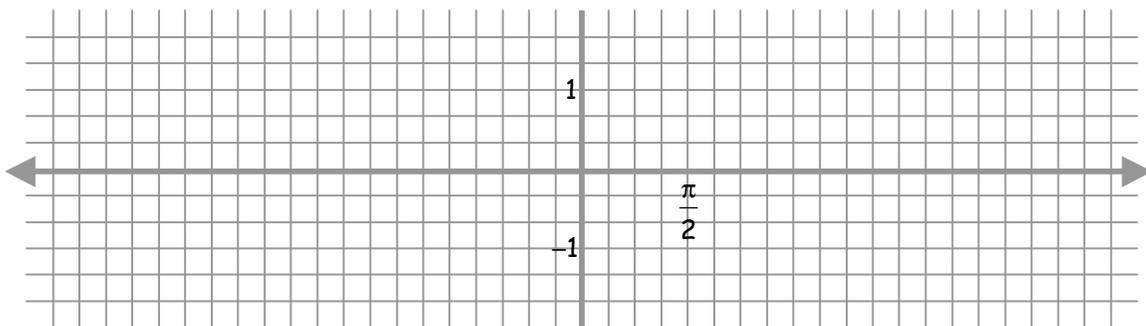


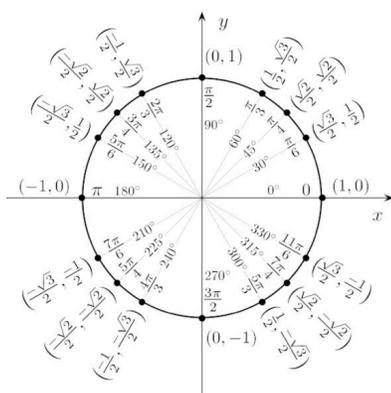
x	y
0	

$$y = \tan(x)$$

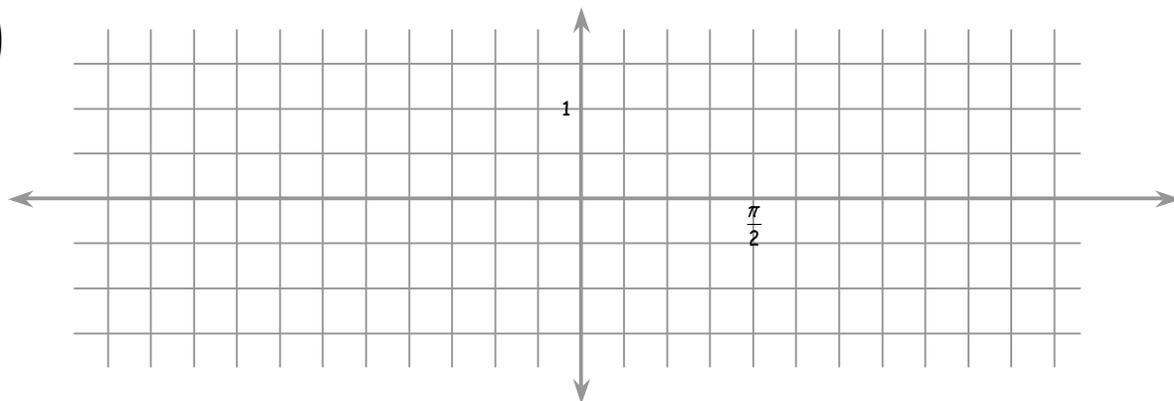


Domain:	Range:	Period:
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- When determining the domain, consider the fact that there are undefined values that occur at a regular interval. Figure out where the first undefined value is and then how often these undefined values occur.
- Notice that there are still "important values," however they occur every _____ radians.
- Instead of having relative extrema and intercepts, there are x-intercepts, asymptotes, or points that show the vertical stretch.
- You can still find the important values by dividing the period by _____.
- Note there is not amplitude, because this is not a sinusoidal (wave) graph.



