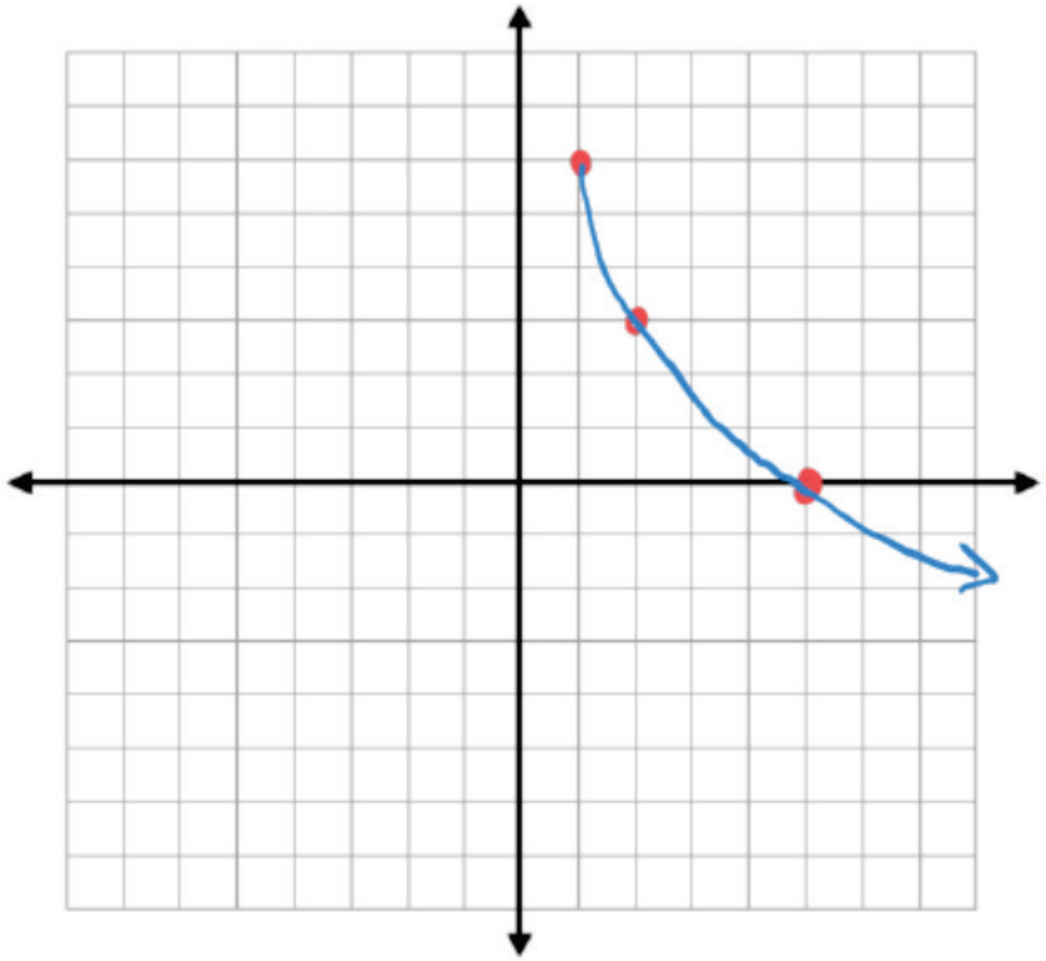
Domain:

Inc/Dec:

$$f(x) = a\sqrt{x-h} + k$$

Practice

$$f(x) = -3\sqrt{x-1}+6$$



x	1	2	5
$f(x)$	6	3	0

Shifts: Right 1 and Up 6

Stretch/Shrink: Vertical Stretch by 3

Flip: Yes

Domain: $x-1 \geq 0$ $\quad +1 \quad +1$ $\quad x \geq 1$

Inc/Dec: Decreasing

$$f(x) = a\sqrt{x-h}+k$$