

Exact Values Review

Name: _____

Find the exact value

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| 1. $\sin 135^\circ$
$\frac{1}{\sqrt{2}}$ | 2. $\cos \frac{5\pi}{3}$
$\frac{1}{2}$ | 3. $\tan \frac{7\pi}{6}$
$\frac{1}{\sqrt{3}}$ | 4. $\tan 150^\circ$
$-\frac{1}{\sqrt{3}}$ |
| 5. $\sin 180^\circ$
0 | 6. $\cos \pi$
-1 | 7. $\tan \frac{2\pi}{3}$
$-\sqrt{3}$ | 8. $\sec \frac{7\pi}{6}$
$-\frac{2}{\sqrt{3}}$ |
| 9. $\sin 120^\circ$
$\frac{\sqrt{3}}{2}$ | 10. $\cos \frac{7\pi}{4}$
$\frac{1}{\sqrt{2}}$ | 11. $\csc \frac{7\pi}{3}$
$\frac{2}{\sqrt{3}}$ | 12. $\tan \frac{3\pi}{4}$
-1 |
| 13. $\sin 390^\circ$
$\frac{1}{2}$ | 14. $\cot \frac{3\pi}{2}$
0 | 15. $\tan \frac{11\pi}{6}$
$-\frac{1}{\sqrt{3}}$ | 16. $\cos \frac{5\pi}{2}$
0 |

Find the exact principle inverse value and the possible values of x in radians where $0 \leq x \leq 2\pi$

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| 17. $x = \cos^{-1}\left(-\frac{\sqrt{3}}{2}\right)$
Principle: $\frac{5\pi}{6}$ | 18. $x = \sin^{-1}\left(\frac{\sqrt{3}}{2}\right)$
Principle: $\frac{\pi}{3}$ | 19. $x = \arcsin\left(-\frac{1}{2}\right)$
P: $-\frac{\pi}{6}$ | 20. $x = \arctan(1)$
P: $\frac{\pi}{4}$ |
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| Q2,3 $\frac{5\pi}{6}, \frac{7\pi}{6}$ | Q1,2 $\frac{\pi}{3}, \frac{2\pi}{3}$ | Q3,4 $\frac{7\pi}{6}, \frac{11\pi}{6}$ | Q1,3 $\frac{\pi}{4}, \frac{5\pi}{4}$ |
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| 21. $x = \arccos\left(\frac{1}{2}\right)$
P: $\frac{\pi}{3}$ | 22. $x = \tan^{-1}(-\sqrt{3})$
P: $-\frac{\pi}{3}$ | 23. $x = \sin^{-1}(0)$
P: 0 | 24. $x = \operatorname{arcsec}(-2)$
P: $\frac{2\pi}{3}$ |
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| Q1,4 $\frac{\pi}{3}, \frac{5\pi}{3}$ | Q2,4 $\frac{2\pi}{3}, \frac{5\pi}{3}$ | 0, π | Q2,3 $\frac{2\pi}{3}, \frac{4\pi}{3}$ |
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