

Problem Set 3  
**6 pts. each blank.**

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

1. Identify **ALL** coterminal angles between  $-360^\circ$  &  $360^\circ$  for the angle whose measure is  $-620^\circ$ .  
 \_\_\_\_\_

2. Determine the reference angle for an angle of  $1246^\circ$ .  
 \_\_\_\_\_

3. Find the value of the tangent for angle A if  $a = 8$ ,  $c = 15$ ,  $C = 90^\circ$ .  
 \_\_\_\_\_

4. Find  $\sin(-270^\circ)$ . (4 pts.)  
 \_\_\_\_\_

5. Find the exact value of  $\cos 300^\circ$ .  
 \_\_\_\_\_

6. Find the exact value of  $\cos \theta$  &  $\sin \theta$  for angle  $\theta$  in standard position for the point  $(7, -24)$ .  
 \_\_\_\_\_

7. Change  $140^\circ$  to radian measure in terms of  $\pi$ . \_\_\_\_\_

8. Change  $\frac{66\pi}{37}$  to degree measure to the nearest second. \_\_\_\_\_

9. A sector of a circle has radius 6 cm and central angle 0.5 radians. Find its arc length and area. (8 pts)

10. A sector of a circle has central angle  $30^\circ$  and arc length 5in. Find the area. (nearest hundredth)  
 \_\_\_\_\_

11.  $y = 2\cos 3\left(x - \frac{\pi}{3}\right) + 2$       **(Graph 2 Cycles)**      \_\_\_\_\_  
 Graph: 8 pts

A=\_\_\_\_\_ (5 pts)

Period=\_\_\_\_\_ (5 pts)

Phase Shift=\_\_\_\_\_ (5 pts)

Vertical Shift=\_\_\_\_\_ (5 pts)

