

Find the exact values. No calculators. Give answers in degrees and radians.

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

2. $\sec^{-1}2$

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

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

Find exact values. No calculators.

5. $\sin^{-1}(\cos 150^\circ)$

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

7. $\cot^{-1}(\tan(-30^\circ))$

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

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

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

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

Find the value of θ , to the nearest tenth of a degree.

12. $\sin \theta = .6118$, if $90^\circ < \theta < 270^\circ$

13. $\cos \theta = -.4275$, if $180^\circ < \theta < 360^\circ$

14. $\tan \theta = -1.582$, if $180^\circ < \theta < 360^\circ$

15. The terminal side of angle θ in standard position passes through $(-1, 4)$. Find the exact values of the six trigonometric functions of θ .

Find exact values. No decimals.

16. $\tan(-240^\circ)$

17. $\sec 690^\circ$

18. $\cos \frac{5\pi}{4}$

19. $\cot\left(\frac{-\pi}{3}\right)$

20. Find the values of all 6 trigonometric functions of 180° .