Find the exact value of the expression.

1. $\cos\left(\sin^{-1}\frac{\sqrt{2}}{2}\right)=$

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

3. $\tan\left(\cos^{-1}\frac{-\sqrt{3}}{2}\right)=$

4. $\sec\left(\cos^{-1}\frac{-1}{2}\right)=$

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

6. $\csc\left(\tan^{-1}1\right)=$

7. $\sin^{-1}\left(\cos 30^\circ\right)=$

8. $\cos^{-1}\left(\sin 45^\circ\right)=$

9. $\tan^{-1}\left(\tan 120^\circ\right)=$

10. $\sin^{-1}\left(\cos\frac{3\pi}{4}\right)=$

11. $\cos^{-1}\left(\sin\frac{7\pi}{6}\right)=$

12. $\cos^{-1}\left(\sin\frac{7\pi}{4}\right)=$

Find the exact value of the expression by drawing a picture and using the Pythagorean Theorem

1. $\cos\left(\sin^{-1}\frac{1}{\sqrt{5}}\right)=$

2. $\sin\left(\tan^{-1}(-3)\right)=$

3. $\tan\left(\cos^{-1}\frac{1}{3}\right)=$

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

5. $\cot\left(\cos^{-1}\frac{-\sqrt{3}}{3}\right)=$

6. $\csc\left(\tan^{-1}\frac{1}{2}\right)=$