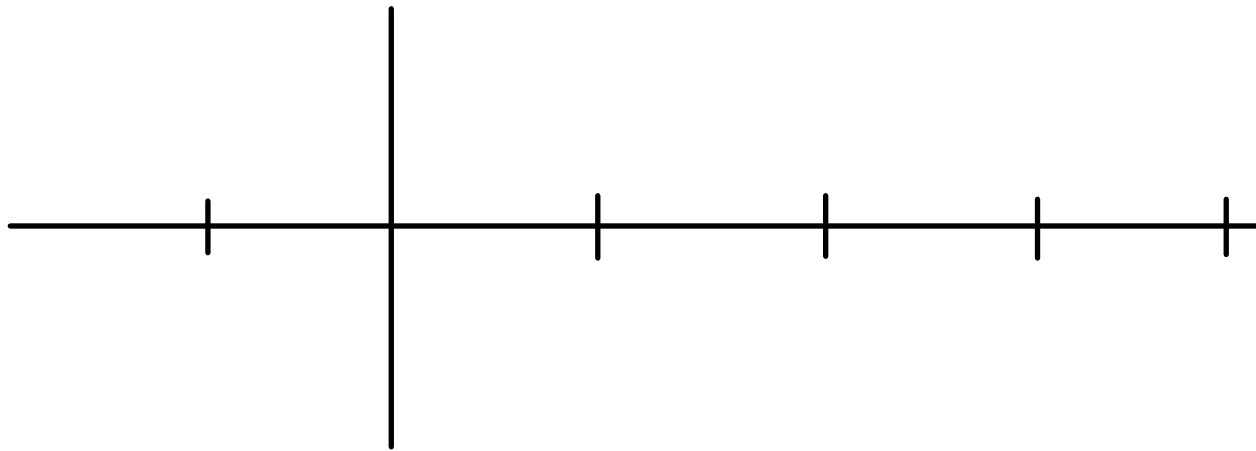
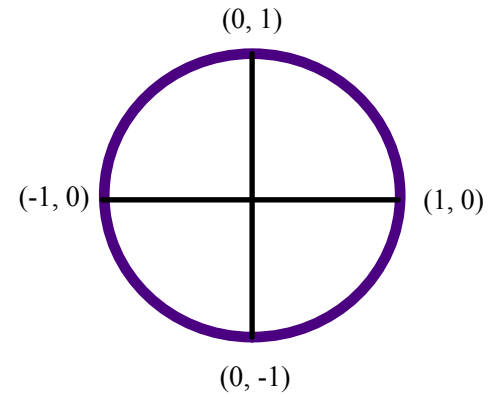


4.5 Graphing Secant and Cosecant

Graph by hand...

1. $y = \sec \theta$

(Let cosine be your guide...)

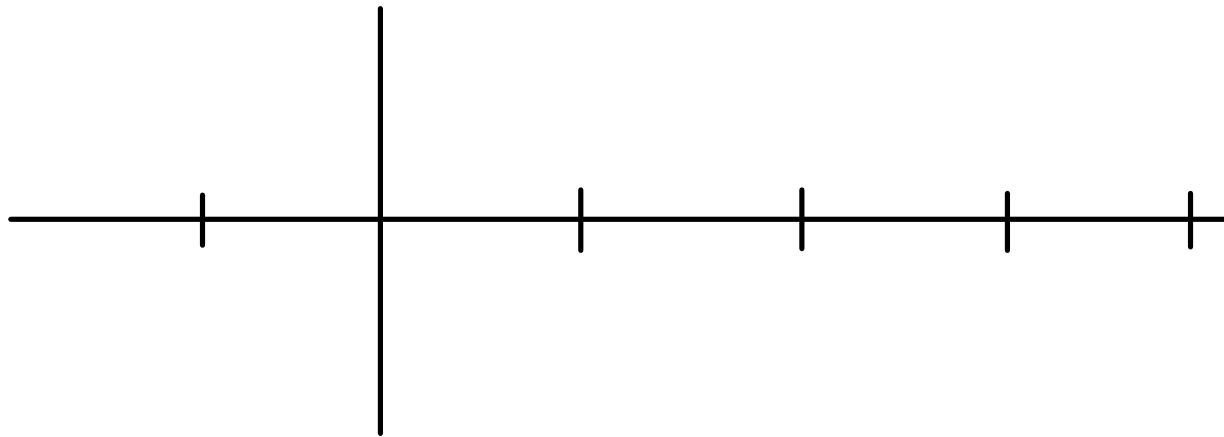
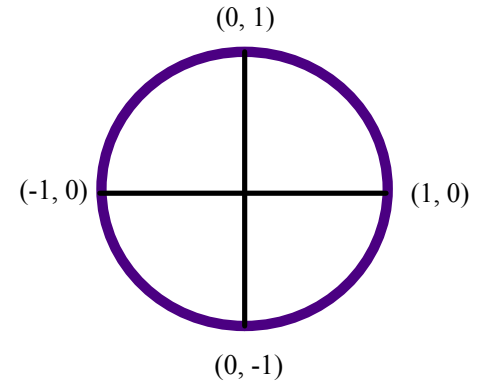


