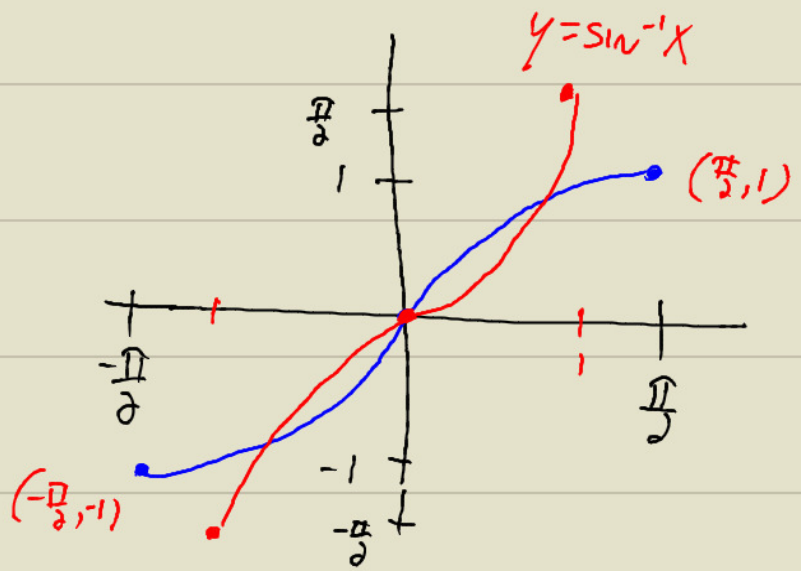
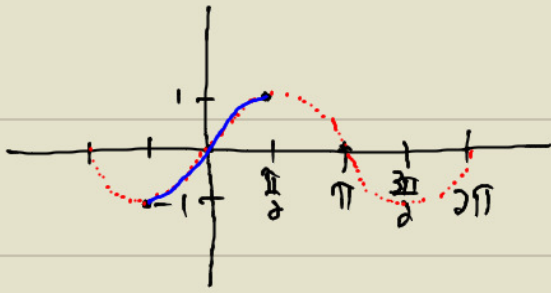


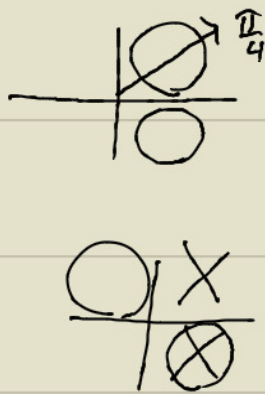
$$y = \sin x$$



$y = \sin^{-1} x$ $-1 \leq x \leq 1 \quad -\frac{\pi}{2} \leq y \leq \frac{\pi}{2}$
$y = \cos^{-1} x$ $-1 \leq x \leq 1 \quad 0 \leq y \leq \pi$
$y = \tan^{-1} x$ $-\infty < x < \infty \quad -\frac{\pi}{2} < y < \frac{\pi}{2}$

1. $\sin^{-1}(1)$
 $p = \sin^{-1}(1)$
 $\sin p = \sin(\sin^{-1}(1))$
 $\sin p = 1$
 "y" $p = \left(\frac{\pi}{2}\right)$

2. $\tan^{-1}(1)$
 $p = \tan^{-1}(1)$
 $\tan p = \tan(\tan^{-1}(1))$
 $\tan p = 1$
 "y/x" $p = \left(\frac{\pi}{4}\right)$



3. $\tan^{-1}\left(-\frac{\sqrt{3}}{3}\right)$
 $p = \tan^{-1}\left(-\frac{\sqrt{3}}{3}\right)$
 $\tan p = \tan\left[\tan^{-1}\left(-\frac{\sqrt{3}}{3}\right)\right]$
 $\tan p = -\frac{\sqrt{3}}{3}$
 $p = \frac{11\pi}{6}$
 $= 11\pi/6 - 2\pi$
 $= \left(-\frac{\pi}{6}\right)$

4. $\cos^{-1}\left(-\frac{\sqrt{2}}{2}\right)$
 $p = \cos^{-1}\left(-\frac{\sqrt{2}}{2}\right)$
 $\cos p = \cos\left(\cos^{-1}\left(-\frac{\sqrt{2}}{2}\right)\right)$
 $\cos p = -\frac{\sqrt{2}}{2}$
 $p = \left(\frac{3\pi}{4}\right)$

