

Chapter 8.2 Review

Name _____

Find all solutions of each equation without using your calculator.

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

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

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

4. $\cos^{-1}(-1)$

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

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

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

8. $\sin^{-1}(-1)$

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

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

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

12. $\cot^{-1}(-1)$

13. $\sin^{-1}\left(\cos\frac{2\pi}{3}\right)$

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

15. $\cos\left(\sin^{-1}\left(\frac{8}{17}\right)\right)$

16. $\cos\left(\tan^{-1}\left(-\frac{12}{5}\right)\right)$

Write the domain of these inverse functions:

17. \sin^{-1}

18. \cos^{-1}

19. \tan^{-1}

What quadrants do you use when you are finding these inverses:

20. \sin^{-1}

21. \cos^{-1}

22. \tan^{-1}

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