4.5 Graphing Secant and Cosecant.notebook

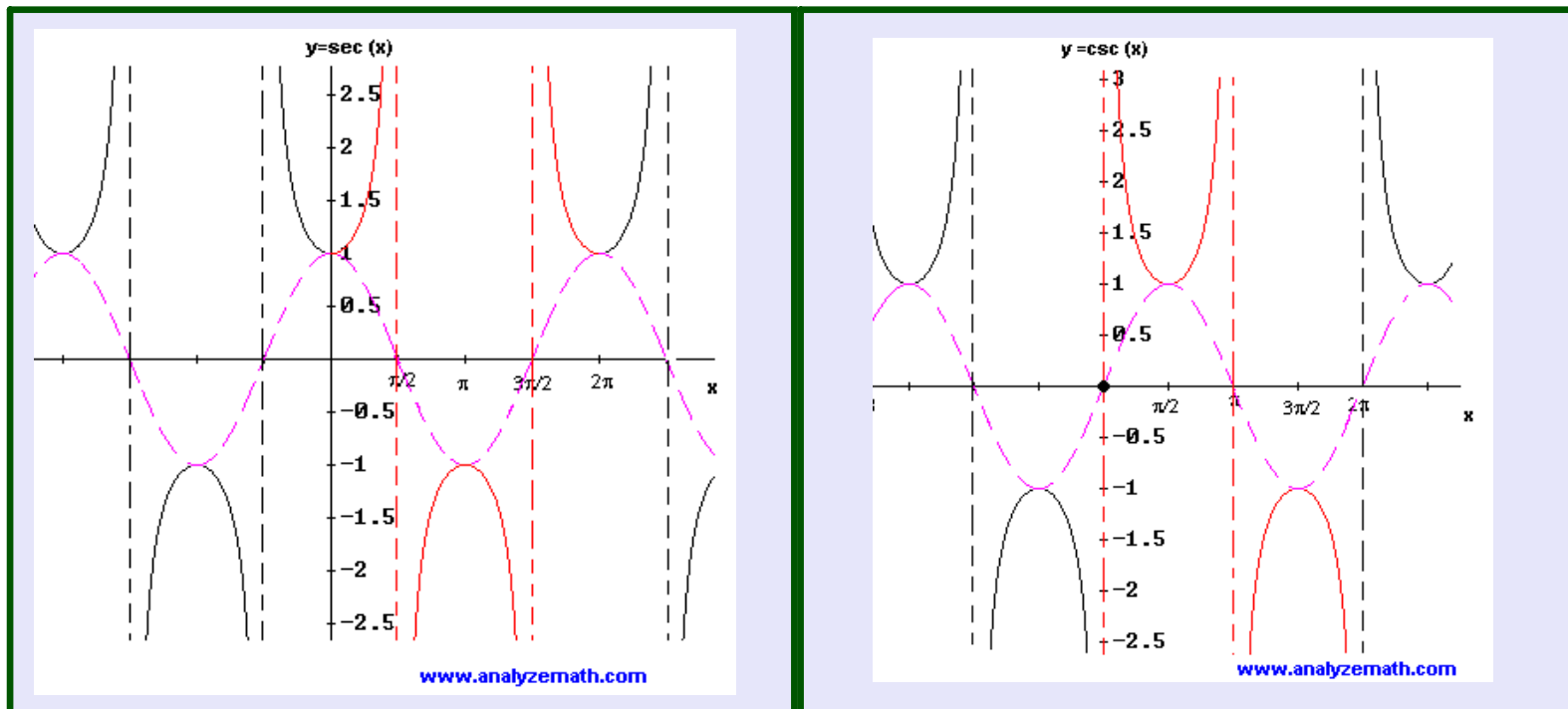
Graph by hand...

