

## Inverse Trigonometric Ratios

Name: \_\_\_\_\_

Date: \_\_\_\_\_

**Find the value of each inverse trigonometric ratio in degrees.**

1)  $\cot^{-1}(\sqrt{3})$

\_\_\_\_\_

2)  $\cos^{-1}(1)$

\_\_\_\_\_

3)  $\sin^{-1}(0)$

\_\_\_\_\_

4)  $\tan^{-1}(0)$

\_\_\_\_\_

5)  $\sin^{-1}\left(\frac{\sqrt{2}}{2}\right)$

\_\_\_\_\_

6)  $\cos^{-1}(0)$

\_\_\_\_\_

7)  $\tan^{-1}(\sqrt{3})$

\_\_\_\_\_

8)  $\sec^{-1}\left(\frac{2\sqrt{3}}{3}\right)$

\_\_\_\_\_

9)  $\sec^{-1}(2)$

\_\_\_\_\_

**Find the value of each inverse trigonometric ratio in radians.**

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

\_\_\_\_\_

2)  $\sec^{-1}(1)$

\_\_\_\_\_

3)  $\csc^{-1}(\sqrt{2})$

\_\_\_\_\_

4)  $\cot^{-1}(0)$

\_\_\_\_\_

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

\_\_\_\_\_

6)  $\cot^{-1}(1)$

\_\_\_\_\_

7)  $\cos^{-1}(0)$

\_\_\_\_\_

8)  $\csc^{-1}(2)$

\_\_\_\_\_

9)  $\tan^{-1}(1)$

\_\_\_\_\_

# Inverse Trigonometric Ratios

Name: \_\_\_\_\_

Date: \_\_\_\_\_

**Find the value of each inverse trigonometric ratio in degrees.**

1)  $\cot^{-1}(\sqrt{3})$

$30^\circ$

2)  $\cos^{-1}(1)$

$0^\circ$

3)  $\sin^{-1}(0)$

$0^\circ$

4)  $\tan^{-1}(0)$

$0^\circ$

5)  $\sin^{-1}\left(\frac{\sqrt{2}}{2}\right)$

$45^\circ$

6)  $\cos^{-1}(0)$

$90^\circ$

7)  $\tan^{-1}(\sqrt{3})$

$60^\circ$

8)  $\sec^{-1}\left(\frac{2\sqrt{3}}{3}\right)$

$30^\circ$

9)  $\sec^{-1}(2)$

$60^\circ$

**Find the value of each inverse trigonometric ratio in radians.**

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

$\frac{\pi}{3}$

2)  $\sec^{-1}(1)$

$0$

3)  $\csc^{-1}(\sqrt{2})$

$\frac{\pi}{4}$

4)  $\cot^{-1}(0)$

$\frac{\pi}{2}$

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

$\frac{\pi}{6}$

6)  $\cot^{-1}(1)$

$\frac{\pi}{4}$

7)  $\cos^{-1}(0)$

$\frac{\pi}{2}$

8)  $\csc^{-1}(2)$

$\frac{\pi}{6}$

9)  $\tan^{-1}(1)$

$\frac{\pi}{4}$