

Find each exact value. Do not use a calculator.

1.  $\sin 240^\circ$

2.  $\cos 135^\circ$

3.  $\tan 45^\circ$

4.  $\sin 300^\circ$

5.  $\cos 210^\circ$

6.  $\tan 330^\circ$

7.  $\tan 60^\circ$

8.  $\sin -150^\circ$

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

10.  $\cos \frac{2\pi}{3}$

11.  $\tan \frac{5\pi}{4}$

12.  $\sin \frac{3\pi}{2}$

13.  $\cos \frac{5\pi}{6}$

14.  $\tan \frac{4\pi}{3}$

15.  $\cos \frac{7\pi}{4}$

24.  $\csc 330^\circ$

25.  $\sec 240^\circ$

26.  $\csc \frac{5\pi}{4}$

27.  $\cot \frac{5\pi}{6}$

Key

Find each exact value. Do not use a calculator.

1.  $\sin 240^\circ$

2.  $\cos 135^\circ$

3.  $\tan 45^\circ$

4.  $\sin 300^\circ$

5.  $\cos 210^\circ$

$-\frac{\sqrt{3}}{2}$

$-\frac{\sqrt{2}}{2}$

1

$-\frac{\sqrt{3}}{2}$

$-\frac{\sqrt{3}}{2}$

6.  $\tan 330^\circ$

7.  $\tan 60^\circ$

8.  $\sin -150^\circ$

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

10.  $\cos \frac{2\pi}{3}$

$-\frac{\sqrt{3}}{3}$

$\sqrt{3}$

$-\frac{1}{2}$

$-\frac{1}{2}$

$-\frac{1}{2}$

11.  $\tan \frac{5\pi}{4}$

12.  $\sin \frac{3\pi}{2}$

13.  $\cos \frac{5\pi}{6}$

14.  $\tan \frac{4\pi}{3}$

15.  $\cos \frac{7\pi}{4}$

1

-1

$-\frac{\sqrt{3}}{2}$

$\sqrt{3}$

$\frac{\sqrt{2}}{2}$

24.  $\csc 330^\circ$

25.  $\sec 240^\circ$

26.  $\csc \frac{5\pi}{4}$

27.  $\cot \frac{5\pi}{6}$

-2

-2

$-\sqrt{2}$

$-\sqrt{3}$