Inverse Trigonometric Functions

Inverse Function	Domain	Range	Derivative
$\arcsin x = \sin^{-1} x$	$(-1, 1)$	$\left(-\frac{\pi}{2}, \frac{\pi}{2}\right)$	$\frac{d}{dx}(\arcsin x) = \frac{1}{\sqrt{1-x^2}}$
$\arccos x = \cos^{-1} x$	$(-1, 1)$	$(0, \pi)$	$\frac{d}{dx}(\arccos x) = -\frac{1}{\sqrt{1-x^2}}$
$\arctan x = \tan^{-1} x$	$(-\infty, \infty)$	$\left(-\frac{\pi}{2}, \frac{\pi}{2}\right)$	$\frac{d}{dx}(\arctan x) = \frac{1}{1+x^2}$
$\operatorname{arccot} x = \cot^{-1} x$	$(-\infty, \infty)$	$(0, \pi)$	$\frac{d}{dx}(\operatorname{arccot} x) = -\frac{1}{1+x^2}$