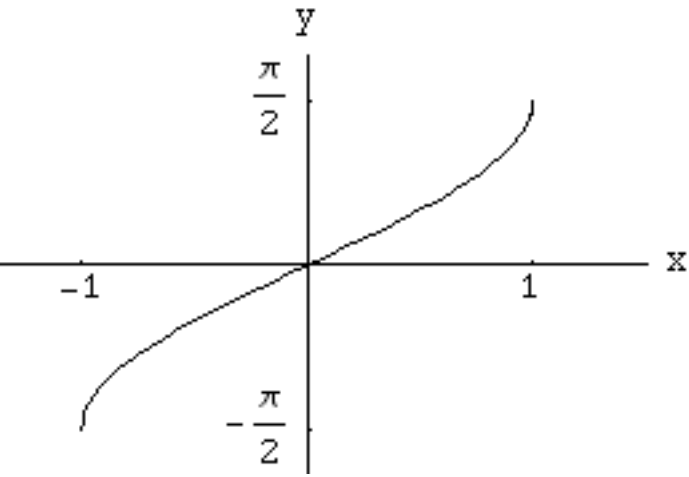
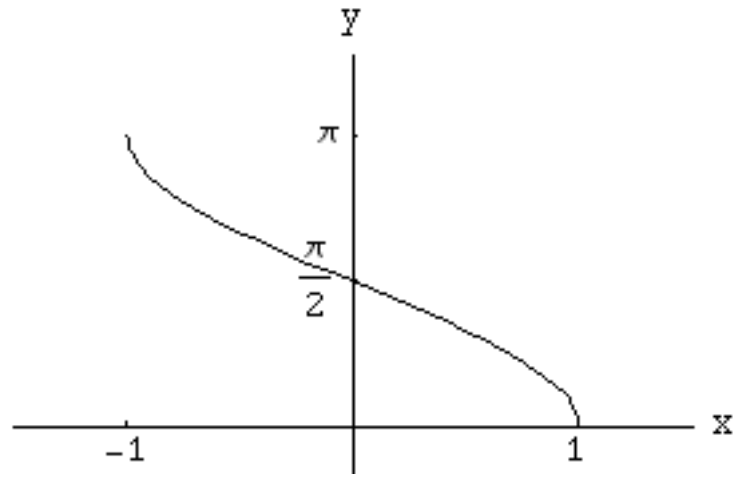


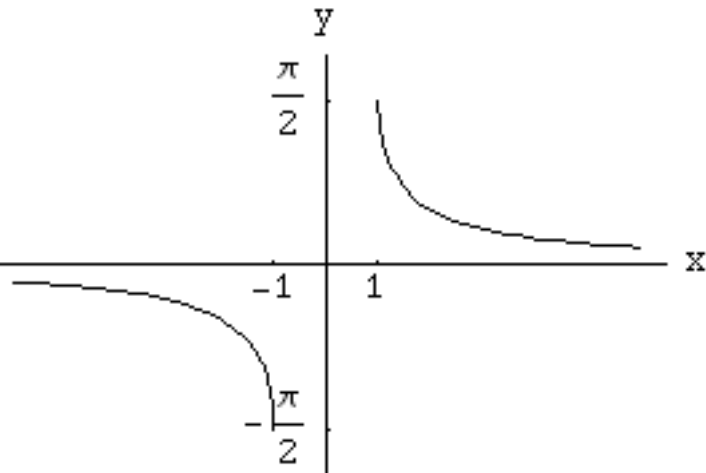
Math 002 — Graph of Inverse Trigonometric Functions



