2.4 Inverse Trig. Functions

1. $\sin^{-1}\left(\frac{1}{2}\right) = \frac{\pi}{6}$

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

3. $\tan^{-1}\left(-\frac{\sqrt{3}}{3}\right) = -\frac{\pi}{6}$

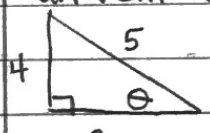
4. $\tan^{-1}\left(\tan\frac{\pi}{6}\right) = \frac{\pi}{6}$

5. $\cos\left(\sin^{-1}\frac{\sqrt{3}}{2}\right)$
   $\cos\left(\frac{\pi}{3}\right) = \boxed{\frac{1}{2}}$

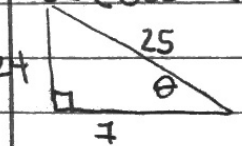
* 6. $\cos^{-1}(-0.92761) \approx 2.75876$ rad. or 158.06527°

7. $\sin^{-1}(1.23456)$ not in domain $(\sin\theta \not\geq 1)$

8. $\tan\left(\sin^{-1}\left(\frac{4}{5}\right)\right) = \boxed{\frac{4}{3}}$



9. $\csc\left(\cos^{-1}\left(\frac{7}{25}\right)\right) = \boxed{\frac{25}{24}}$



10. $\sin\left(\tan^{-1}\frac{22}{5}\right) = \boxed{\frac{12}{13}}$