Pre-Calculus Midterm Review Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Convert to radian measure.
2. Convert  to degree measure.
3. State the reference angle for 
4. State a positive coterminal angle of 
5. State a negative coterminal angle of 
6. Evaluate each of the following.
	1. 
	2. 
	3. 

Given the function  state each of the following characteristics.

1. phase shift
2. period
3. amplitude
4. sinusoidal axis
5. Evaluate. 
6. Evaluate. 

The diameter of a Ferris wheel is 176 feet, and one complete revolution takes 11 minutes. The bottom of the wheel is 10 feet above the ground. Each passenger gets on the ride at the bottom of the wheel.

1. What is the highest distance above the ground that each passenger will attain during the ride?
2. State an equation that will give each rider’s height above the ground at any time during the ride.
3. The equation  models water depth in meters in a seaport with  representing 10:00 PM.
	1. What will the water depth be at 3 PM?
	2. At what time will the water depth first be 8 meters? State your answer in hours and minutes, and be sure to designate AM or PM.
4. Determine the area of a triangle with side lengths 
5. Determine the area of a triangle given 
6. Given 
7. Given 