Entry #: _____

Lesson 5.4: Trigonometric Graphs- Tangent, Cotangent, Secant & Cosecant

Tangent & Cotangent Curves

Complete the tables below.

$y = \tan(\theta)$

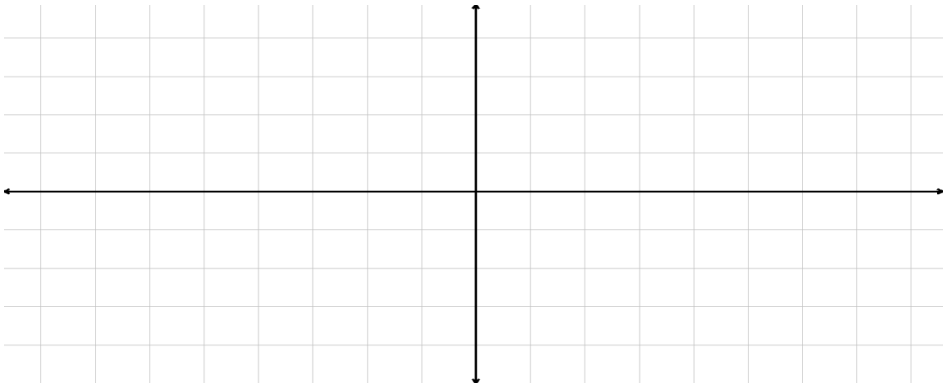
$\boldsymbol{\theta}$	0				$\frac{\pi}{2}$				π				$\frac{3\pi}{2}$				2π
$\boldsymbol{\tan(\theta)}$																	
$\approx$																	

$y = \cot(\theta)$

$\boldsymbol{\theta}$	0				$\frac{\pi}{2}$				π				$\frac{3\pi}{2}$				2π
$\boldsymbol{\cot(\theta)}$																	
$\approx$																	

Both $y = \tan(\theta)$ and $y = \cot(\theta)$ have a period of _____ .

Graph both $y = \tan(\theta)$ and $y = \cot(\theta)$ on the set of axes below. Add a dashed line where there are asymptotes.



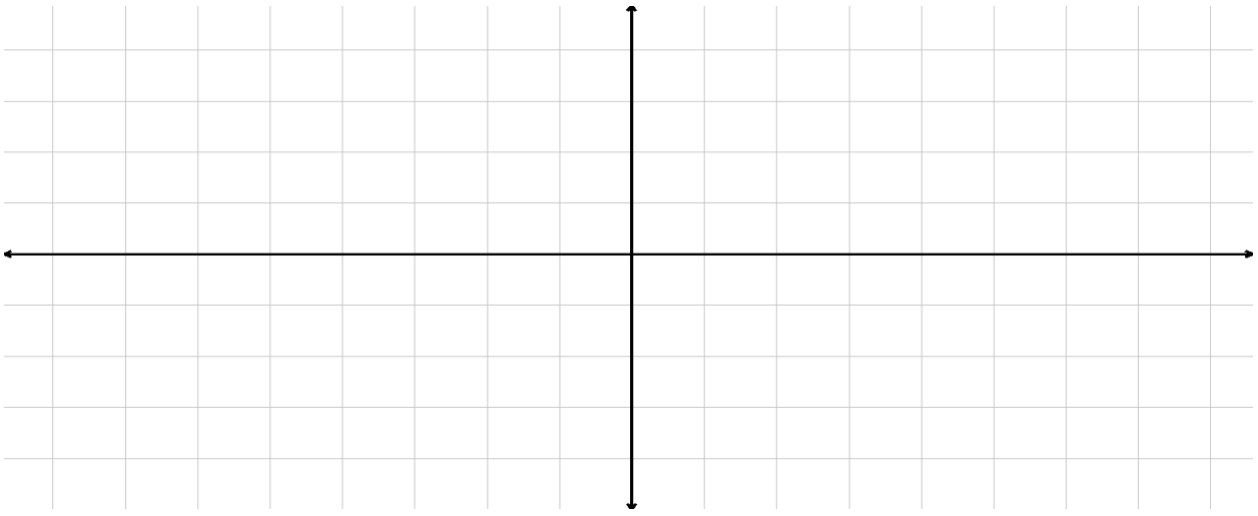
Secant & Cosecant Curves

How to Graph Secant or Cosecant Curves:

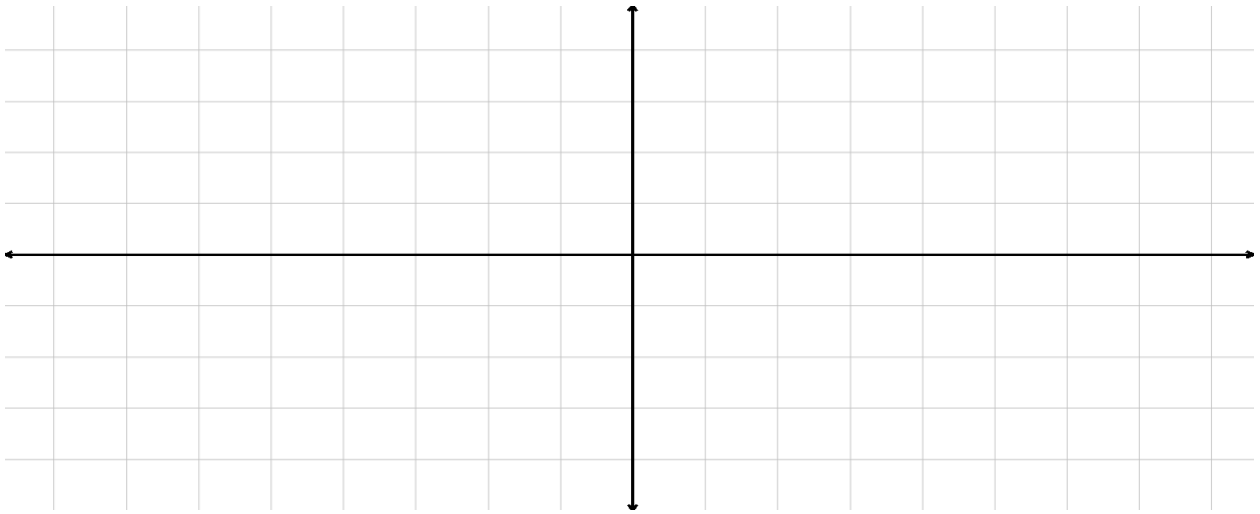
Step 1	
Step 2	
Step 3	
Step 4	

Examples:

1. Graph $y = 3\sec(2x)$



2. Graph $y = 2\csc\left(\frac{1}{2}x\right)$



3. Graph $y = \sec\left(x + \frac{\pi}{2}\right) + 1$