

Pre-AP Precalculus
WS - Inverse Trig Functions, pt 1
Spring 2019

Name _____

Date _____ Per _____

Evaluate the following:

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

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

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

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

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

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

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

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

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

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

11. $\cos\left(\sin^{-1}\left(\frac{7}{24}\right)\right)$

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

13. $\tan\left(\csc^{-1}\left(-\frac{15}{8}\right)\right)$

14. $\cos\left(\tan^{-1}\left(\frac{24}{7}\right)\right)$

Solve the following equations on the interval $[0, 2\pi)$

15. $\cos x = -0.371$

16. $\sec x = 2.315$

17. $\tan x = -3.916$

18. $\sin x = -0.3458$

19. $\csc x = -6.873$

20. $\cos^{-1} 0.9871$

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