

Name : _____

Evaluate

T1S1

Evaluate the following.

1) $\operatorname{cosec}^{-1}\left(\tan\left(\frac{71\pi}{4}\right)\right)$

2) $\sec^{-1}\left(\operatorname{cosec}\left(\frac{4\pi}{3}\right)\right)$

3) $\cos^{-1}\left(\cos\left(\frac{5\pi}{3}\right)\right)$

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

5) $\cot^{-1}\left(\sin\left(-\frac{7\pi}{2}\right)\right)$

6) $\tan^{-1}\left(\cos\left(\frac{\pi}{2}\right)\right)$

Name : _____

Answer key

Evaluate

T1S1

Evaluate the following.

1) $\operatorname{cosec}^{-1}\left(\tan\left(\frac{71\pi}{4}\right)\right)$

$-\frac{\pi}{2}$

2) $\sec^{-1}\left(\operatorname{cosec}\left(\frac{4\pi}{3}\right)\right)$

$\frac{5\pi}{6}$

3) $\cos^{-1}\left(\cos\left(\frac{5\pi}{3}\right)\right)$

$\frac{\pi}{3}$

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

$\frac{\pi}{6}$

5) $\cot^{-1}\left(\sin\left(-\frac{7\pi}{2}\right)\right)$

$\frac{\pi}{4}$

6) $\tan^{-1}\left(\cos\left(\frac{\pi}{2}\right)\right)$

0