

Find the *exact* value of each trig function. Do not use any type of calculator.

1. $\cos 315^\circ \frac{\sqrt{2}}{2}$

2. $\sin 150^\circ \frac{1}{2}$

3. $\tan 210^\circ \frac{\sqrt{3}}{3}$

4. $\sec 90^\circ \emptyset$

5. $\cos 180^\circ -1$

6. $\sin 330^\circ -\frac{1}{2}$

7. $\csc 120^\circ \frac{2\sqrt{3}}{3}$

8. $\cot 240^\circ \frac{\sqrt{3}}{3}$

9. $\sec 135^\circ -\sqrt{2}$

10. $\cot 300^\circ -\frac{\sqrt{3}}{3}$

11. $\tan 240^\circ \sqrt{3}$

12. $\sec 270^\circ \emptyset$

13. $\sin 0^\circ 0$

14. $\cos \frac{\pi}{4} \frac{\sqrt{2}}{2}$

15. $\sin \frac{2\pi}{3} \frac{\sqrt{3}}{2}$

16. $\tan \frac{11\pi}{6} -\frac{\sqrt{3}}{3}$

17. $\sec \frac{5\pi}{6} -\frac{2\sqrt{3}}{3}$

18. $\csc \frac{5\pi}{4} -\sqrt{2}$

19. $\cot \frac{7\pi}{4} -1$

20. $\sin \frac{\pi}{2} 1$

21. $\tan \frac{3\pi}{2} \emptyset$

22. $\cot 2\pi \emptyset$

23. $\sec \frac{3\pi}{4} -\sqrt{2}$

24. $\csc \frac{5\pi}{3} -\frac{2\sqrt{3}}{3}$

25. $\sec \frac{\pi}{6} \frac{2\sqrt{3}}{3}$

26. $\cot \frac{\pi}{3} \frac{\sqrt{3}}{3}$

27. $\sin (-135^\circ) -\frac{\sqrt{2}}{2}$

28. $\cos (-240^\circ) -\frac{1}{2}$

29. $\tan (-30^\circ) -\frac{\sqrt{3}}{3}$

30. $\sin 480^\circ \frac{\sqrt{3}}{2}$

31. $\cos 405^\circ \frac{\sqrt{2}}{2}$

32. $\tan 930^\circ \frac{\sqrt{3}}{3}$

33. $\cos 1035^\circ \frac{\sqrt{2}}{2}$