

1. Change 124.63° to degrees, minutes, seconds
2. Write $48^\circ 32' 15''$ as a decimal to the nearest thousandth of a degree
3. State the angle measure represented by 1.25 rotations counterclockwise
4. Identify all coterminal angles between -360° and 360° for the angle 630° (hint: there are two)
5. Find the measure of the reference angle for 310°

6. Find the value of cosine for $\angle A$
7. Find the value of the cosecant for $\angle A$
8. Find the value of cotangent for $\angle A$
9. If $\sec \theta = -4$, find $\cos \theta$
10. Find the value of $\tan(-180)$
11. Find the exact value of $\sec(240)$
12. Find the exact value of $\sec \theta$ for angle θ in standard position if the point at $(-4,5)$ lies on its terminal side
13. If θ is in Quadrant IV and $\cos \theta = \frac{12}{13}$, what is the value of $\cot \theta$?
14. Find the height of the waterfall to the nearest foot
15. Find the width across the pool to the nearest foot
16. If $0^\circ \leq x \leq 360^\circ$, solve for the equation $\csc x = -2$
17. Assuming an angle in Quadrant I, evaluate $\cos(\cot^{-1} \frac{12}{5})$
18. Given the triangle, find $m\angle B$ to the nearest tenth of a degree if $a = 12$ and $c = 22$

Round to the nearest tenth

19. In $\triangle ABC$, $A = 42^\circ$, $B = 68^\circ$, $c = 15$. Find a
20. If $A = 27.2^\circ$, $B = 67.4^\circ$, $a = 12.8$, find the area of $\triangle ABC$
21. In $\triangle ABC$, $A = 59^\circ$, $b = 12$, $c = 4$. Find a

22. in $\triangle ABC$, $a = 4$, $b = 11$, $c = 8$. Find $m\angle B$
23. If $a = 21$, $b = 15$, and $c = 28$, find the area of $\triangle ABC$
24. The terminal side of an angle θ in standard position coincides with the line $3x - y = 0$ in Quadrant III. Find $\cos \theta$ to the nearest ten-thousand (Hint: graph the linear equation)