Category	sin	cos	tan
Basic			
Basic Trigonometric	$\sin x$	$\cos x$	$\tan x = \frac{\sin x}{\cos x}$
Reciprocal	$\csc x = \frac{1}{\sin x}$	$\sec x = \frac{1}{\cos x}$	$\cot x = \frac{\cos x}{\sin x}$
Inverse	$\arcsin x$ Domain: $[-1, 1]$ Range: $[-\frac{\pi}{2}, \frac{\pi}{2}]$	$\arccos x$ Domain: $[-1, 1]$ Range: $[0, \pi]$	$\arctan x$ Domain: $\mathbb{R}$ Range: $(-\frac{\pi}{2}, \frac{\pi}{2})$
Hyperbolic	$\sinh x = \frac{e^x - e^{-x}}{2}$	$\cosh x = \frac{e^x + e^{-x}}{2}$	$\tanh x = \frac{e^x - e^{-x}}{e^x + e^{-x}}$
Reciprocal Hyperbolic	$\text{csch } x = \frac{1}{\sinh x}$	$\text{sech } x = \frac{1}{\cosh x}$	$\coth x = \frac{1}{\tanh x}$
Differentiation			
Derivatives	$\frac{d}{dx}(\sin x) = \cos x$	$\frac{d}{dx}(\cos x) = -\sin x$	$\frac{d}{dx}(\tan x) = \sec^2 x$
Second Derivatives	$\frac{d^2}{dx^2}(\sin x) = -\sin x$	$\frac{d^2}{dx^2}(\cos x) = -\cos x$	$\frac{d^2}{dx^2}(\tan x) = 2\sec^2 x \tan x$
Derivatives of Reciprocal	$\frac{d}{dx}(\csc x) = -\csc x \cot x$	$\frac{d}{dx}(\sec x) = \sec x \tan x$	$\frac{d}{dx}(\cot x) = -\csc^2 x$
Derivatives of Inverse	$\frac{d}{dx}(\arcsin x) = \frac{1}{\sqrt{1-x^2}}$	$\frac{d}{dx}(\arccos x) = -\frac{1}{\sqrt{1-x^2}}$	$\frac{d}{dx}(\arctan x) = \frac{1}{1+x^2}$
Derivatives of Hyperbolic	$\frac{d}{dx}(\sinh x) = \cosh x$	$\frac{d}{dx}(\cosh x) = \sinh x$	$\frac{d}{dx}(\tanh x) = \text{sech}^2 x$
Integration			
Integrals	$\int \sin x \, dx = -\cos x + C$	$\int \cos x \, dx = \sin x + C$	$\int \tan x \, dx = -\ln\|\cos x\| + C$
Integrals of Reciprocal	$\int \csc x \, dx = -\ln\|\csc x + \cot x\| + C$	$\int \sec x \, dx = \ln\|\sec x + \tan x\| + C$	$\int \cot x \, dx = \ln\|\sin x\| + C$
Integrals of Inverse	$\int \arcsin x \, dx =$ $x \arcsin x + \sqrt{1-x^2} + C$	$\int \arccos x \, dx =$ $x \arccos x - \sqrt{1-x^2} + C$	$\int \arctan x \, dx =$ $x \arctan x - \frac{1}{2}\ln(1+x^2) + C$
Inverse Integral forms	$\int \frac{dx}{x^2+a^2} = \frac{1}{a}\arctan\frac{x}{a} + C$	$\int \frac{dx}{\sqrt{a^2-x^2}} = \arcsin\frac{x}{a} + C$	$\int \frac{dx}{\sqrt{x^2+a^2}} = \text{arcsinh}\frac{x}{a} + C$
Integrals of Hyperbolic	$\int \sinh x \, dx = \cosh x + C$	$\int \cosh x \, dx = \sinh x + C$	$\int \tanh x \, dx = \ln(\cosh x) + C$
Miscellanous			
Power Reduction Formulas	$\int \sin^2 x \, dx = \frac{1}{2}x - \frac{1}{4}\sin 2x + C$	$\int \cos^2 x \, dx = \frac{1}{2}x + \frac{1}{4}\sin 2x + C$	$\int \tan^2 x \, dx = \tan x - x + C$
Exponential Integral	$\int e^{ax}\sin bx \, dx = \frac{e^{ax}}{a^2+b^2}(a\sin bx - b\cos bx) + C$	$\int e^{ax}\cos bx \, dx = \frac{e^{ax}}{a^2+b^2}(a\cos bx + b\sin bx) + C$	