Trigonometry/Precalculus Graphing Tangent & Reciprocal Trig Functions Day \_\_\_\_\_ Name Date Block

			·	
х	$\frac{3\pi}{4}$	π	$\frac{5\pi}{4}$	$\frac{3\pi}{2}$
tan x				



Plot the points above. Sketch an asymptote for each value of x that is undefined. Let the asymptotes shape your curve as you connect it.

1) Fill in the table to graph  $f(x) = \tan x$ .







shape your curve as you connect it.

3) The graph of  $f(x) = \cos x$  is shown below. Fill in the table to graph sec  $x = \frac{1}{f(x)}$ .



4) Fill in the table to graph  $f(x) = \cot x$ .

Х	$-\pi$	$-\frac{3\pi}{4}$	$-\frac{\pi}{2}$	$-\frac{\pi}{4}$	0	$\frac{\pi}{4}$	$\frac{\pi}{2}$	$\frac{3\pi}{4}$	π
cot x									

х	$\frac{5\pi}{4}$	$\frac{3\pi}{2}$	$\frac{7\pi}{4}$	$2\pi$
cot x				

				1				
				5				
				<b>T</b> 4				
				3				
				2				
				<b>T</b> 1				
· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·		· · · · · · · · · · · · · · · · · · ·					
-2π	$-\frac{3\pi}{2}$	- <b>π</b>	$-\frac{\pi}{2}$		$\frac{\pi}{2}$ 7	τ 3	π 2 <b>2</b>	π
-2π	$-\frac{3\pi}{2}$	-π	$-\frac{\pi}{2}$		$\frac{\pi}{2}$ 7	t <u>3</u>	π 2 2	π
-2π	- <u>3</u> π 2	-π	- <u>π</u> 2	1 2		t 3	π 2 2 2	π
-2π	- <u>3π</u>	-π	- <u>π</u> 2	-1 -2 -3		τ <u>3</u>	π 2 2	π
-2π		-π 		1 2 3 4		τ <u>3</u>	π 2	π

## Trigonometry/Precalculus Day 19 Warm Up

- 1) The \_\_\_\_\_\_ of a sine or cosine curve represents the distance from the midline to either the peak or valley of a wave.
- 2) The amount of distance it takes to complete one cycle of a sinusoidal curve

is called its\_\_\_\_\_\_.

- 3) The \_\_\_\_\_\_ of a sinusoidal function tells how many cycles occur in the span of  $2\pi$ .
- 4) The equation that relates the period and frequency of a sinusoidal curve is \_\_\_\_\_\_.
- 5) For both sine and cosine curves, the domain is \_\_\_\_\_\_ and

the range is\_\_\_\_\_\_.

6) To calculuate the tangent of an angle on the Unit Circle, divide the

by the .

## Trigonometry/Precalculus Day 19 Warm Up

- 1) The \_\_\_\_\_\_ of a sine or cosine curve represents the distance from the midline to either the peak or valley of a wave.
- 2) The amount of distance it takes to complete one cycle of a sinusoidal curve

is called its\_\_\_\_\_\_.

3) The \_\_\_\_\_\_ of a sinusoidal function tells how many cycles occur in the span of  $2\pi$ .

4) The equation that relates the period and frequency of a sinusoidal curve is \_\_\_\_\_\_.

5) For both sine and cosine curves, the domain is \_\_\_\_\_\_ and

the range is\_\_\_\_\_\_.

6) To calculuate the tangent of an angle on the Unit Circle, divide the