

1. Show that the point $\left(\frac{7}{25}, \frac{24}{25}\right)$ lies on the unit circle.

The point P is on the unit circle. Find $P(x, y)$ from the given information.

2. The y-coordinate is $-\frac{7}{25}$ and P is in Q4 3. The x-coordinate is $-\frac{2}{5}$ and P lies above the x-axis

Find the reference angle for the following angles.

4. $\frac{7\pi}{3}$

5. $-\frac{5\pi}{6}$

6. $\frac{17\pi}{4}$

Find the exact value of the trigonometric function at the given real number. (BY HAND!)

7. $\sec \frac{11\pi}{6}$

8. $\csc(-\pi)$

9. $\cot \frac{-3\pi}{2}$

10. $\sin \frac{3\pi}{2}$

11. $\cos \frac{5\pi}{3}$

12. $\tan -\frac{3\pi}{4}$

13. $\sin \frac{5\pi}{6}$

14. $\cos -3\pi$

15. $\tan -\frac{2\pi}{3}$

16. If $\left(-\frac{5}{13}, -\frac{12}{13}\right)$ is a terminal point on the unit circle determined by angle θ , then find $\sin \theta$, $\cos \theta$, and $\tan \theta$.

Determine the sign of the expression if the triangle lies in the given quadrant.

17. $\tan t \cdot \sec t$; Q4

18. $\frac{\cos t \sec t}{\tan t}$; Q2

19. Given $\tan t > 0$ and $\sin t < 0$, find the *quadrant* in which the terminal point of t lies.

20. Find the values of the five other trigonometric functions if $\cos t = -\frac{4}{5}$ and the terminal point determined by t lies in the 3rd quadrant.

Determine whether the function is even or odd. (Use your TI-84 to graph the function)

21. $f(x) = x^2 \cos 2x$

22. $f(x) = \sin x + \cos x$