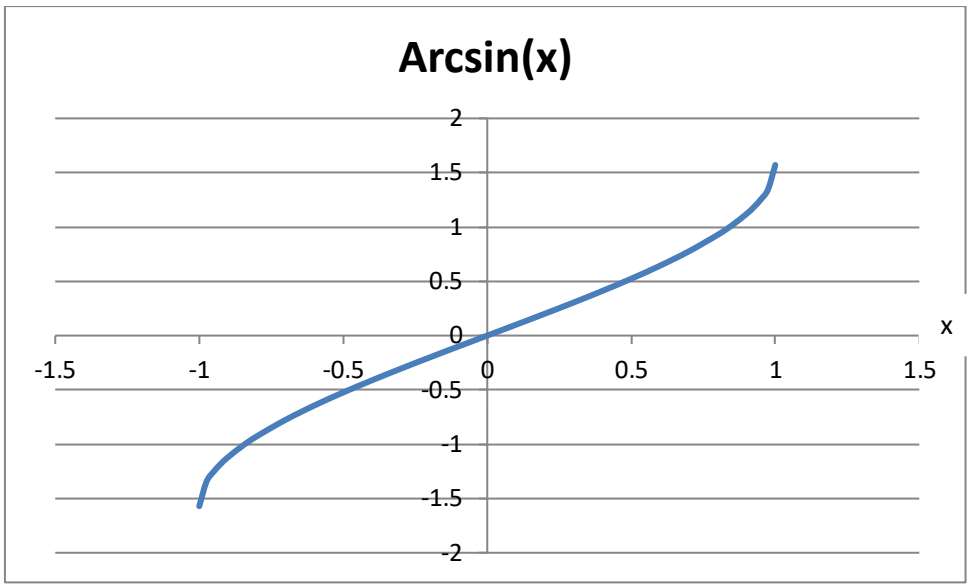
Inverse Trigonometric Functions

The trigonometric functions[1] - sine, cosine and tangent – have inverse functions[2] that are termed arcsin, arccos and arctan or $\sin^{-1}$, $\cos^{-1}$ or $\tan^{-1}$.

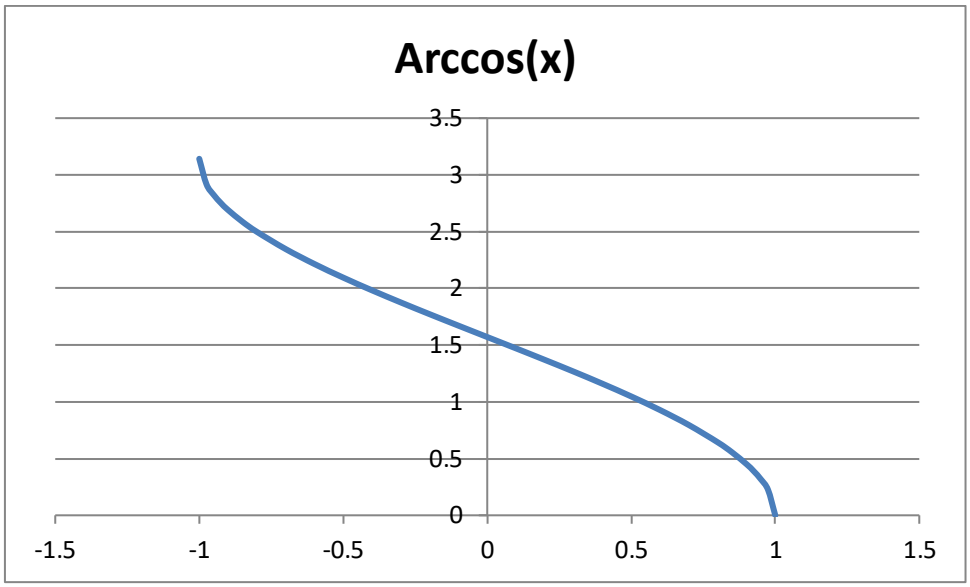
Arcsine ($\sin^{-1}$)

$\sin^{-1}(x)$ has the following graph. The value of x must lie in the range $[-1, 1]$ and $\sin^{-1}(x)$ lies in the range $[\frac{-\pi}{2}, \frac{\pi}{2}]$.



Arccosine ($\cos^{-1}$)

$\cos^{-1}(x)$ has the following graph. The value of x must lie in the range $[-1, 1]$ and $\cos^{-1}(x)$ lies in the range $[\frac{-\pi}{2}, \frac{\pi}{2}]$.



[1] Trigonometric Functions
[2] Functions

Arctangent or tan^{-1}

$\tan^{-1} x$ has the following graph. The value of x must lie in the range $[-\infty, \infty]$ and $\tan^{-1}(x)$ lies in the range $[\frac{-\pi}{2}, \frac{\pi}{2}]$.