1. Find the values of the other five trig functions for the acute angle θ if cos θ = $\frac{5}{13}$.
2. Find the exact values of the six trig functions of θ if θ is in standard position and the terminal side of θ is in the third quadrant and bisects the quadrant.
3. Use a formula for negatives to find the value of sec (-180$°$).
4. Verify the identity by transforming the left-hand side into the right-hand side.

sin(-x) sec(-x) = - tan(x)

1. Find y by referring to the graph of the trig function.

As x ($\frac{π}{4}$ )- , csc x y

1. Refer to the graph of y = sin x to find the separate values of x in the interval [0, 4π] that satisfy the equation sin x = -1.
2. Approximate to the nearest 0.1$°,$ all angles θ in the interval [0$°, $360$°) $that satisfy the equation

 sin θ = 0.7584.

1. Approximate to the nearest 0.1R all angles θ in the interval [0$, 2π) $that satisfy the equation

 sec θ = 1.6024.

1. Suppose a robot has a straight arm 18 inches long that can rotate about the origin in a coordinate plane. If the robot’s hand is located at (18,0) and then rotates through an angle of 60$°, $what is the new location of the hand?
2. Find the period of the equation y = 3 tan x.
3. Find the period of the equation y = cot (x + $\frac{2π}{3}$).
4. Find the period of the equation y = -3 tan ($\frac{1}{3}x- \frac{π}{3})$.
5. Find the period of the equation y = csc 2πx.
6. Given that α = 45$°$ and b = 20 in triangle ABC with γ=90$°, $find the value of a.
7. Given that a = 3 and b = 3 in triangle ABC with γ=90$°, $find the value of c.
8. Find the angle that is complementary to θ = 1$°$59’5”.
9. If a circular arc of the length s = 15 cm subtends the central angle θ = 3 on a circle, find the radius of the circle.
10. If a tornado has a core diameter of 250 feet and maximum wind speed of 150 mi/hr (or 220 ft/sec) at the perimeter of the core, approximate the number of revolutions the core makes each minute.