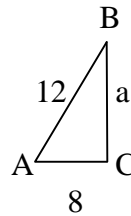


Honors Worksheet #2
Chapter 5

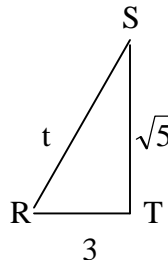
Write the letter for the correct answer in the blank at the right of each problem

1. Change 128.433° to degrees, minutes, and seconds.
A. $128^\circ 25' 58''$ B. $128^\circ 25' 59''$ C. $128^\circ 25' 92''$ D. $128^\circ 26' 00''$ 1. _____
2. Write $43^\circ 18' 35''$ as a decimal to the nearest thousandth of a degree.
A. 43.306° B. 43.308° C. 43.309° D. 43.310° 2. _____
3. Give the angle measure represented by 3.25 rotations clockwise.
A. 1170° B. 90° C. 90° D. 1170° 3. _____
4. Identify for all coterminal angles between -360° and 360° for the angle 420° .
A. 60° and 300° B. 30 and 330°
C. 30° and 330° D. 60° and 300° 4. _____
5. Find the measure of the reference angle for 1046° .
A. 56° B. 56° C. 34° D. 34° 5. _____
6. Find the value of the tangent for $\angle A$.
A. $\frac{2\sqrt{5}}{2}$ B. $\frac{\sqrt{5}}{2}$ C. $\frac{2}{3}$ D. $\frac{\sqrt{5}}{3}$



6. _____

7. Find the value of the secant for $\angle R$.
A. $\frac{\sqrt{70}}{5}$ B. $\frac{3\sqrt{14}}{14}$ C. $\frac{\sqrt{5}}{3}$ D. $\frac{\sqrt{14}}{3}$



7. _____

8. Which of the following is equal to $\csc \theta$?
A. $1/\sin \theta$ B. $1/\cos \theta$ C. $1/\tan \theta$ D. $1/\sec \theta$ 8. _____
9. If $\cot \theta = 0.85$, find $\tan \theta$.
A. 0.588 B. 0.85 C. 1.176 D. 1.7 9. _____

10. Find $\cos (270^\circ)$.
A. undefined B. 1 C. -1 D. 0 10._____

11. Find the exact value of $\sec 300^\circ$.
A. 2 B. $\frac{2\sqrt{3}}{3}$ C. -2 D. $-\frac{2\sqrt{3}}{3}$ 11._____

12. Find the value of $\csc \theta$ for angle θ in standard position if the Point at (5, 2) lies on its terminal side.
A. $\frac{\sqrt{29}}{2}$ B. $\frac{2\sqrt{29}}{29}$ C. $\frac{\sqrt{29}}{5}$ D. $\frac{5\sqrt{29}}{29}$ 12._____

13. Suppose θ is an angle in standard position whose terminal Side lies in Quadrant II. If $\sin \theta = 12/13$, find the value of $\sec \theta$.
A. 5/13 B. 13/15 C. 12/5 D. 13/12 13._____

For Exercises 14 and 15, refer to the figure. The angle of elevation from the end of the shadow to the top of the building is 63° and the distance is 220 feet.

14. Find the height of the building to the nearest foot.
A. 100 ft B. 196 ft C. 432 ft D. 112 ft 14._____

15. Find the length of the shadow to the nearest foot.
A. 100 ft B. 196 ft C. 432 ft D. 112 ft 15._____

16. If $0^\circ < x < 360^\circ$, solve the equation $\sec x = 2$