

Using the Unit Circle

Find the exact value of each of the following:

1) $\cos \frac{\pi}{3}$

14) $\sin \frac{-7\pi}{6}$

2) $\sin \frac{\pi}{6}$

15) $\cot \frac{26\pi}{3}$

3) $\cos \pi$

16) $\csc \frac{\pi}{3}$

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

17) $\sec \frac{4\pi}{3}$

5) $\tan \frac{\pi}{2}$

18) $\cos \frac{-11\pi}{6}$

6) $\tan \frac{\pi}{4}$

19) $\sin \frac{13\pi}{4}$

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

20) $\csc \frac{-5\pi}{6}$

8) $\cos \pi$

21) $\tan \frac{-\pi}{6}$

9) $\sin \frac{11\pi}{6}$

22) $\cot \frac{2\pi}{3}$

10) $\tan \frac{-2\pi}{3}$

23) $\sec \frac{-19\pi}{3}$

11) $\cos \frac{-9\pi}{2}$

24) $\cot \frac{\pi}{4}$

12) $\sin \frac{21\pi}{4}$

25) $\cot \frac{21\pi}{6}$

13) $\cot \frac{7\pi}{4}$

26) $\tan \frac{34\pi}{3}$

Using the Unit Circle

27) Find all angles θ in the interval $[0, 2\pi)$ that satisfy the equation $\sin \theta = \frac{-3}{2}$

28) Find all angles θ in the interval $[0, 2\pi)$ that satisfy the equation $\tan \theta = \sqrt{3}$

29) Find all angles θ in the interval $[0, 2\pi)$ where $\sec \theta$ is undefined.

30) Find all angles θ in the interval $[0, 2\pi)$ that satisfy the equation $\csc \theta = \sqrt{2}$