

Find the exact value of each.

$$\cos\left(\sin^{-1}\frac{1}{\sqrt{3}}\right)$$

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

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

Solve each trigonometric equation for θ on the interval $[0, 2\pi)$.

$$\cos \theta = \frac{\sqrt{2}}{2}$$

$$\sin \theta = -\frac{1}{2}$$

$$\cos \theta = -1$$

$$\sin \theta = 0$$

$$\tan \theta = -\frac{1}{\sqrt{3}}$$

$$\cot \theta = 1$$

Solve each trigonometric equation for θ on the interval $[0, 2\pi)$.

$$\sin 2\theta = \frac{1}{2}$$

$$\cos 3\theta = -\frac{1}{2}$$

$$\sin \frac{\theta}{3} = \frac{\sqrt{3}}{2}$$

$$\tan \left(\frac{\theta}{2} + \frac{\pi}{6} \right) = -1$$

$$\cos \theta = -0.4$$

$$\sin \theta = -0.2$$