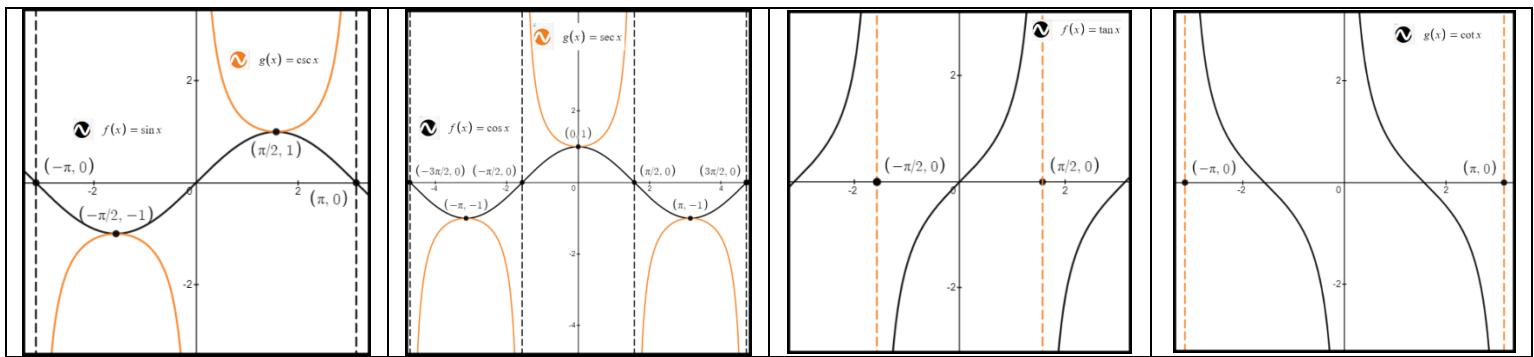
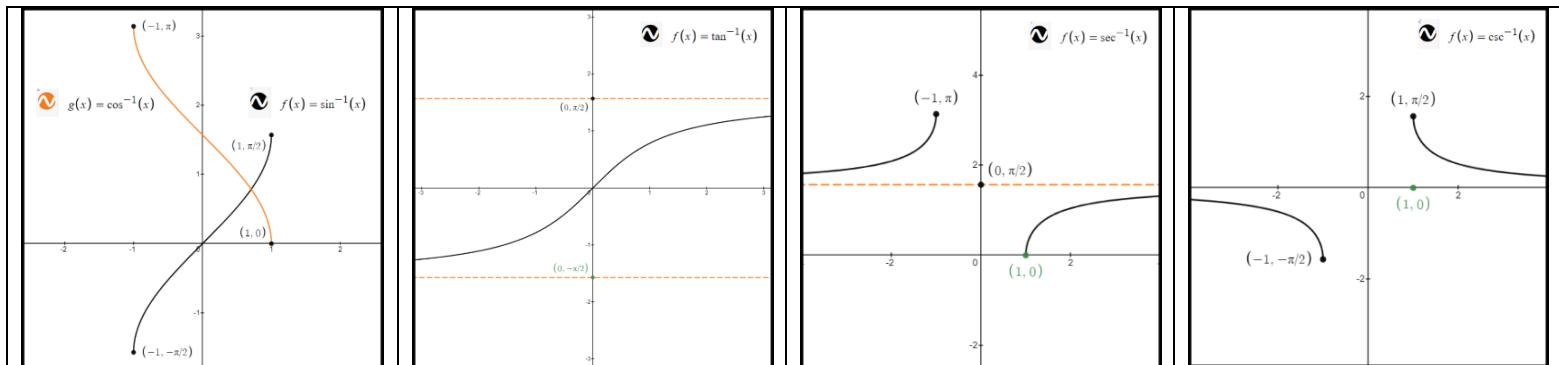


Trig Functions



Function	Domain	Range
$y = \sin x$	$(-\infty, \infty)$	$[-1, 1]$
$y = \cos x$	$(-\infty, \infty)$	$[-1, 1]$
$y = \tan x = \frac{\sin x}{\cos x}$	$x \neq \frac{\pi}{2} + n\pi$	$(-\infty, \infty)$
$y = \csc x = \frac{1}{\sin x}$	$x \neq n\pi$	$(-\infty, -1] \cup [1, \infty)$
$y = \sec x = \frac{1}{\cos x}$	$x \neq \frac{\pi}{2} + n\pi$	$(-\infty, -1] \cup [1, \infty)$
$y = \cot x = \frac{\cos x}{\sin x}$	$x \neq n\pi$	$(-\infty, \infty)$

Inverse Trig Functions



Function	Restricted Domain	Range	Inverse	Domain	Range
$y = \sin x$	$[-\frac{\pi}{2}, \frac{\pi}{2}]$	$[-1, 1]$	$y = \sin^{-1} x$	$[-1, 1]$	$[-\frac{\pi}{2}, \frac{\pi}{2}]$
$y = \cos x$	$[0, \pi]$	$[-1, 1]$	$y = \cos^{-1} x$	$[-1, 1]$	$[0, \pi]$
$y = \tan x$	$(-\frac{\pi}{2}, \frac{\pi}{2})$	$(-\infty, \infty)$	$y = \tan^{-1} x$	$(-\infty, \infty)$	$(-\frac{\pi}{2}, \frac{\pi}{2})$
$y = \csc x$	$[-\frac{\pi}{2}, 0) \cup (0, \frac{\pi}{2}]$	$(-\infty, -1] \cup [1, \infty)$	$y = \csc^{-1} x$	$(-\infty, -1] \cup [1, \infty)$	$[-\frac{\pi}{2}, 0) \cup (0, \frac{\pi}{2}]$
$y = \sec x$	$[0, \frac{\pi}{2}) \cup (\frac{\pi}{2}, \pi]$	$(-\infty, -1] \cup [1, \infty)$	$y = \sec^{-1} x$	$(-\infty, -1] \cup [1, \infty)$	$[0, \frac{\pi}{2}) \cup (\frac{\pi}{2}, \pi]$
$y = \cot x$	$(0, \pi)$	$(-\infty, \infty)$	$y = \cot^{-1} x$	$(-\infty, \infty)$	$(0, \pi)$