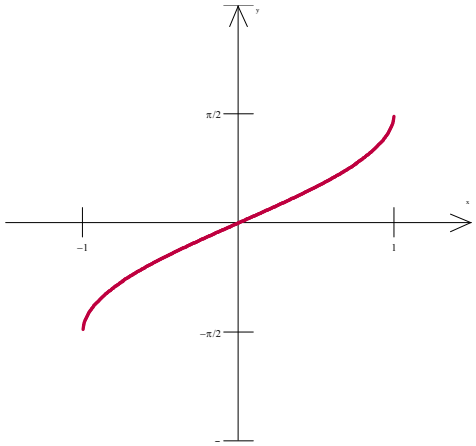
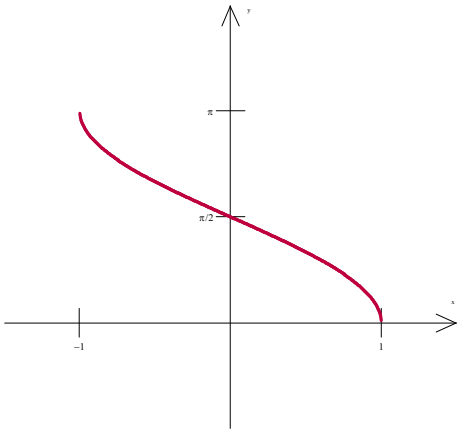
Inverse Trigonometry

$y = \arcsin x = \sin^{-1} x$
if $\sin y = x$
and $-1 \le x \le 1$ and
$-\frac{\pi}{2} \le y \le \frac{\pi}{2}$
$(-90^\circ \le y \le 90^\circ)$



$y = \arccos x = \cos^{-1} x$
if $\cos y = x$
and $-1 \le x \le 1$ and
$0 \le y \le \pi$
$(0^\circ \le y \le 180^\circ)$



$y = \arctan x = \tan^{-1} x$
if $\tan y = x$
and $-1 \le x \le 1$ and
$-\frac{\pi}{2} < y < \frac{\pi}{2}$
$(-90^\circ < y < 90^\circ)$