

#### 4.20 Trig Inverse and Principal Values Quiz Review WS 1

Find the exact value for each expression. Use radian measures for angles. Use principal values for inverses.

1.  $\text{Arctan}(-1)$

2.  $\text{Cos}^{-1}(-1)$

3.  $\text{Sin}^{-1}\left(-\frac{1}{2}\right)$

4.  $\text{Tan}^{-1}(\sqrt{3})$

5.  $\cos[\text{Tan}^{-1}(-\sqrt{3})]$

6.  $\text{Arccos}\left[\sin\left(\frac{2\pi}{3}\right)\right]$

7.  $\text{Sin}^{-1}\left[\tan\left(\frac{7\pi}{4}\right)\right]$

8.  $\cot\left[2\text{Sin}^{-1}\left(\frac{\sqrt{3}}{2}\right)\right]$

9.  $\cot\left[\text{Arccos}\left(-\frac{5}{13}\right)\right]$

10.  $\cos[\text{Arctan}(2x)]$

11.  $\tan\left[\text{Sin}^{-1}\left(\frac{5}{x}\right)\right]$

12.  $\csc\left[\text{Cos}^{-1}\left(\frac{x}{\sqrt{7}}\right)\right]$

Use a calculator to find two values of  $\theta$ , where  $0^\circ \leq \theta < 360^\circ$ . Round to the nearest degree.

13.  $\arcsin(0.6191)$

14.  $\cos^{-1}(-0.9211)$

15.  $\tan \theta = -0.3249$

Use a calculator to find two values of  $\theta$ , where  $0 \leq \theta < 2\pi$ . Round to the nearest thousandth of a radian.

16.  $\arcsin(0.5723)$

17.  $\cos^{-1}(-0.1989)$

18.  $\tan \theta = -0.3351$