

Unit 5: Graphs and Inverse of Trig Functions

Lesson 9: Inverse Trig Functions MA3A8

1. $\cos^{-1}\left(\cos \frac{5\pi}{3}\right)$ _____

2. $\sin^{-1}\left[\sin\left(\frac{5\pi}{6}\right)\right]$ _____

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

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

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

5. $\cos^{-1}\left[\sin\left(-\frac{\pi}{3}\right)\right]$ _____

6. $\cos\left[\sin^{-1}\left(-\frac{\sqrt{3}}{2}\right)\right]$ _____

7. $\sin\left[\cos^{-1}\left(-\frac{\sqrt{3}}{2}\right)\right]$ _____

8. $\sin\left[\cos^{-1}\left(-\frac{4}{5}\right)\right]$ _____

9. $\cos\left[\sin^{-1}\left(-\frac{5}{13}\right)\right]$ _____

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

11. $\sin\left[\cos^{-1}\left(-\frac{2}{5}\right)\right]$ _____

12. $\cot^{-1}\left(\tan \frac{3\pi}{4}\right)$ _____

13. $\tan^{-1}\left[\cot\left(-\frac{5\pi}{6}\right)\right]$ _____

14. $\tan\left(\cot^{-1} 2\right)$ _____

15. $\sin\left(\csc^{-1} 3\right)$ _____

16. $\tan\left[\sin^{-1}\left(-\frac{3}{5}\right)\right]$ _____

17. $\cot\left[\sin^{-1} \frac{12}{13}\right]$ _____

18. $\sin\left(\tan^{-1} 2\right)$ _____

19. $\cos\left(\cot^{-1} \frac{1}{2}\right)$ _____

20. $\tan^{-1}\left[\tan \frac{11\pi}{6}\right]$ _____

21. $\cot^{-1}\left(\cot \frac{5\pi}{6}\right)$ _____

22. $\sec^{-1}\left[\sec\left(-\frac{\pi}{4}\right)\right]$ _____

23. $\cot^{-1}\left[\cot\left(-\frac{3\pi}{2}\right)\right]$ _____