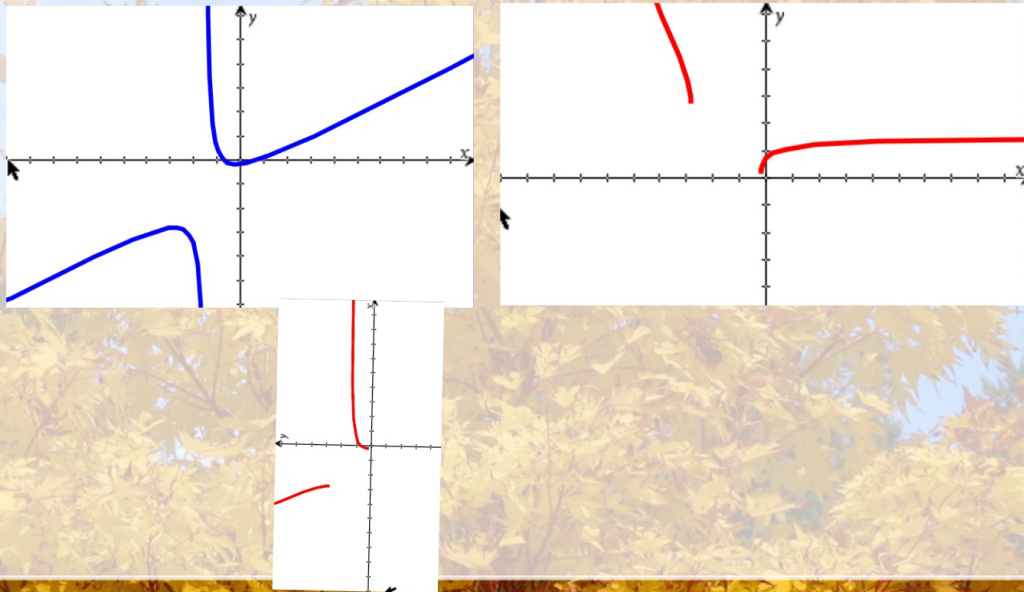


October 10

How are the two graphs below similar and different?



October 10

Students will verbally explain how to graph all six trig functions

(using the words:
zero, asymptote, undefined...)



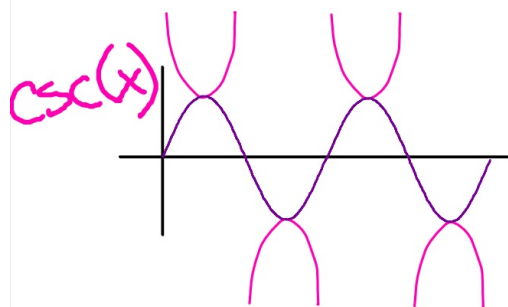


Move to page 5.2

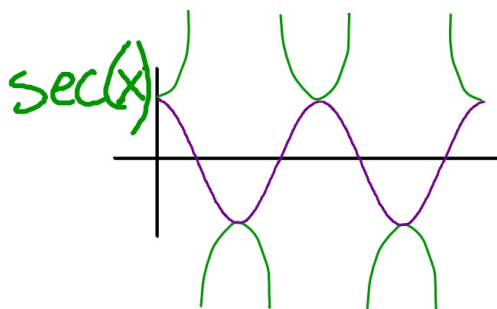
7. How does the graph of the cosecant function compare to your description in question 5? Explain.

8. Choose one of the ^{two} ~~three~~ trig functions from this activity. How could you use the graphs of sine and cosine to graph that function? Explain.

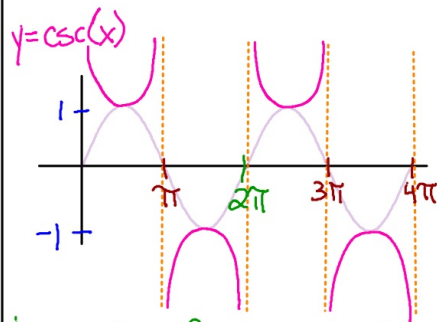
$\sin(x)$



$\cos(x)$



Graph of Cosecant



Range:
 $y \leq -1, y \geq 1$

Length of one cycle $= 2\pi$

Vertical Asymptotes

at $x = 0, \pi, 2\pi, \dots, n\pi$

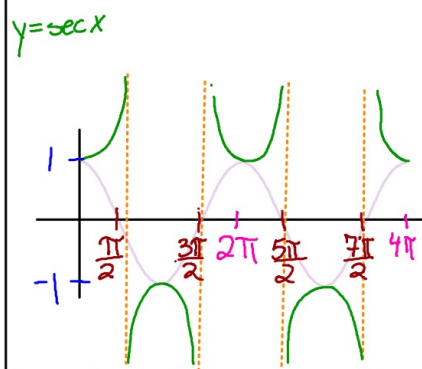
Domain:

All real numbers

except $x = 0, \pi, 2\pi, \dots, n\pi$

($n = \text{any whole \#}$)

Graph of Secant



Range:
 $y \leq -1, y \geq 1$

Domain:

All real #s

except $x = \frac{\pi}{2}, \frac{3\pi}{2}, \dots, \frac{(2n+1)\pi}{2}$

Length of one cycle $= 2\pi$

Vertical Asymptotes

at $x = \frac{\pi}{2}, \frac{3\pi}{2}, \dots, \frac{(2n+1)\pi}{2}$

($2n+1 = \text{any odd \#}$)