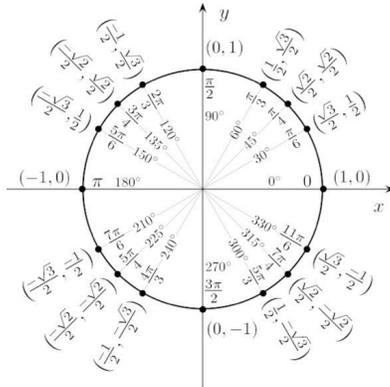
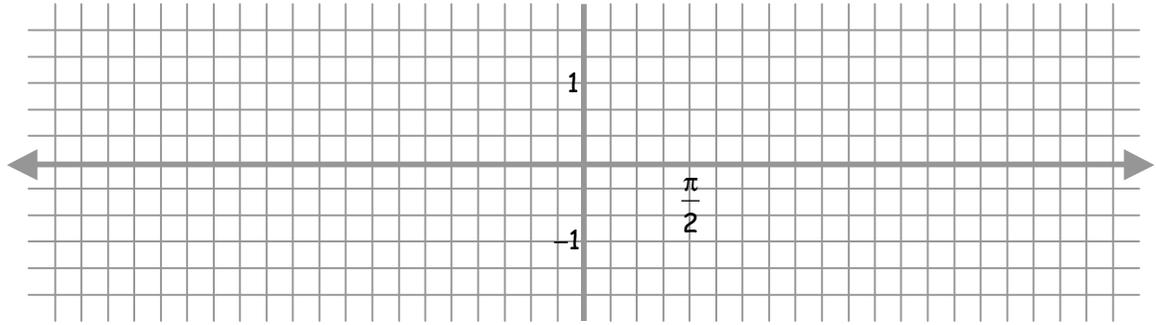
1. $y = -\tan(2\theta)$



Amplitude: NONE <i>There is only an amplitude for sinusoidal functions</i>	Phase Shift:	Important Values:
Period:	Vertical Shift:	Reflection?

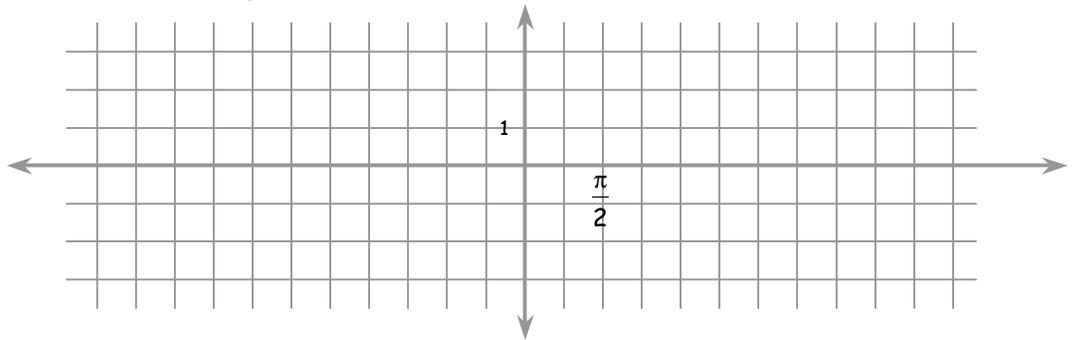
x	y
0	

$$y = \cot(x)$$



Domain:	
Range:	Period

2. $y = 2\cot\left(\frac{x}{3}\right)$



Amplitude: NONE <i>There is only an amplitude for sinusoidal functions</i>	Phase Shift:	Important Values:
Period:	Vertical Shift:	Reflection?

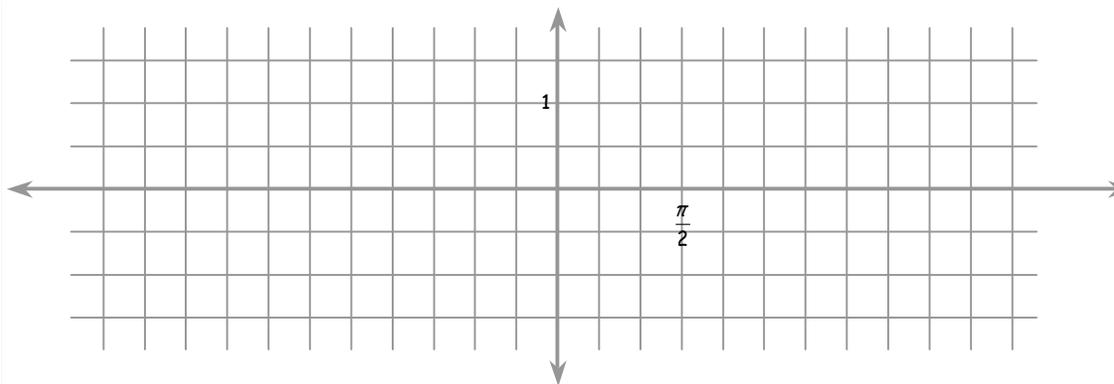
When the sine is equal to zero, the cosecant is _____ and there will be an _____ on the graph. Likewise, when the cosine is equal to _____, the _____ is undefined and there will be an asymptote on the graph.

