

Name: \_\_\_\_\_ No. \_\_\_\_\_ Per: \_\_\_\_\_ Date: \_\_\_\_\_  
 Serafino · Precalculus S1 M T W R F

2A

## Trigonometry in the Coordinate Plane

Notes & Practice Packet

1. Fill in the chart below:

	WITHOUT A CALCULATOR				WITH A CALCULATOR			
Quadrant	III			IV			II	
$0^\circ \leq \theta < 360^\circ$			$210^\circ$					$253.7^\circ$
Any coterminal		$-240^\circ$				$26,564^\circ$		
$\hat{\theta}$	$45^\circ$				$26^\circ$			
$\sin \theta$				$-1/2$	$-0.4384$		$.9744$	
$\cos \theta$					$0.8988$			

5. NAME THAT QUADRANT... or Quadrants... or Quadrantal Angles... or Special Angles

- |   |   |
|---|---|
| A. Sine is positive                           | K. Cosine is $-1$                             |
| B. Secant is negative                         | L. Tangent is 0                               |
| C. Cotangent is positive                      | M. Sine is 0, Cosine is 1                     |
| D. Cosecant is negative                       | N. Cosecant is undefined & Secant is $-1$     |
| E. Sine is positive & Secant is negative      | O. Cosecant is 1.                             |
| F. Cosecant is negative & Tangent is negative | P. Secant is undefined & Cosecant is Negative |
| G. Cosine is positive & Sine is negative      | Q. Tangent is $-1$                            |
| H. Tangent is positive & Secant is positive   | R. Cosine is $-\sqrt{3}/2$                    |
| I. Cotangent is undefined                     | S. Sine is $1/2$                              |
| J. Secant is undefined                        |   |



For the given information, find the exact (no calc) AND approximate (calc) six trig ratios of  $\theta$ . Then find  $0^\circ \leq \theta < 360^\circ$ . If two possibilities exist, give both.

2. A point on the terminal side of  $\theta$  is  $(-1, 3)$

3. The  $\cot \theta = -1/2$  in QIV

4. The  $\sec \theta = 5/3$

5. The  $\sin \theta = -5/3$