

Trigonometric Expressions

Name: _____

Date: _____

Evaluate the following trigonometric expressions.

1) $\sin^{-1}(\cot(\frac{3\pi}{2}))$

2) $\tan^{-1}(\sec(\frac{4\pi}{2}))$

3) $\cos^{-1}(\tan(-3\pi))$

4) $\sec^{-1}(\cos(\frac{3\pi}{4}))$

5) $\cot^{-1}(\tan(\frac{22\pi}{12}))$

6) $\sin^{-1}(\operatorname{cosec}(\frac{\pi}{2}))$

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

8) $\cos^{-1}(\frac{3}{4}\sin(3\pi))$

9) $\cot^{-1}(\cos(-\pi))$

10) $\sin^{-1}(\frac{1}{2}\cot(\frac{\pi}{6}))$

11) $\cot^{-1}(2\sin(\frac{-4\pi}{3}))$

12) $\tan^{-1}(\cos(\frac{\pi}{2}))$

Trigonometric Expressions

Name: _____

Date: _____

Evaluate the following trigonometric expressions.

1) $\sin^{-1}(\cot(\frac{3\pi}{2}))$

0

2) $\tan^{-1}(\sec(\frac{4\pi}{2}))$

$\frac{\pi}{4}$

3) $\cos^{-1}(\tan(-3\pi))$

$\frac{\pi}{2}$

4) $\sec^{-1}(\cos(\frac{3\pi}{4}))$

$-\frac{\pi}{4}$

5) $\cot^{-1}(\tan(\frac{22\pi}{12}))$

$\frac{2\pi}{3}$

6) $\sin^{-1}(\operatorname{cosec}(\frac{\pi}{2}))$

$\frac{\pi}{2}$

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

$-\frac{\pi}{3}$

8) $\cos^{-1}(\frac{3}{4}\sin(3\pi))$

$\frac{\pi}{2}$

9) $\cot^{-1}(\cos(-\pi))$

$\frac{3\pi}{4}$

10) $\sin^{-1}(\frac{1}{2}\cot(\frac{\pi}{6}))$

$\frac{\pi}{3}$

11) $\cot^{-1}(2\sin(\frac{-4\pi}{3}))$

$\frac{\pi}{6}$

12) $\tan^{-1}(\cos(\frac{\pi}{2}))$

0