

REVIEW

Formulas:			
$s = \theta r$	$s = \frac{\theta}{360^\circ} 2\pi r$	$v = rw$	$w = \frac{\theta}{t}$

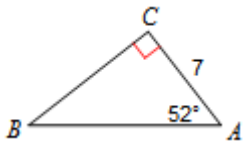
Convert to radians.	Convert to degrees.	Convert to degrees, minutes, seconds.
1. -295°	2. $\frac{19\pi}{6}$	3. 128.485°
Convert to decimal degrees.	Find all coterminal angles.	Find a coterminal angle between 0π and 2π .
4. $48^\circ 32' 12''$	5.	6. $\frac{11\pi}{4}$
State the quadrant in which the terminal side lies.	Find the measure of the angle.	Draw the angle.
7. $-\frac{4\pi}{3}$	8.	9.

10. A turntable with 12 inch diameter rotates at 77 revolutions per minute.

- What is its angular velocity in radians per second?
- What is the linear velocity of a point on the edge of the turntable in inches per second?
- What is the linear velocity of a point on the edge of the turntable in miles per hour?

Solve the triangle completely.

11.

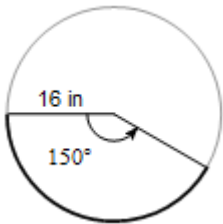


12. Given $\triangle ABC$ where $\angle C$ is a right angle, $b = 2$, and $c = 3$.

13. From a balloon 959 feet high, the angle of depression to the ranger headquarter is $74^\circ 2'$. How far is the headquarters from the balloon?

APPLICATION

14. Find the length of the arc.



15. How many radians is 2.5 revolutions?

16. The radius of a car wheel is 14 inches. How many revolutions per minute is the wheel making the when the car is travelling at 30 mph?

17. Two wheels are rotating in such a way that the rotation of the smaller wheel causes the larger wheel to rotate. The radius of the smaller wheel is 3.5 cm and the radius of the larger wheel is 19.5 cm. Through how many degrees will the larger wheel rotate if the smaller one rotates 134° ?