2. $y = \csc \theta$

(Let sine be your guide...)



Computer generated versions....



Graphing With Phase Shifts

Helpful Hints:

- Find "c" - you will probably have to factor
- "c" will be your first point on the graph
- Use the interval to get the next 4 points
- "c" + the period = the last pt. on the graph

$$\frac{2\pi}{k} = \text{Period}$$

$$\frac{\text{period}}{4} = \text{interval}$$

cosecant and secant have no amplitude...

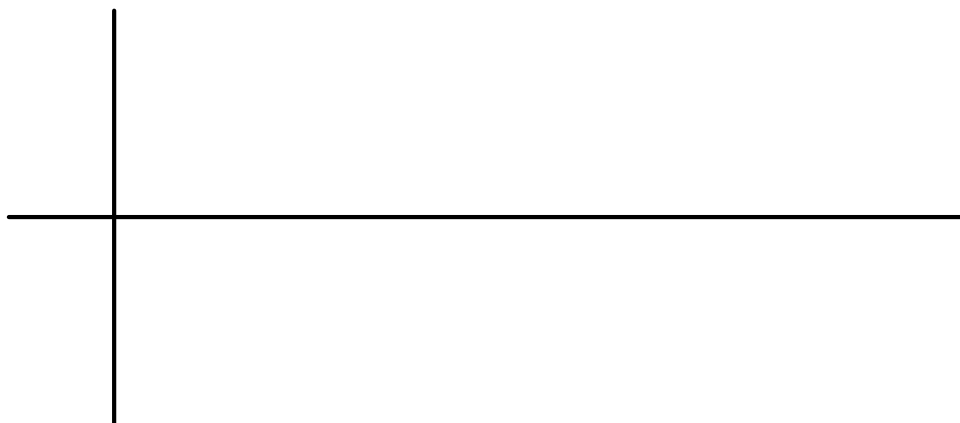
Ex. 1

$$y = 3 \csc 2\theta$$

Amp.: \emptyset Period: _____

Interval: _____ P.S.: _____

V.S.: _____



4.5 Graphing Secant and Cosecant.notebook

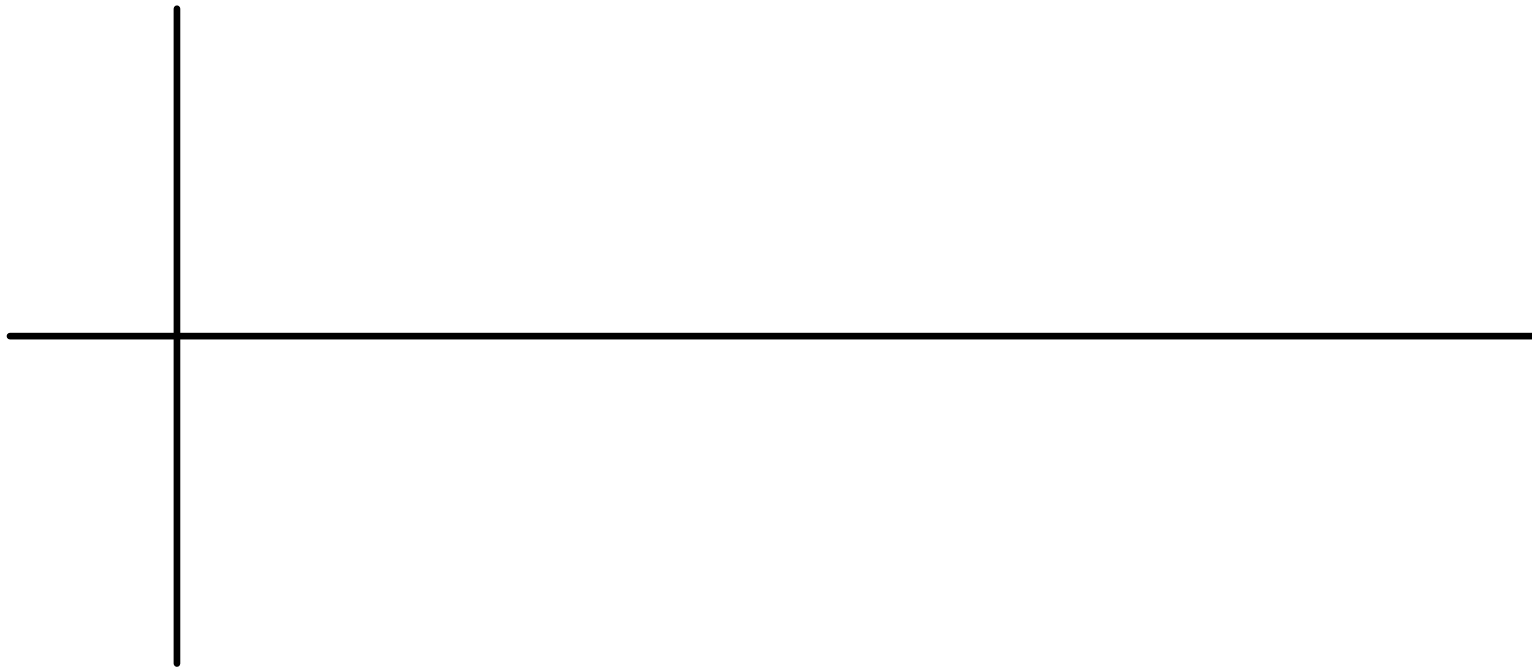
Ex. 2

$$y = -2 \sec 3\theta$$

Amp.: \emptyset Period: _____

Interval: _____ P.S.: _____

V.S.: _____



4.5 Graphing Secant and Cosecant.notebook

