

Lesson 6.1B – Graphs of Cosecant and Secant

I. Warm-Up

1. Evaluate the following:

a. $\csc\left(\frac{3\pi}{4}\right) =$

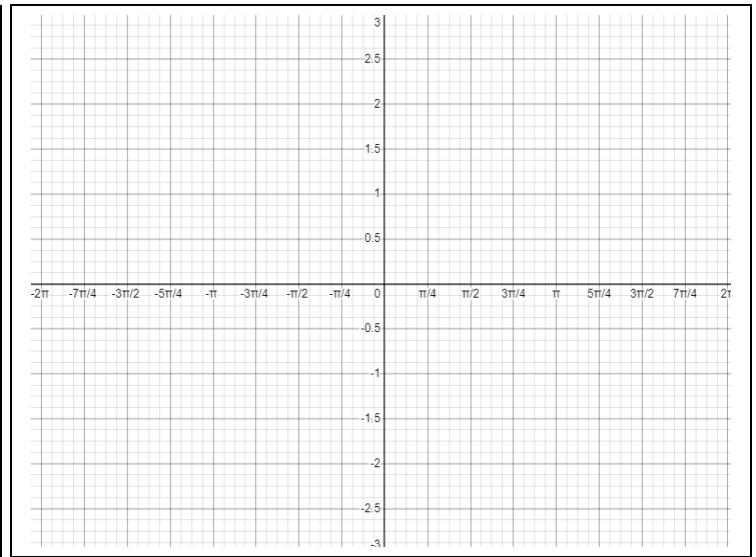
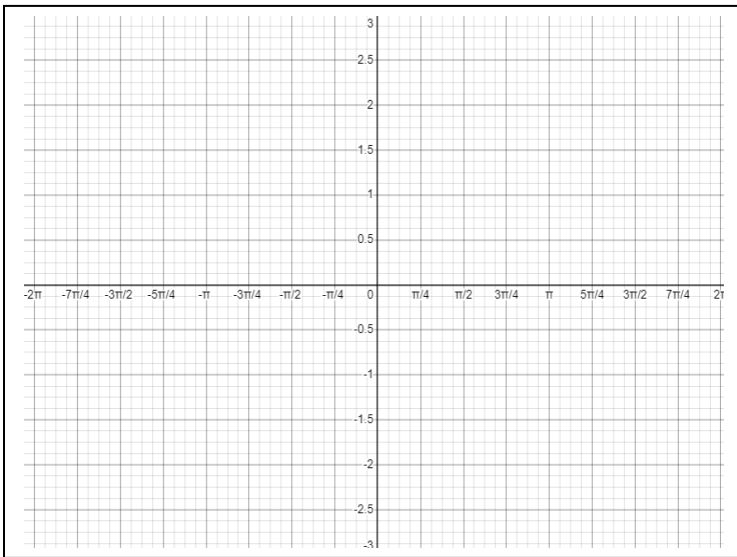
b. $\sec\left(\frac{7\pi}{4}\right) =$

c. $\cot\left(\frac{5\pi}{3}\right)$

II. Graphs of Cosecant and Secant

2. Graph $y = \sin(x)$ below.

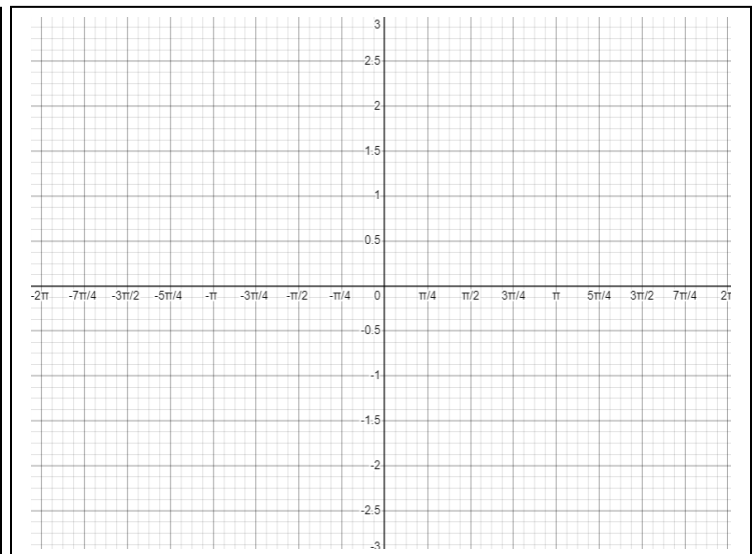
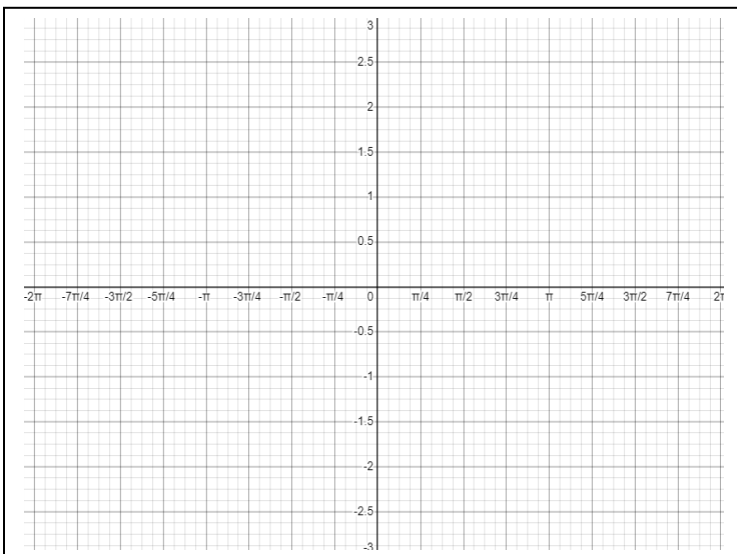
Graph $y = \cos(x)$ below.



