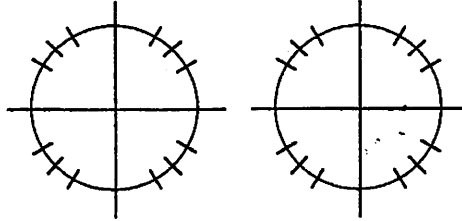


Use the unit circle and the first quadrant chart to find the given values.

θ°					
θ°					
$\sin \theta$					
$\cos \theta$					
$\tan \theta$					



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

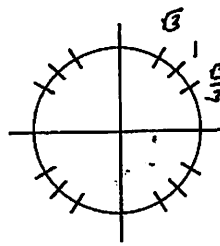
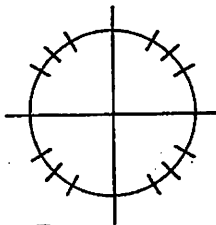
28. $\tan \left(\frac{11\pi}{4}\right)$

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.

θ°	0°	30°	45°	60°	90°
θ^r	0	$\pi/6$	$\pi/4$	$\pi/3$	$\pi/2$
$\sin \theta$	0	$1/2$	$\sqrt{2}/2$	$\sqrt{3}/2$	1
$\cos \theta$	1	$\sqrt{3}/2$	$\sqrt{2}/2$	$1/2$	0
$\tan \theta$	0	$\sqrt{3}/3$	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. $\sin(\frac{\pi}{6}) = 1/2$

19. $\sec(\frac{3\pi}{4}) = -\sqrt{2}$

22. $\cos(\frac{\pi}{2}) = 0$

25. $\csc(-\frac{2\pi}{3}) = -\frac{2\sqrt{3}}{3}$

28. $\tan(\frac{11\pi}{4}) = -1$
 $\frac{3\pi}{4}$

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°

17. $\cos(\frac{\pi}{3}) = 1/2$

20. $\cot(\frac{5\pi}{3}) = -\frac{\sqrt{3}}{3}$

23. $\tan(\pi) = 0$

26. $\sec(-\frac{5\pi}{4}) = -\sqrt{2}$

29. $\cos(\frac{17\pi}{3}) = 1/2$
 $\frac{5\pi}{3}$

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°

18. $\tan(\frac{\pi}{4}) = \frac{\sqrt{2}}{2}$

21. $\csc(\frac{7\pi}{6}) = -2$

24. $\sin(\frac{3\pi}{2}) = -1$

27. $\cot(-\frac{11\pi}{6}) = -\sqrt{3}$

30. $\sin(\frac{19\pi}{6}) = -1/2$
 $\frac{7\pi}{6}$