

I. Evaluate each inverse expression.

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

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

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

10. $\arctan\sqrt{3}$

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

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

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

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

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

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

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

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

III. Evaluate each composition.

19. $\sin(\sin^{-1}(1.2))$

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

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

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

$$23. \sin(\tan^{-1}(-1))$$

$$24. \sin^{-1}\left(\cos\left(\frac{7\pi}{6}\right)\right)$$

$$25. \cos\left(\tan^{-1}\left(-\frac{4}{5}\right)\right)$$

$$26. \tan(\cos^{-1} x)$$

$$27. \sin\left(\cos^{-1}\left(\frac{1}{x}\right)\right)$$

$$28. \tan\left(\sin^{-1}\left(\frac{x}{2}\right)\right)$$

$$29. \cos(\sin^{-1} 2x)$$

$$30. \sec\left(\cos^{-1} \frac{1}{x}\right)$$

$$31. \sin\left(\tan^{-1} \frac{x}{\sqrt{3}}\right)$$

$$32. \tan\left(\sin^{-1} \frac{x}{\sqrt{x^2+4}}\right)$$