*Now use your 2 graphs to graph cosecant and secant.

Graph $y = \csc(x)$ below.

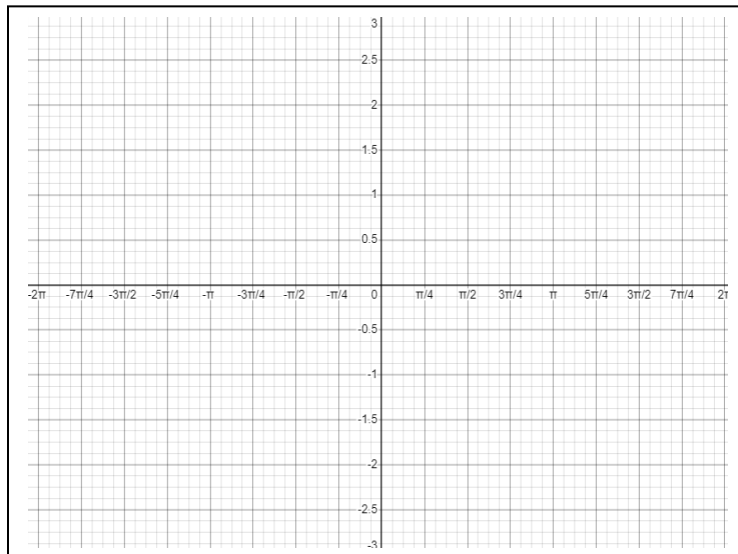
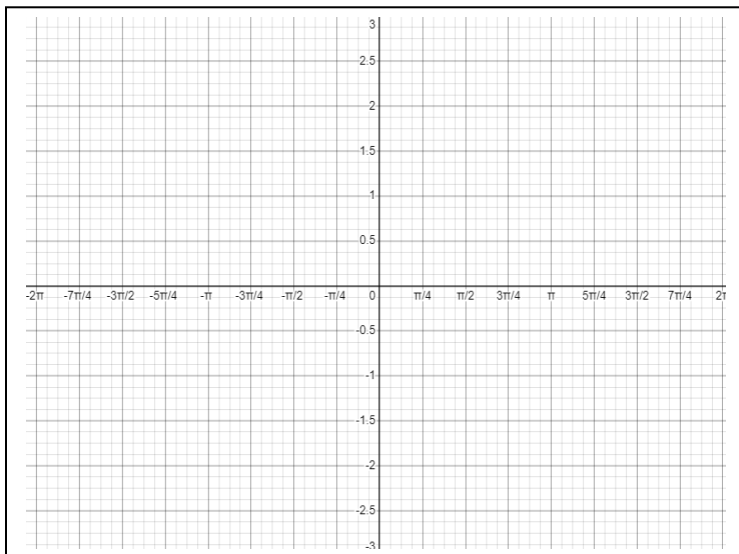
Graph $y = \sec(x)$ below.



III. Practice – Graph the functions below. Be sure to include two full periods.

3. $f(x) = 3 \csc(2x)$

4. $f(x) = 3 \sec(\pi x) - 1$



5. $f(x) = -2 \csc(x + \frac{\pi}{2})$

6. $f(x) = -2 \sec(3x - \frac{\pi}{2})$

