

5.2 Sine and Cosine

Find the exact value of the following trigonometric expressions.

1. $\sin 0 = 0$

2. $\cos 0 = 1$

3. $\sin \frac{\pi}{2} = 1$

4. $\cos \frac{\pi}{2} = 0$

5. $\sin \pi = 0$

6. $\cos \pi = -1$

7. $\sin \frac{3\pi}{2} = -1$

8. $\cos \frac{3\pi}{2} = 0$

9. $\sin \frac{\pi}{4} = \frac{\sqrt{2}}{2}$

10. $\sin \frac{\pi}{6} = \frac{1}{2}$

11. $\cos \frac{\pi}{3} = \frac{1}{2}$

12. $\sin \frac{4\pi}{3} = -\frac{\sqrt{3}}{2}$

13. $\cos \frac{5\pi}{6} = -\frac{\sqrt{3}}{2}$

14. $\sin \frac{3\pi}{4} = \frac{\sqrt{2}}{2}$

15. $\cos \frac{7\pi}{6} = -\frac{\sqrt{3}}{2}$

16. $\sin \frac{11\pi}{6} = -\frac{1}{2}$

17. $\cos -\frac{\pi}{6} = \frac{\sqrt{3}}{2}$

18. $\sin \frac{3\pi}{4} = \frac{\sqrt{2}}{2}$

19. $\cos \frac{11\pi}{6} = \frac{\sqrt{3}}{2}$

20. $\sin \frac{2\pi}{3} = \frac{\sqrt{3}}{2}$

21. $\cos \frac{7\pi}{6} = -\frac{\sqrt{3}}{2}$

22. $\sin \frac{5\pi}{3} = -\frac{\sqrt{3}}{2}$

23. $\cos \frac{5\pi}{6} = -\frac{\sqrt{3}}{2}$