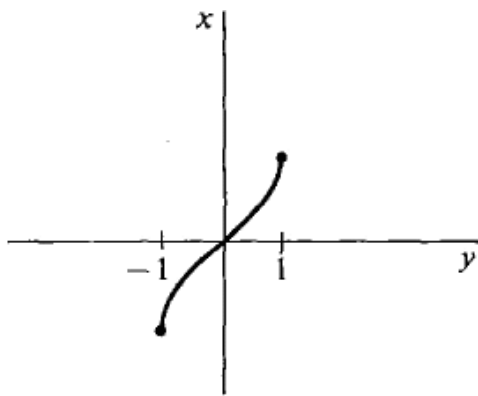
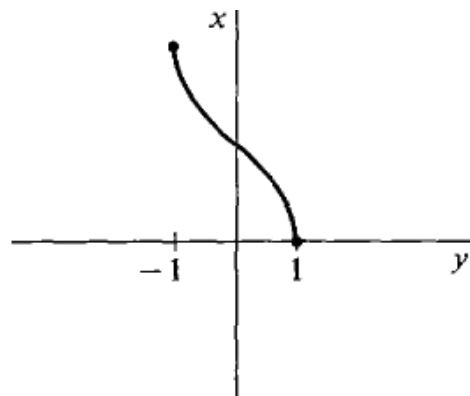


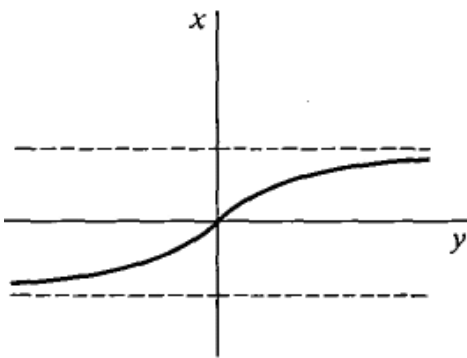
Inverse Trigonometric Graphs



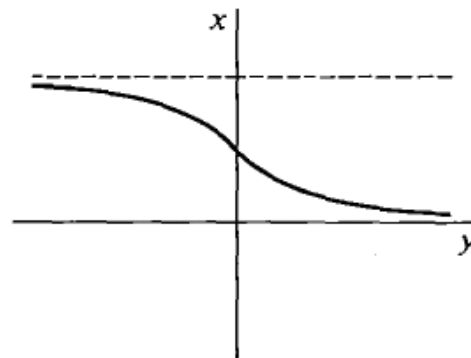
$$x = \arcsin y$$



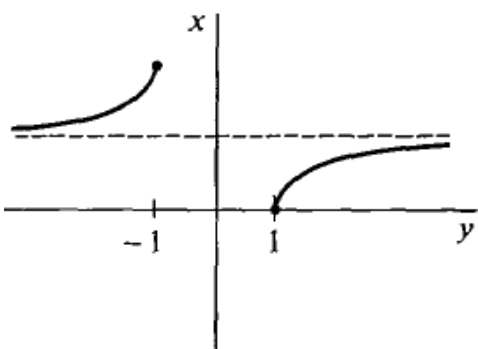
$$x = \arccos y$$



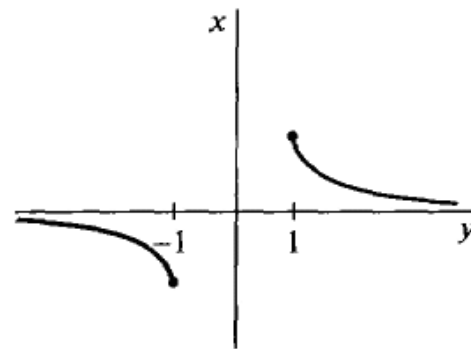
$$x = \arctan y$$



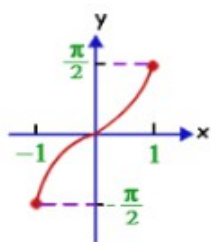
$$x = \operatorname{arccot} y$$



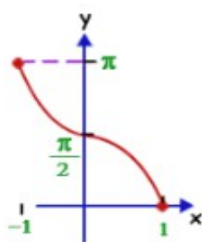
$$x = \operatorname{arcsec} y$$



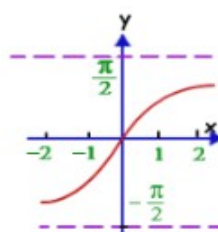
$$x = \operatorname{arccsc} y$$



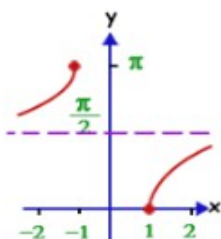
Domain : $-1 \leq x \leq 1$
 Range : $-\frac{\pi}{2} \leq y \leq \frac{\pi}{2}$



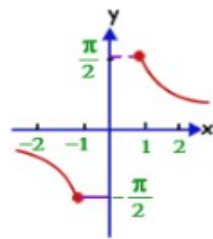
Domain : $-1 \leq x \leq 1$
 Range : $0 \leq y \leq \pi$



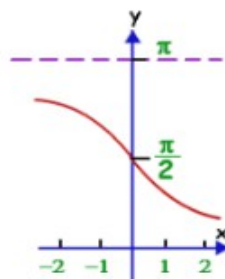
Domain : $-\infty < x < \infty$
 Range : $-\frac{\pi}{2} < y < \frac{\pi}{2}$



Domain : $x \leq -1$ or $x \geq 1$
 Range : $0 \leq y \leq \pi, y \neq \frac{\pi}{2}$



Domain : $x \leq -1$ or $x \geq 1$
 Range : $-\frac{\pi}{2} \leq y \leq \frac{\pi}{2}, y \neq 0$



Range : $0 < y < \pi$
 Domain : $-\infty < x < \infty$

S.No.	Inverse Cir. Fn.	Domain	Range	Graph
1.	$\sin^{-1} x = \theta$ iff $\sin \theta = x, -\pi/2 \leq \theta \leq \pi/2$	$[-1, 1]$	$[-\pi/2, \pi/2]$	
2.	$\cos^{-1} x = \theta$ iff $\cos \theta = x, 0 \leq \theta \leq \pi$	$[-1, 1]$	$[0, \pi]$	
3.	$\tan^{-1} x = \theta$ iff $\tan \theta = x, \frac{\pi}{2} < \theta < \frac{\pi}{2}$	$(-\infty, \infty)$	$(-\pi/2, \pi/2)$	
4.	$\cot^{-1} x = \theta$ iff $\cot \theta = x, 0 \leq \theta \leq \pi$	$(-\infty, \infty)$	$(0, \pi)$	
5.	$\sec^{-1} x = \theta$ iff $\sec \theta = x, 0 \leq \theta \leq \pi$ and $\theta \neq \frac{\pi}{2}$	$(-\infty, -1] \cup [1, \infty)$	$[0, \pi]$ $\theta \neq \frac{\pi}{2}$	
6.	$\text{cosec}^{-1} x = \theta$ iff $\text{cosec} \theta = x$ $-\frac{\pi}{2} \leq \theta \leq \frac{\pi}{2}, \theta \neq 0$	$(-\infty, -1] \cup [1, \infty)$	$[-\pi/2, \pi/2]$ $\theta \neq 0$	