

Assignment 6.4

Find the equivalent positive degree or radian less than 360° or 2π .

1. -405° 2. $\frac{7\pi}{3}$ 3. 690°

4. $\frac{17\pi}{6}$ 5. -510° 6. $\frac{-13\pi}{4}$

Evaluate the given expression, leaving the answer in simple radical form.

7. $\sin 630^\circ =$ 8. $\cos \frac{9\pi}{4} =$

9. $\tan(-90^\circ) =$ 10. $\csc \frac{-\pi}{6} =$

11. $\sec 300^\circ =$ 12. $\cot \frac{8\pi}{3} =$

13. $\cos -120^\circ =$ 14. $\sin \frac{5\pi}{4} =$

15. $\csc 420^\circ =$ 16. $\tan \frac{5\pi}{6} =$

17. $\cot(-90^\circ) =$ 18. $\sec -\pi =$

19. $\cos 45^\circ \sin 210^\circ - \sin 30^\circ \cos 135^\circ =$ 20. $\tan \frac{\pi}{6} \cot \frac{\pi}{6} + \tan \frac{\pi}{3} \cot \frac{\pi}{3} =$

21. $\cos^2 330^\circ - \csc^2 330^\circ =$ 22. $\cot^2 \frac{11\pi}{6} - \csc^2 \frac{11\pi}{6} =$

23. $\cos^2 45^\circ - \sin^2 135^\circ =$

24. $\frac{\sec 30^\circ}{\cos 30^\circ} =$

25. $\sin^2 30^\circ + \cos^2 30^\circ + \tan^2 30^\circ - \sec^2 30^\circ =$

Determine all values of θ from 0° through 360° for which:

26. $\sin \theta = 0$

27. $\cos \theta = -1$

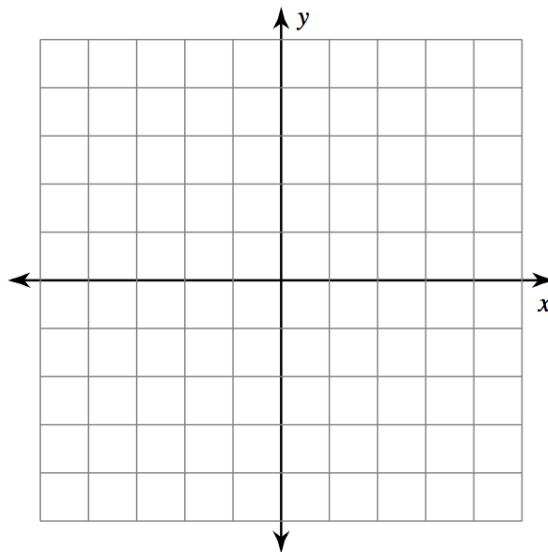
28. $\tan \theta = -1$

29. $\cot \theta = \text{undefined}$

30. $\sec \theta = 0$

31. $\csc \theta = 0$

32. Graph the circle with the equation $x^2 + y^2 = 16$, give a table of values on the graph.



33. Write the equation of a circle with the given radius.

a. $r = 11$

b. $r = \frac{5}{2}$

c. $r = \sqrt{7}$