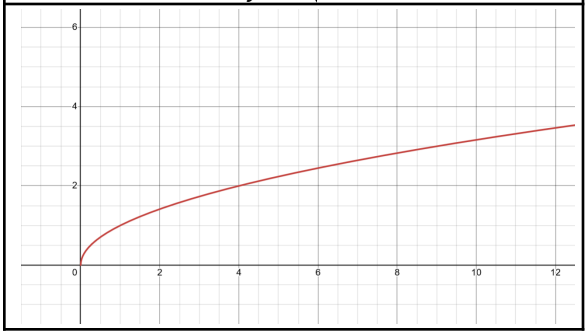
Radical Functions

$y = \sqrt{x}$

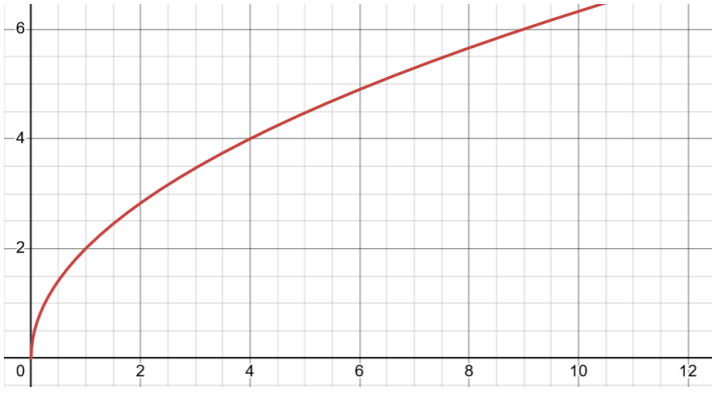
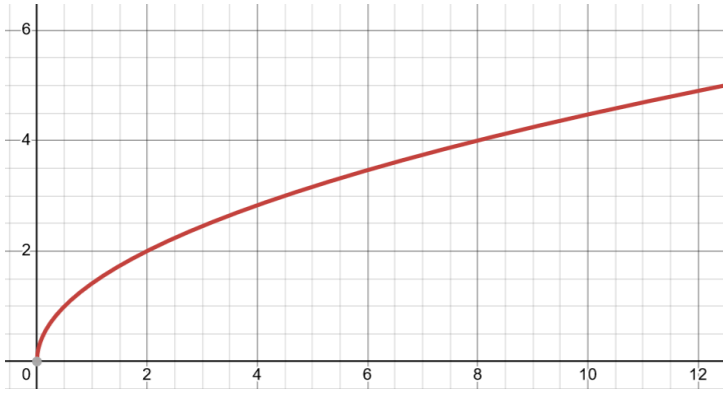
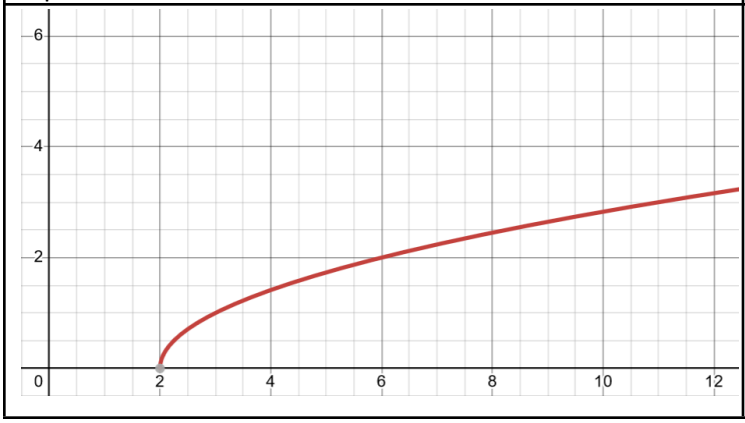
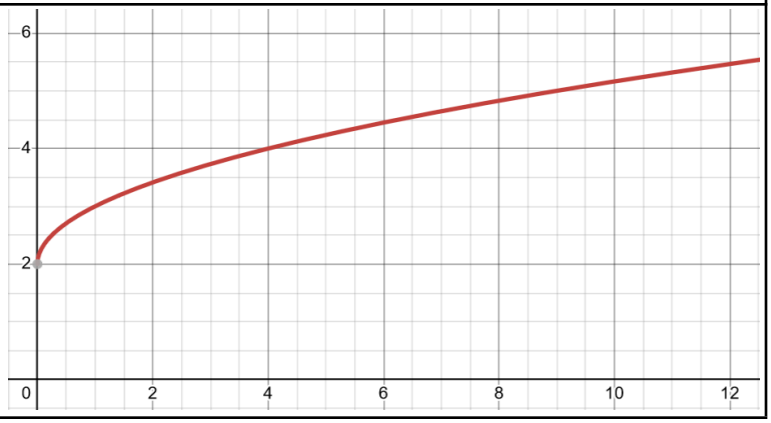


A **radical function** is a function that contains a root, such as a square root, cube root, etc. The general form of a radical function is:

$$y = \sqrt[n]{x}$$

Where n is the degree of the root.

The general transformed radical functions is: $y = a * \sqrt[n]{b(x - h)} + k$

$y = 2\sqrt{x}$	$y = \sqrt{2(x)}$
If $\|a\| > 1$, the graph is vertically stretched. If $0 < \|a\| < 1$, the graph is vertically compressed. If $a < 0$, the graph is reflected over the x-axis.	If $\|b\| > 1$, the graph is horizontally compressed. If $0 < \|b\| < 1$, the graph is horizontally stretched. If $b < 0$, the graph is reflected over the y-axis.
	
$y = \sqrt{x - 2}$	$y = \sqrt{x} + 2$
If $h > 0$, the graph shifts to the right. If $h < 0$, the graph shifts to the left. *note that the h is being subtracted; in the above expression $h = 2$	If $k > 0$, the graph shifts up. If $k < 0$, the graph shifts down.
	

Researched & Developed by: Pi-Rates Add to your knowledge

Radical Functions

Researched &
Developed by: Pi-Rates
Add to your knowledge