

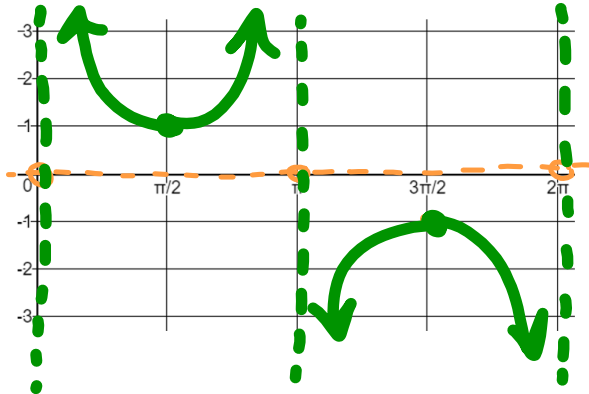
$y = \sin \theta$

Warm - UP

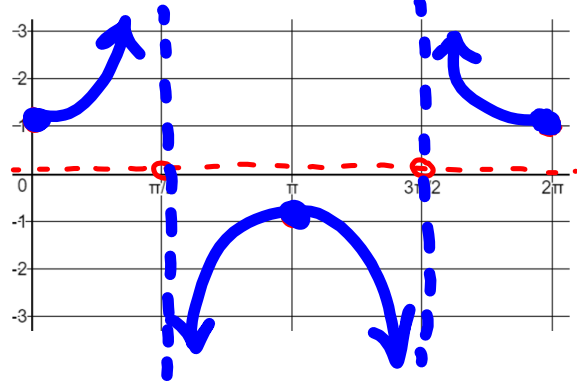
$y = \cos \theta$

Graph one cycle of each.

1.) Graph one cycle of $y = \csc \theta$



2.) Graph one cycle of $y = \sec \theta$



4.4 - Day 4 - Writing Sec/Csc/Tan/Cot Functions

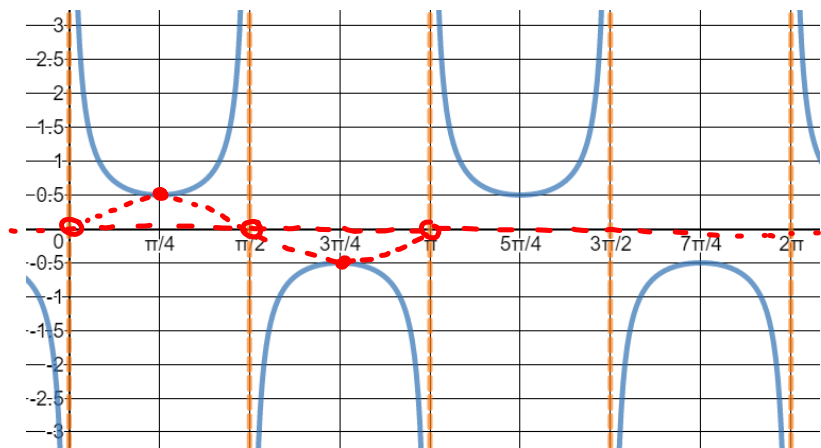
- Parent function?

csc or sec
tan or cot

- a-value: 1/2

- b-value: 2

- midline: y=0



Function: $y = \frac{1}{2} \csc 2\theta$

Ex.2:

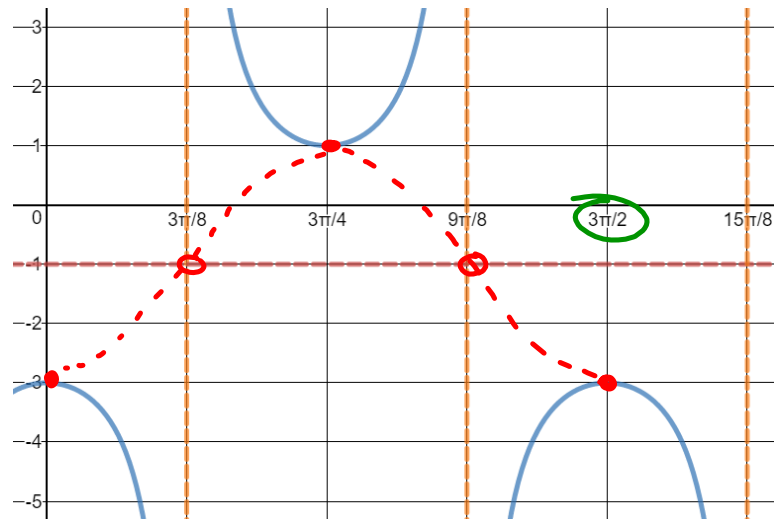
- Parent function?

csc or **sec**
tan or cot

- a-value: 2

- b-value: $\frac{4}{3}$

- midline: $y = -1$



Function: $y = -2 \sec \frac{4\theta}{3} - 1$

Ex.3:

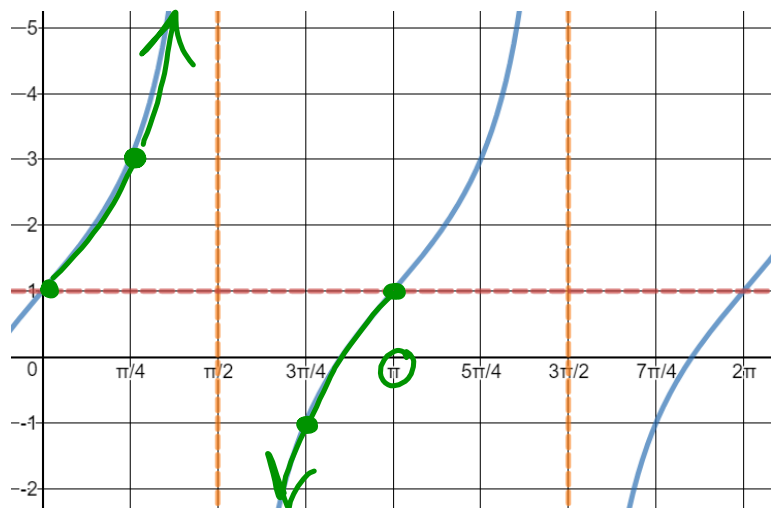
- Parent function?

csc or sec
tan or cot

- a-value: 2

- b-value: 1

- midline: $y = 1$



Function: $y = 2 \tan \theta + 1$

Ex.4:

- Parent function?

csc or sec

tan or **cot**

neg. →

- a-value: 1

- b-value: 4

- midline: $y = 0$

