

Finding Exact Values of Trig Functions

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Find the exact value of each trigonometric function. Do NOT use a calculator!

1) $\cos -45^\circ$

2) $\tan -240^\circ$

3) $\cos 45^\circ$

4) $\cos 225^\circ$

5) $\cos -240^\circ$

6) $\tan 60^\circ$

7) $\sin 45^\circ$

8) $\sin -225^\circ$

9) $\tan -60^\circ$

10) $\sin 225^\circ$

11) $\tan \frac{5\pi}{3}$

12) $\sin \frac{4\pi}{3}$

13) $\cos -\frac{\pi}{2}$

14) $\cos \frac{3\pi}{2}$

15) $\cos -\frac{3\pi}{2}$

16) $\cos \frac{\pi}{2}$

17) $\tan \frac{2\pi}{3}$

18) $\sin -\frac{\pi}{2}$

19) $\sin \frac{\pi}{3}$

20) $\sin \frac{3\pi}{2}$

Find the exact value of the given trigonometric function. Draw your picture.

1. $\tan \frac{5\pi}{3} =$

2. $\csc -\frac{3\pi}{2} =$

3. $\cot 225^\circ =$

4. $\sin -330^\circ =$

5. $\cos 510^\circ =$

6. $\sec -450^\circ =$

Find the exact value of the remaining trigonometric functions. Draw your picture in the indicated quadrant.

7. $\cos \theta = \frac{3}{5}$, and $\sin \theta < 0$.

8. $\sec \theta = \frac{-12}{5}$, and $\cot \theta > 0$

9. $\cot \theta = \frac{-\sqrt{3}}{5}$, and $\sec \theta < 0$

10. $\sin \theta = \frac{\sqrt{3}}{2}$, and $\sec \theta > 0$