

## Precalc Warm Up – 11/17/10

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

Period: \_\_\_\_\_

1) Convert the following degree measurements to radians:

a.  $90^\circ$

b.  $60^\circ$

c.  $210^\circ$

d.  $270^\circ$

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# Precalc – Graphing Sine – 11/17/10

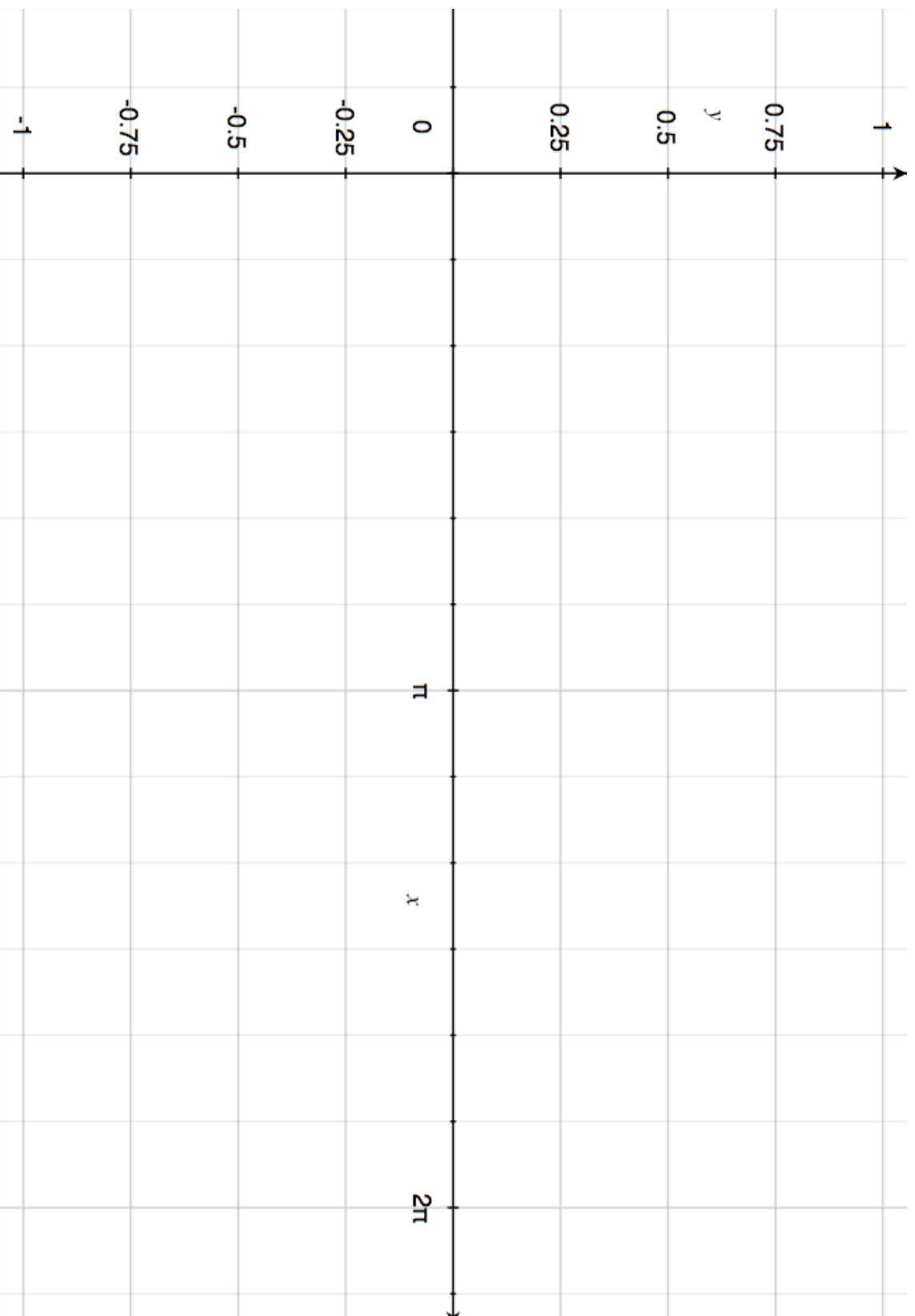
Name: \_\_\_\_\_

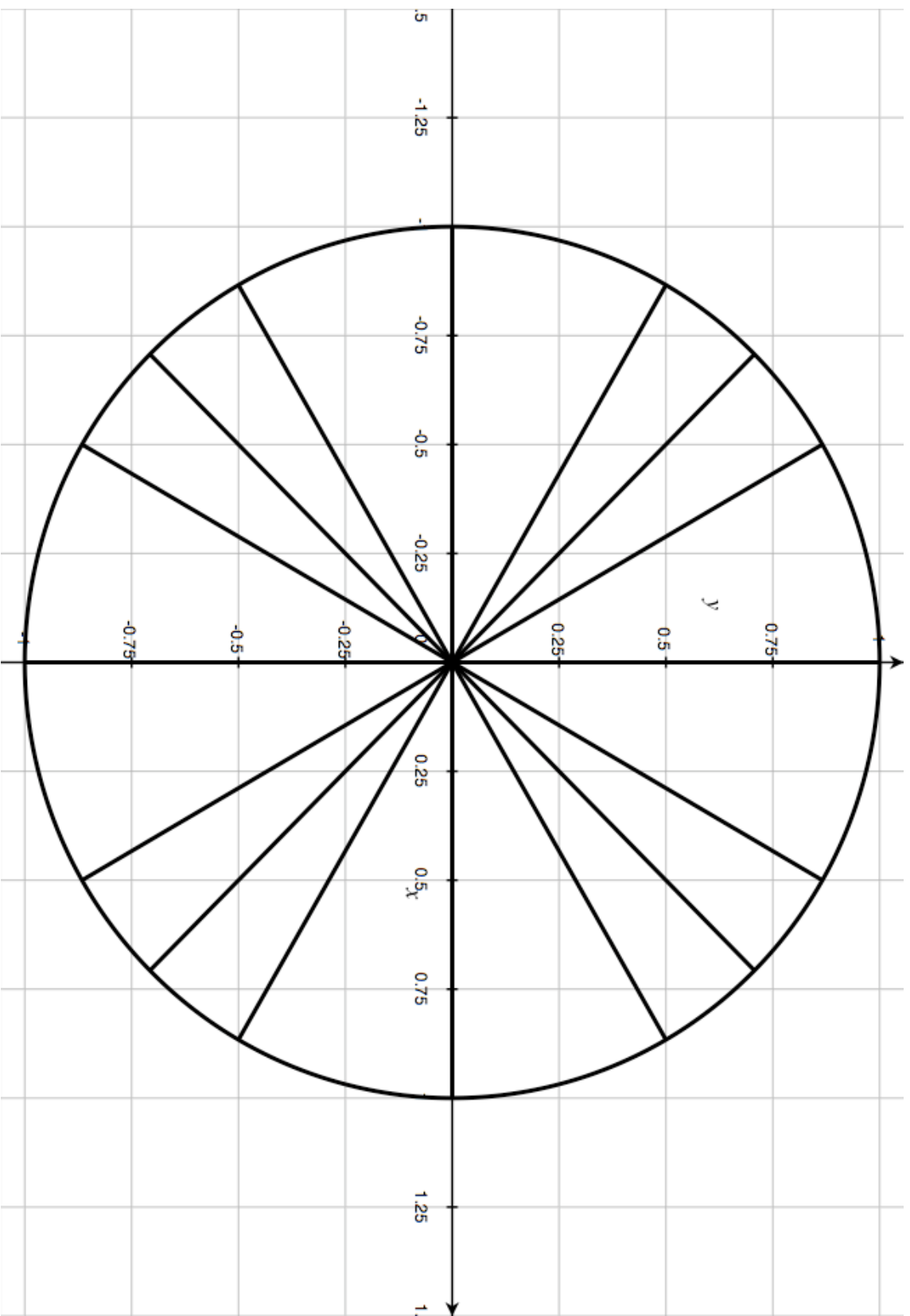
Block: \_\_\_\_\_

Students will be able to graph the sine function and will understand the periodic nature of the sine function

- 1) Fill in the table below with the y-value (height) for each angle in the unit circle. You may use the unit circle Mr. Monte-Sano gave you to help you.

	Angle	y-value
First Quadrant	0	
	$\frac{\pi}{6}$	
	$\frac{\pi}{3}$	
Second Quadrant	$\frac{\pi}{2}$	
	$\frac{2\pi}{3}$	
	$\frac{5\pi}{6}$	
Third Quadrant	$\pi$	
	$\frac{7\pi}{6}$	
	$\frac{4\pi}{3}$	
Fourth Quadrant	$\frac{3\pi}{2}$	
	$\frac{5\pi}{3}$	
	$\frac{11\pi}{6}$	
	$2\pi$	





2) The function that you graphed is  $f(x) = \sin \theta$ . How would you describe its shape?

3) Is  $f(x) = \sin \theta$  strictly increasing, decreasing or neither?

4) What do you think happens to  $f(x) = \sin \theta$  to the right of  $\theta = 2\pi$  (as  $\theta$  increases)?

5) What do you think happens to  $f(x) = \sin \theta$  to the left of  $\theta = 0$  (as  $\theta$  decreases)?

6) Will  $\sin \theta = 2$ ? Why or why not?

7) What do you predict the function  $f(x) = \cos \theta$  will look like?

# Precalc – Exit Slip – 11/17/10

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

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1) Sketch the graph of  $f(x) = \sin \theta$ .

