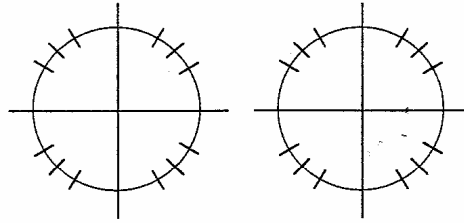


Use the unit circle and the first quadrant chart to find the given values.

$\theta^\circ$					
$\theta^r$					
$\sin \theta$					
$\cos \theta$					
$\tan \theta$					



1.  $\sin(45^\circ)$

2.  $\cos(30^\circ)$

3.  $\tan(60^\circ)$

4.  $\sec(120^\circ)$

5.  $\cot(225^\circ)$

6.  $\csc(330^\circ)$

7.  $\cos(270^\circ)$

8.  $\tan(90^\circ)$

9.  $\sin(180^\circ)$

10.  $\csc(-45^\circ)$

11.  $\sec(-150^\circ)$

12.  $\cot(-120^\circ)$

13.  $\tan(570^\circ)$

14.  $\cos(495^\circ)$

15.  $\sin(660^\circ)$

16.  $\sin\left(\frac{\pi}{6}\right)$

17.  $\cos\left(\frac{\pi}{3}\right)$

18.  $\tan\left(\frac{\pi}{4}\right)$

19.  $\sec\left(\frac{3\pi}{4}\right)$

20.  $\cot\left(\frac{5\pi}{3}\right)$

21.  $\csc\left(\frac{7\pi}{6}\right)$

22.  $\cos\left(\frac{\pi}{2}\right)$

23.  $\tan(\pi)$

24.  $\sin\left(\frac{3\pi}{2}\right)$

25.  $\csc\left(-\frac{2\pi}{3}\right)$

26.  $\sec\left(-\frac{5\pi}{4}\right)$

27.  $\cot\left(-\frac{11\pi}{6}\right)$

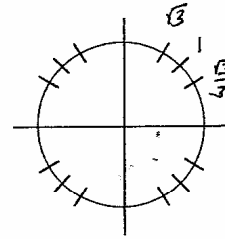
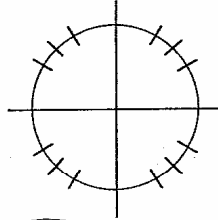
28.  $\tan\left(\frac{11\pi}{4}\right)$

29.  $\cos\left(\frac{17\pi}{3}\right)$

30.  $\sin\left(\frac{19\pi}{6}\right)$

Use the unit circle and the first quadrant chart to find the given values.

$\theta^\circ$	$0^\circ$	$30^\circ$	$45^\circ$	$60^\circ$	$90^\circ$
$\theta^r$	0	$\pi/6$	$\pi/4$	$\pi/3$	$\pi/2$
$\sin \theta$	0	$\frac{1}{2}$	$\frac{\sqrt{2}}{2}$	$\frac{\sqrt{3}}{2}$	1
$\cos \theta$	1	$\frac{\sqrt{3}}{2}$	$\frac{\sqrt{2}}{2}$	$\frac{1}{2}$	0
$\tan \theta$	0	$\frac{\sqrt{3}}{3}$	1	$\sqrt{3}$	und



1.  $\sin(45^\circ) = \frac{\sqrt{2}}{2}$
4.  $\sec(120^\circ) = -2$
7.  $\cos(270^\circ) = 0$
10.  $\csc(-45^\circ) = -\sqrt{2}$
13.  $\tan(570^\circ) = \frac{\sqrt{3}}{3}$   
 $\tan 210^\circ$
16.  $\sin\left(\frac{\pi}{6}\right) = \frac{1}{2}$
19.  $\sec\left(\frac{3\pi}{4}\right) = -\sqrt{2}$
22.  $\cos\left(\frac{\pi}{2}\right) = 0$
25.  $\csc\left(-\frac{2\pi}{3}\right) = -\frac{2\sqrt{3}}{3}$
28.  $\tan\left(\frac{11\pi}{4}\right) = -1$   
 $\frac{3\pi}{4}$

2.  $\cos(30^\circ) = \frac{\sqrt{3}}{2}$
5.  $\cot(225^\circ) = 1$
8.  $\tan(90^\circ) = \text{und}$
11.  $\sec(-150^\circ) = -\frac{2\sqrt{3}}{3}$
14.  $\cos(495^\circ) = \frac{-\sqrt{2}}{2}$   
 $135^\circ$
17.  $\cos\left(\frac{\pi}{3}\right) = \frac{1}{2}$
20.  $\cot\left(\frac{5\pi}{3}\right) = -\frac{\sqrt{3}}{3}$
23.  $\tan(\pi) = 0$
26.  $\sec\left(-\frac{5\pi}{4}\right) = -\sqrt{2}$
29.  $\cos\left(\frac{17\pi}{3}\right) = \frac{1}{2}$   
 $\frac{5\pi}{3}$

3.  $\tan(60^\circ) = \sqrt{3}$
6.  $\csc(330^\circ) = -2$
9.  $\sin(180^\circ) = 0$
12.  $\cot(-120^\circ) = \frac{\sqrt{3}}{3}$
15.  $\sin(660^\circ) = -\frac{\sqrt{3}}{2}$   
 $300^\circ$
18.  $\tan\left(\frac{\pi}{4}\right) = \frac{\sqrt{2}}{2}$
21.  $\csc\left(\frac{7\pi}{6}\right) = -2$
24.  $\sin\left(\frac{3\pi}{2}\right) = -1$
27.  $\cot\left(-\frac{11\pi}{6}\right) = -\sqrt{3}$
30.  $\sin\left(\frac{19\pi}{6}\right) = -\frac{1}{2}$   
 $\frac{7\pi}{6}$