

$\theta$	$\frac{\pi}{6}$	$\frac{\pi}{4}$	$\frac{\pi}{3}$
$\sin \theta$	$\frac{1}{2}$	$\frac{\sqrt{2}}{2}$	$\frac{\sqrt{3}}{2}$
$\cos \theta$	$\frac{\sqrt{3}}{2}$	$\frac{\sqrt{2}}{2}$	$\frac{1}{2}$
$\tan \theta$	$\frac{1}{\sqrt{3}}$ or $\frac{\sqrt{3}}{3}$	1	$\sqrt{3}$

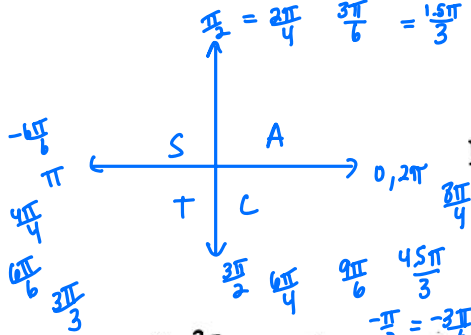
$$\csc \theta = \frac{1}{\sin \theta}$$

$$\sec \theta = \frac{1}{\cos \theta}$$

$$\cot \theta = \frac{1}{\tan \theta}$$

# EVALUATING TRIG FUNCTIONS

Find the value of each of the following:



1.  $\sin \frac{3\pi}{4} = \frac{\sqrt{2}}{2}$
2.  $\cos 2\pi = 1$
3.  $\tan \frac{7\pi}{6} = -\frac{1}{\sqrt{3}}$
4.  $\sin(-3\pi) = 0$
5.  $\cos \frac{5\pi}{3} = \frac{1}{2}$
6.  $\tan \frac{5\pi}{4} = 1$
7.  $\sin 8\pi = 0$
8.  $\cos \frac{11\pi}{3} = \frac{1}{2}$
9.  $\tan \frac{\pi}{4} = 1$
10.  $\sin \frac{2\pi}{3} = \frac{\sqrt{3}}{2}$
11.  $\cos(-\frac{5\pi}{6}) = -\frac{\sqrt{3}}{2}$
12.  $\tan(-\frac{2\pi}{3}) = -\sqrt{3}$
13.  $\sin(-\frac{\pi}{6}) = -\frac{1}{2}$
14.  $\cos \frac{12\pi}{3} = 1$
15.  $\tan \frac{7\pi}{3} = \frac{1}{\sqrt{3}}$
16.  $\sin(-\frac{11\pi}{6}) = -\frac{1}{2}$
17.  $\cos(-\frac{15\pi}{4}) = \frac{\sqrt{2}}{2}$
18.  $\tan(-\frac{5\pi}{3}) = -\frac{1}{\sqrt{3}}$
19.  $\sin(-\frac{\pi}{4}) = -\frac{\sqrt{2}}{2}$
20.  $\cos 0 = 1$
21.  $\csc \frac{5\pi}{6} = 2$
22.  $\sec \frac{7\pi}{3} = 2$
23.  $\cot \frac{2\pi}{3} = \frac{1}{\sqrt{3}}$
24.  $\csc \frac{11\pi}{3} = 2$
25.  $\sec(-\frac{\pi}{6}) = 2$
26.  $\cot \frac{3\pi}{4} = -1$
27.  $\csc(-\frac{7\pi}{4}) = -\frac{2}{\sqrt{2}}$
28.  $\sec(-\frac{2\pi}{3}) = -2$
29.  $\cot \frac{11\pi}{6} = \frac{1}{\sqrt{3}}$
30.  $\csc(-\frac{7\pi}{3}) = -2$
31.  $\sec \frac{3\pi}{4} = -\frac{2}{\sqrt{2}}$
32.  $\cot(-\frac{11\pi}{4}) = -\frac{1}{\sqrt{2}}$
33.  $\csc(-\frac{\pi}{3}) = -2$
34.  $\sec(-\frac{21\pi}{3}) = 1$
35.  $\cot(-\frac{10\pi}{5}) = 0$
36.  $\sin \frac{5\pi}{3} = -\frac{\sqrt{3}}{2}$
37.  $\sec \frac{\pi}{2} = \text{undefined}$
38.  $\cot \pi = \text{undefined}$
39.  $\csc \frac{11\pi}{2} = -2$
40.  $\csc(-\frac{\pi}{6}) = -2$
41.  $\tan(-\frac{3\pi}{2}) = \text{undefined}$
42.  $\cos \frac{7\pi}{6} = -\frac{\sqrt{3}}{2}$
43.  $\cot(-\frac{5\pi}{4}) = -1$
44.  $\sin \frac{11\pi}{4} = \frac{\sqrt{2}}{2}$
45.  $\sec 2\pi = 1$