

Name: \_\_\_\_\_

Per: \_\_\_\_\_

### Radians Quiz #4

Graph the following angles, without converting to degrees.

1.  $7\pi/4$

2.  $-2\pi/3$

Convert the following angles to radians or degrees. Leave radians in improper, fraction form.

3.  $260^\circ$

4.  $5\pi/8$

For each of the following angles, state a **positive** and **negative** coterminal angle for the given number of revolutions.

5.  $3\pi/7$ , 3 rev.

For the following questions, find either linear or angular speed. All answers should be in decimal form rounded to the nearest hundredth. Write all radian measurements in decimal form, not  $\pi$  form.

6. The Jupiter rotates every 9.9 hrs and has a diameter of 88,846 mi. If you are standing on its equator, how fast are you traveling?
7. A car travels at a constant speed around a circular track with circumference equal to 3 miles. If the car records a time of 12 minutes for 8 laps, what is the linear speed of the car in miles per hour?
8. A lighthouse in the middle of a channel rotates its light in a circular motion with constant speed. If the beacon of light completes two revolutions every 25 seconds, what is the angular speed of the beacon in radians per minute?