Graph the "important values" of the cosine function on the graph below and use these values to build the parent graphs of the secant function. Fill the entire grid.

$f(x) = \cos x$ Graph only the "important values"		$f(x) = \sec(x)$
		Domain:
$f(x) = \sec x$		Range:
		Period:

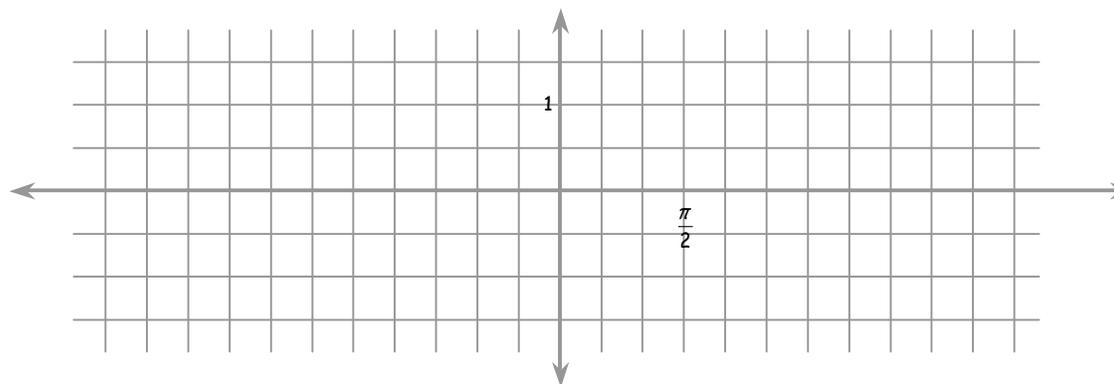
1. $y = \frac{1}{2} \sec x + 1$

Amplitude: NONE	Reflection?
Period:	Important Values:
Phase Shift:	Vertical Shift:



2. $y = -\sec(x - \pi)$

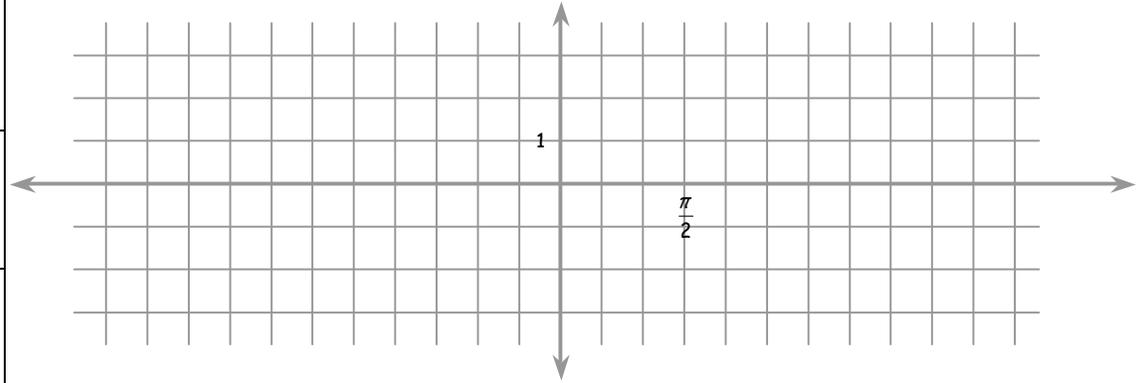
Amplitude:	Reflection?
Period:	Important Values:
Phase Shift:	Vertical Shift:



$f(x) = \sin x$ Graph only the "important values"		$f(x) = \csc(x)$
$f(x) = \csc x$		Domain:
		Range:
		Period:

3. $y = 2 \csc x$

Amplitude: NONE	Reflection?
Period:	Important Values:
Phase Shift:	Vertical Shift:



4. $y = -\csc 2x - 1$

Amplitude:	Reflection?
Period:	Important Values:
Phase Shift:	Vertical Shift:

