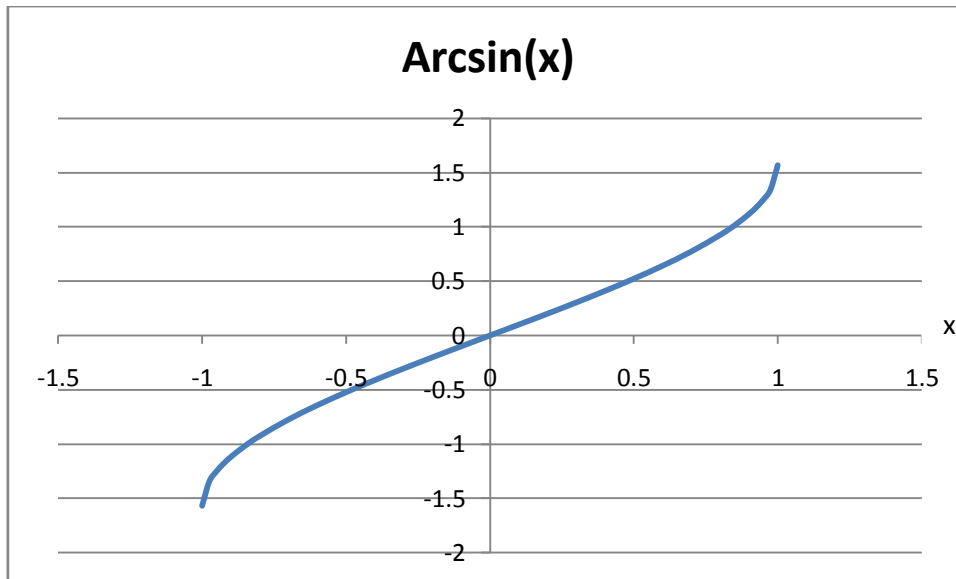


Inverse Trigonometric Functions

The trigonometric functions¹ - sine, cosine and tangent - have inverse functions that are termed arcsin, arccos and arctan or \sin^{-1} , \cos^{-1} or \tan^{-1} .

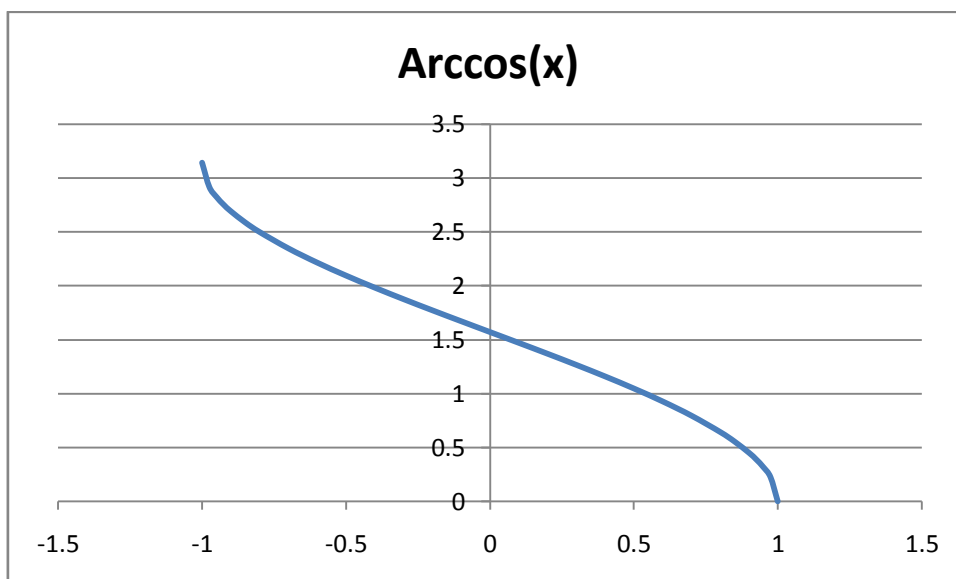
Arcsine (\sin^{-1})

$\sin^{-1}(x)$ 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](#)

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 $[-\frac{\pi}{2}, \frac{\pi}{2}]$.

