

**Using radians, find the period of each function.**

1)  $y = \cot\left(x - \frac{\pi}{6}\right)$

2)  $y = \frac{1}{5} \csc(2x)$

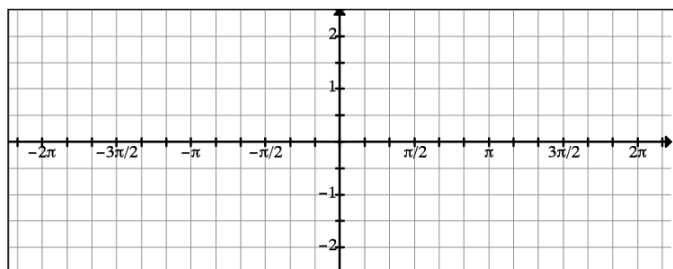
3)  $y = 4 \sec 2\left(x - \frac{3\pi}{4}\right)$

4)  $y = \sec \frac{1}{5}(5x + \pi)$

5)  $y = \cot\left(\frac{x}{2}\right)$

**Graph the trigonometric functions from  $[-2\pi, 2\pi]$ . Label all axes.**

6)  $f(x) = \sec x$

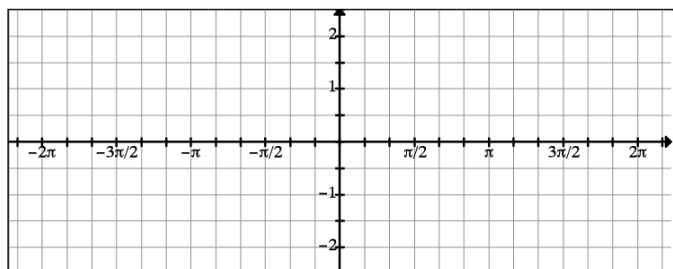


$x$	0	$\frac{\pi}{2}$	$\pi$	$\frac{3\pi}{2}$	$2\pi$
$f(x)$					

Amplitude: \_\_\_\_\_ Period: \_\_\_\_\_

Domain: \_\_\_\_\_ Range: \_\_\_\_\_

7)  $f(x) = \csc x$

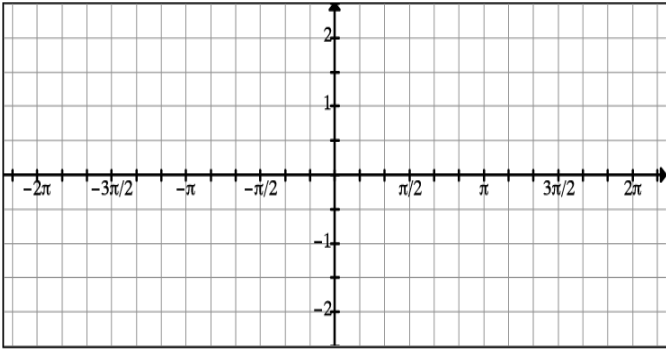


$x$	0	$\frac{\pi}{2}$	$\pi$	$\frac{3\pi}{2}$	$2\pi$
$f(x)$					

Amplitude: \_\_\_\_\_ Period: \_\_\_\_\_

Domain: \_\_\_\_\_ Range: \_\_\_\_\_

8)  $f(x) = \cot x$



$x$	0	$\frac{\pi}{4}$	$\frac{\pi}{2}$	$\frac{3\pi}{4}$	$\pi$
$f(x)$					

Amplitude: \_\_\_\_\_ Period: \_\_\_\_\_

Domain: \_\_\_\_\_ Range: \_\_\_\_\_

**Using the given information and graphs, solve the following questions.**

9) Which trig graphs have domain  $(-\infty, \infty)$ ? \_\_\_\_\_

10) Which trig graphs have range  $(-\infty, \infty)$ ? \_\_\_\_\_

11) Which trig graphs have range  $(-\infty, -1] \cup [1, \infty)$ ? \_\_\_\_\_

12) Which trig graphs intercept the y-axis at the origin? \_\_\_\_\_

13) Which trig graphs intercept the y-axis at  $(0,1)$ ? \_\_\_\_\_

14) Which trig graphs are **EVEN** functions? \_\_\_\_\_

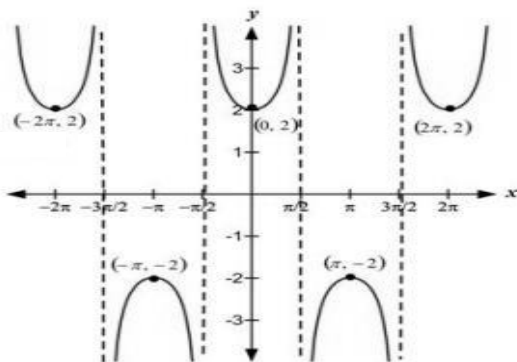
15) Which trig graphs are **ODD** functions? \_\_\_\_\_

16) Which trig graphs have a period length of  $2\pi$ ? \_\_\_\_\_

17) Which trig graph(s) have a period length of  $2\pi$ ? \_\_\_\_\_

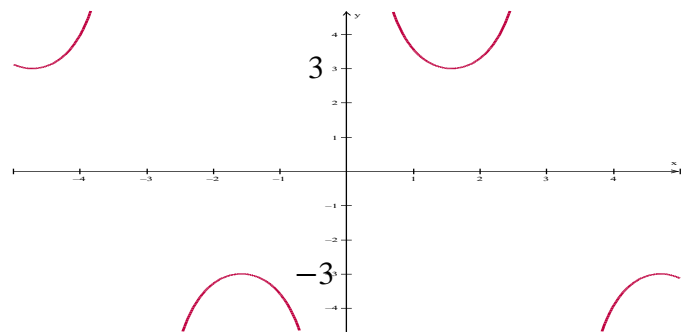
**Given the continuous graph, determine the equation**

18) Parent function: Secant Graph



Equation: \_\_\_\_\_

19) Parent Function: Cosecant Graph



Equation: \_\_\_\_\_