

Assessment objective for Chapter 4 mid-chapter quiz

The student will be able to...

- Find positive and negative co-terminal angles in radians or degrees.
- Convert an angle measured in degrees to radians.
- Convert an angle measured in radians to degrees.
- Determine arc length and find the measure of the central angle.
- Use reference angles to evaluate the basic trigonometric functions for any angle.
- Use the unit circle to evaluate basic trigonometric functions.
- Use the basic trigonometric functions to solve a modeling problem.
- Simplify trigonometric expressions using identities.

Find the point (x, y) on the unit circle that corresponds to the real number $t = \frac{14\pi}{3}$

Give the exact value of $\tan\left(\frac{-5\pi}{3}\right)$

Give the exact value of $\csc\frac{7\pi}{6}$

Evaluate $\sec(3.2)$.

Determine the quadrant in which the terminal side of the angle $\frac{-33\pi}{4}$ lies.

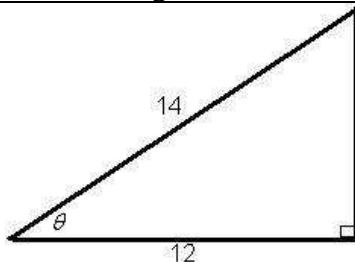
Find a positive angle that is coterminal to $\theta = -\frac{7\pi}{9}$

Convert to degrees: $\frac{7\pi}{18}$ radians

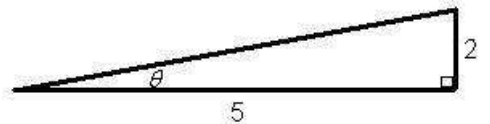
A circle of radius r has a central angle of $\theta = 30^\circ$ which subtends an arc of 5 inches. Find r

Find the missing part of the triangle.

Find the measure of $\sin \theta$



Given the following, find $\cos \theta$.



Given $\sin \theta = \frac{4}{3}$, and $\frac{\pi}{2} \leq \theta \leq \pi$, find the exact value of $\tan \theta$.

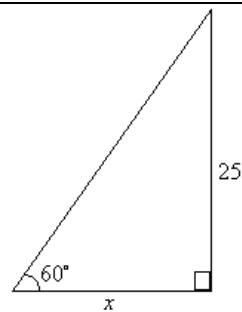
If $\csc \theta = \frac{2\sqrt{3}}{3}$, find two angles θ that satisfy the condition.

Given $\cos \theta = -\frac{2}{5}$ and $\tan \theta < 0$, find the exact value of $\sin \theta$.

Find the 6 trig functions of angle θ , that has a terminal side with endpoint at $(-5, -1)$.
(exact values only)

The angle of elevation of the sun is 40° . Find the length of the shadow cast by a building that is 75 feet tall.
(Round your answer to two decimal places)

Find the exact value of x on the triangle to the right.



Find the reference angle to the following A) 146° B) $\frac{5\pi}{6}$ C) 115° D) $\frac{5\pi}{3}$

A right triangle has an acute angle θ such that $\sec \theta = \frac{7}{4}$, find $\tan \theta$.