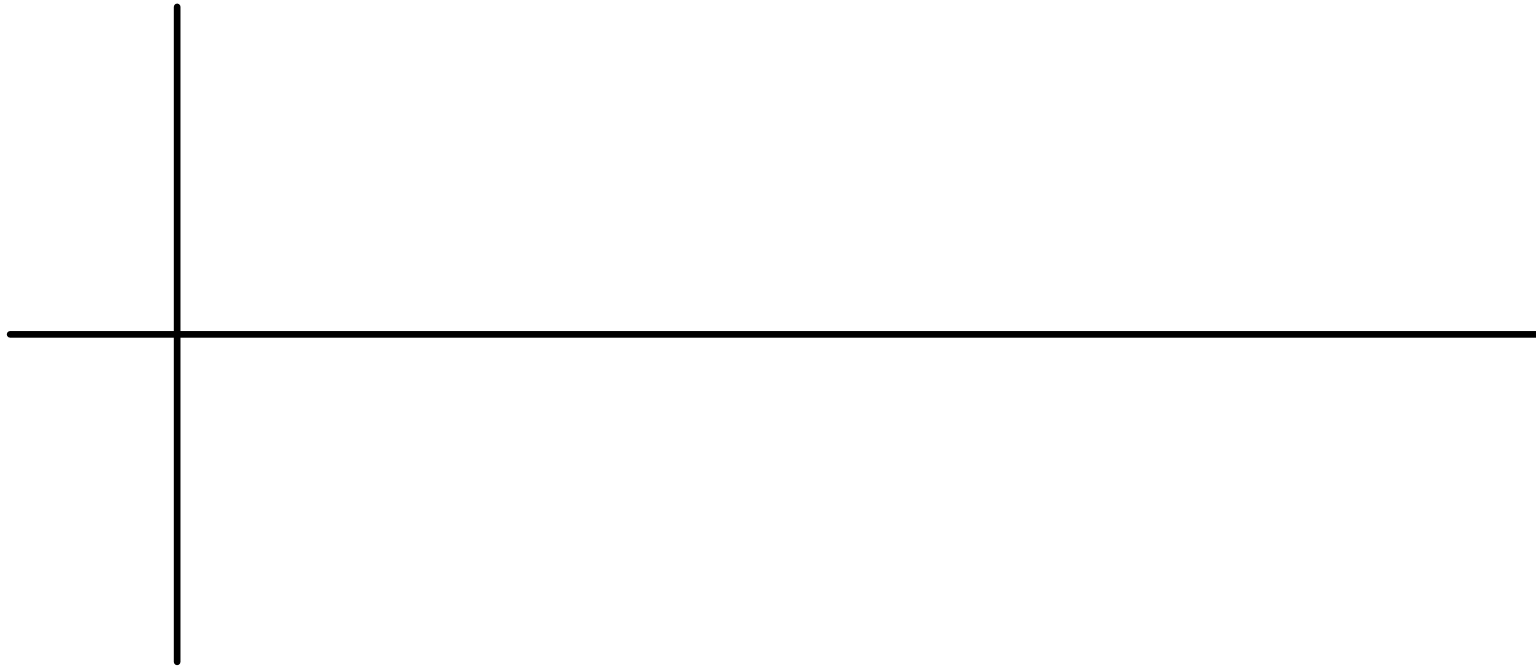
Ex. 3

$$y = \csc\left(\theta - \frac{\pi}{4}\right)$$

Amp.: \emptyset Period: _____

Interval: _____ P.S.: _____

V.S.: _____



4.5 Graphing Secant and Cosecant.notebook

Ex. 4

$$y = \frac{1}{2} \sec(4\theta + 2\pi) + 3$$

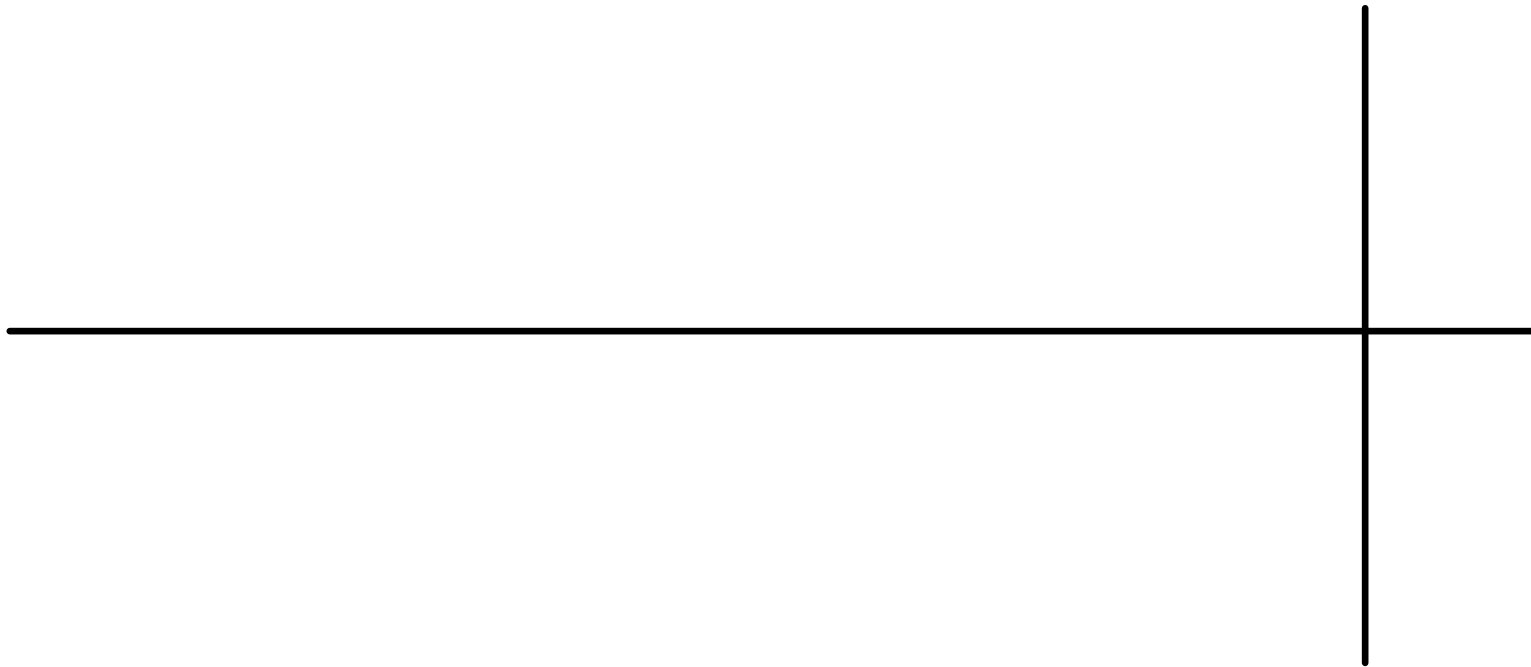
Amp.: \emptyset

Period: _____

Interval: _____

P.S.: _____

V.S.: _____



Assignment:

Worksheet - Secant/Cosecant