

Parent Function	Graph	Parent Function	Graph
$y = \sin(x)$ Odd Domain: $(-\infty, \infty)$ Range: $[-1, 1]$ Period: 2π Zeros: $(\pi k, 0)$, $k \in \text{Integers}$		$y = \csc(x)$ Odd Domain: $x \neq \pi k$ Range: $(-\infty, -1] \cup [1, \infty)$ Asymptotes: $x = \pi k$ Period: 2π Zeros: None	
$y = \cos(x)$ Even Domain: $(-\infty, \infty)$ Range: $[-1, 1]$ Period: 2π Zeros: $(\frac{\pi}{2} + \pi k, 0)$		$y = \sec(x)$ Even Domain: $x \neq \frac{\pi}{2} + \pi k$ Range: $(-\infty, -1] \cup [1, \infty)$ Asymptotes: $x = \frac{\pi}{2} + \pi k$ Period: 2π Zeros: None	
$y = \tan(x)$ Odd Domain: $x \neq \frac{\pi}{2} + \pi k$ Range: $(-\infty, \infty)$ Asymptotes: $x = \frac{\pi}{2} + \pi k$ Period: π Zeros: $(\pi k, 0)$		$y = \cot(x)$ Odd Domain: $x \neq \pi k$ Range: $(-\infty, \infty)$ Asymptotes: $x = \pi k$ Period: π Zeros: $(\frac{\pi}{2} + \pi k, 0)$	

Graphs of the Six Trigonometric Functions

Here are the graphs of the six Trig Functions. You may also hear the expressions **sine wave** and **cosine wave** for the sin and cos graphs, since they look like “waves”.

Graph of Sin Function

Here's what a **sin function** graph looks like; notice that the **domain** is $(-\infty, \infty)$, and the **range** is $[-1, 1]$.