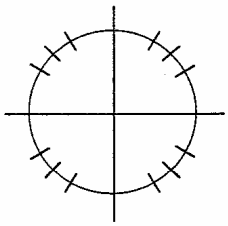
Math 36

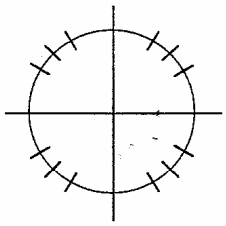
Unit Circle Worksheet

Name _____

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

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





1. $\sin(45°)$ **2.** $\cos(30°)$ **3.** $\tan(60°)$

4. $\sec(120°)$ **5.** $\cot(225°)$ **6.** $\csc(330°)$

7. $\cos(270°)$ **8.** $\tan(90°)$ **9.** $\sin(180°)$

10. $\csc(-45°)$ **11.** $\sec(-150°)$ **12.** $\cot(-120°)$

13. $\tan(570°)$ **14.** $\cos(495°)$ **15.** $\sin(660°)$

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

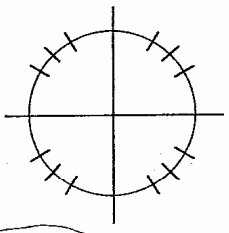
Math 36

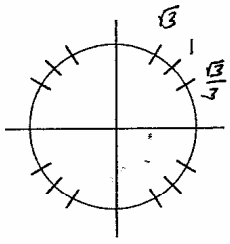
Unit Circle Worksheet

Byers
Name

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	$\frac{1}{2}$	$\sqrt{2}/2$	$\sqrt{3}/2$	1
$\cos\theta$	1	$\frac{\sqrt{3}}{2}$	$\sqrt{2}/2$	$1/2$	0
$\tan\theta$	0	$\sqrt{3}/3$	1	$\sqrt{3}$	und





1. sin (45°) $\frac{\sqrt{2}}{2}$
2. cos (30°) $\frac{\sqrt{3}}{2}$
3. tan (60°) $\sqrt{3}$
4. sec (120°) -2
5. cot (225°) $= 1$
6. csc (330°) -2
7. cos (270°) 0
8. tan (90°) ud
9. sin (180°) 0
10. csc (-45°) $-\sqrt{2}$
11. sec (-150°) $-\frac{2\sqrt{3}}{3}$
12. cot (-120°) $\sqrt{3}/3$
13. tan (570°) $\sqrt{3}/3$
    Tan 210°
14. cos (495°) $-\frac{\sqrt{2}}{2}$
    135
15. sin (660°) $-\sqrt{3}/2$
    300
16. sin $\left(\frac{\pi}{6}\right)$ $1/2$
17. cos $\left(\frac{\pi}{3}\right)$ $1/2$
18. tan $\left(\frac{\pi}{4}\right)$ $\sqrt{2}/2$
19. sec $\left(\frac{3\pi}{4}\right)$ $-\sqrt{2}$
20. cot $\left(\frac{5\pi}{3}\right)$ $-\frac{\sqrt{3}}{3}$
21. csc $\left(\frac{7\pi}{6}\right)$ -2
22. cos $\left(\frac{\pi}{2}\right)$ 0
23. tan (π) 0
24. sin $\left(\frac{3\pi}{2}\right)$ -1
25. csc $\left(-\frac{2\pi}{3}\right)$ $-\frac{2\sqrt{3}}{3}$
    5
26. sec $\left(-\frac{5\pi}{4}\right)$ $-\sqrt{2}$
27. cot $\left(-\frac{11\pi}{6}\right)$ $-\sqrt{3}$
28. tan $\left(\frac{11\pi}{4}\right)$ -1
    $\frac{3\pi}{4}$
29. cos $\left(\frac{17\pi}{3}\right)$ $1/2$
    $\frac{5\pi}{3}$
30. sin $\left(\frac{19\pi}{6}\right)$ $-1/2$
    $\frac{7\pi}{6}$