

Pre-Calculus: Evaluating Inverse Trig Expressions
Assignment 2

Name _____

Evaluate each inverse expression for principal values only and write your final answer as an exact value. If no solution exists put "DNE"

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

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

19. $\arccos(1)$

2. $\arctan(-1)$

11. $\cos^{-1}(0)$

20. $\arcsin(1)$

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

12. $\arcsin(0)$

21. $\tan^{-1}(0)$

4. $\arctan(-\sqrt{3})$

13. $\tan^{-1}(1)$

22. $\tan^{-1}(\text{undefined})$

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

14. $\arctan\left(-\frac{\sqrt{3}}{3}\right)$

23. $\arccos\left(-\frac{\sqrt{2}}{2}\right)$

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

15. $\arcsin\left(\frac{\sqrt{2}}{2}\right)$

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

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

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

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

8. $\arccos\left(\frac{\sqrt{2}}{2}\right)$

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

26. $\arcsin\left(-\frac{\sqrt{3}}{2}\right)$

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

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