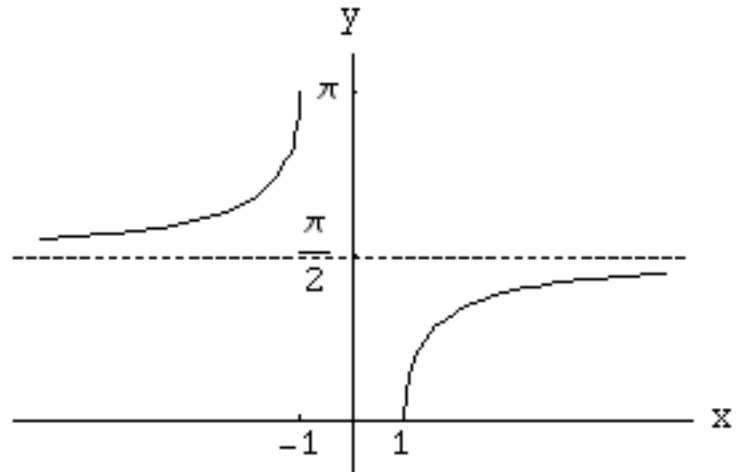
$y = \sin^{-1}x = \arcsin x$   
 Domain =  $[-1, 1]$   
 Range =  $[-\frac{\pi}{2}, \frac{\pi}{2}]$   
 It's a 1 - 1 odd function



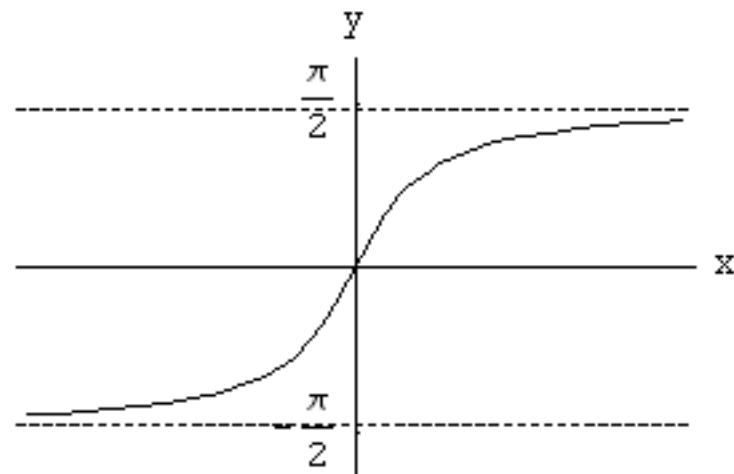
$y = \cos^{-1}x = \arccos x$   
 Domain =  $[-1, 1]$   
 Range =  $[0, \pi]$   
 It's 1 - 1 but nither odd nor even function



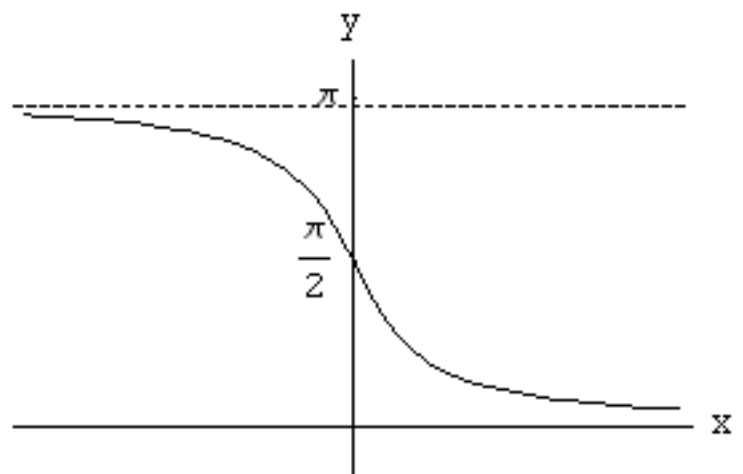
$y = \csc^{-1}x = \operatorname{arccsc} x$   
 Domain =  $(-\infty, -1] \cup [1, \infty)$   
 Range =  $[-\frac{\pi}{2}, 0) \cup (0, \frac{\pi}{2}]$   
 It's a 1 - 1 odd function



$y = \sec^{-1}x = \operatorname{arcsec} x$   
 Domain =  $(-\infty, -1] \cup [1, \infty)$   
 Range =  $[0, \frac{\pi}{2}) \cup (\frac{\pi}{2}, \pi]$   
 It's 1 - 1 but nither odd nor even function



$y = \tan^{-1}x = \arctan x$   
 Domain =  $(-\infty, \infty)$   
 Range =  $(-\frac{\pi}{2}, \frac{\pi}{2})$   
 It's a 1 - 1 odd function



$y = \cot^{-1}x = \operatorname{arccot} x$   
 Domain =  $(-\infty, \infty)$   
 Range =  $(0, \pi)$   
 It's 1 - 1 but nither odd nor even function