Precalculus Unit 5: 5.1 Homework
Radian and Degree Measure

1. Find two co-terminal angles to $\frac{7\pi}{5}$.

2. Find two co-terminal angles to $215°$.

3. Convert $726°$ to radians.

4. Convert $\frac{11\pi}{12}$ to degrees.

5. The central angle of a circle with radius 7 inches, subtends (cuts off) an arc of 18 inches. Find the measure of the angle.

6. A circle of radius *r* has a central angle of 75° which subtends an arc of 21 inches. Find the radius to two decimals.

7. The blade of a helicopter is 12 feet long and spins at 420 rpm. What is the speed (in miles per hour) of the tip of the blade?

8. You are riding a stationary bike to get some exercise and are riding at a speed of 14 mph. If the bike has a wheel with a diameter of 26 inches, determine the revolutions per minute (rpm) of the wheel.