

# Graphing Trig

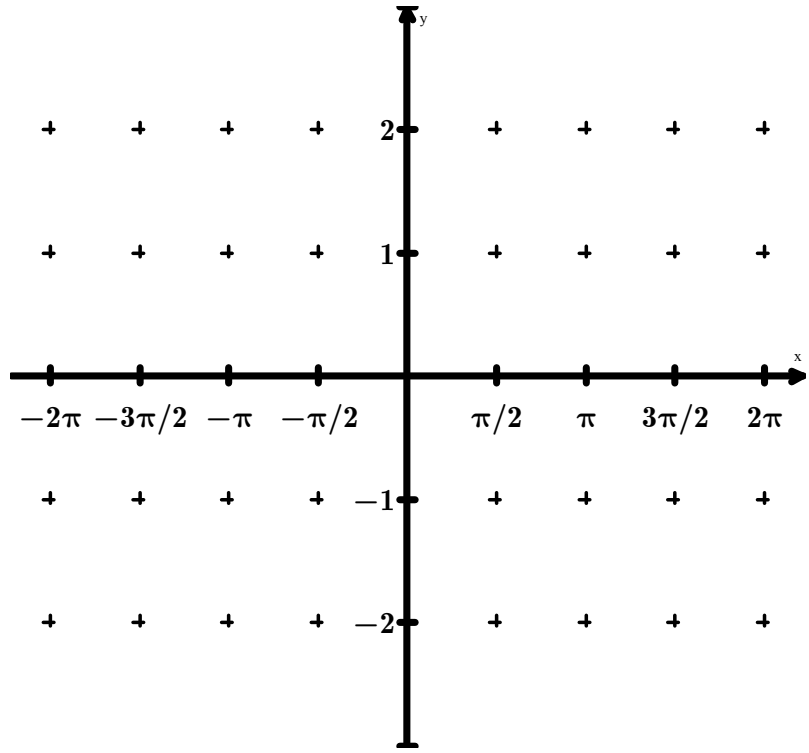
$\csc(x)/\sec(x)/\cot(x)$

Name \_\_\_\_\_

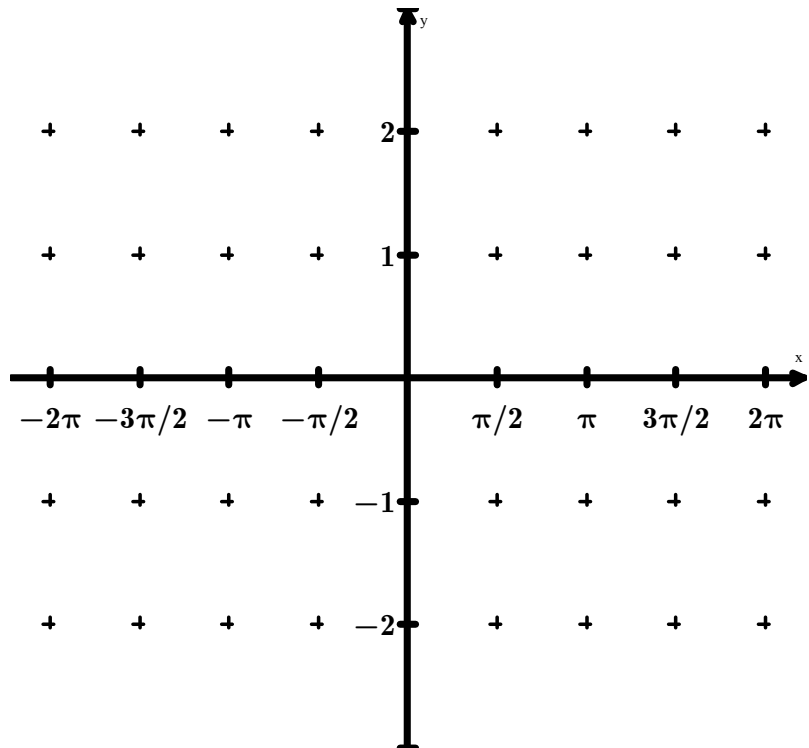
Date: \_\_\_\_\_ Block: \_\_\_\_\_

Mrs. Mistrion

x	y = csc(x)
$-2\pi$	
$-\frac{3\pi}{2}$	
$-\pi$	
$-\frac{\pi}{2}$	
0	
$\frac{\pi}{2}$	
$\pi$	
$\frac{3\pi}{2}$	
$2\pi$	

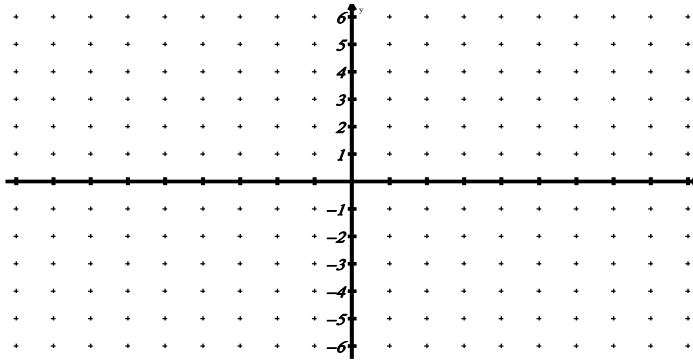


x	y = sec(x)
$-2\pi$	
$-\frac{3\pi}{2}$	
$-\pi$	
$-\frac{\pi}{2}$	
0	
$\frac{\pi}{2}$	
$\pi$	
$\frac{3\pi}{2}$	
$2\pi$	



**EXAMPLE ONE** → Graph the following functions

a)  $k(b) = \csc(2b - \pi) - 1$



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

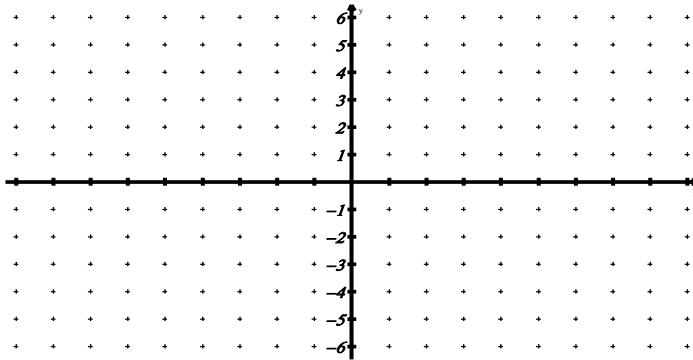
Period: \_\_\_\_\_

Unit: \_\_\_\_\_

Phase Shift: \_\_\_\_\_

Vertical Shift: \_\_\_\_\_

b)  $g(x) = 2\csc(x + \pi) + 3$



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

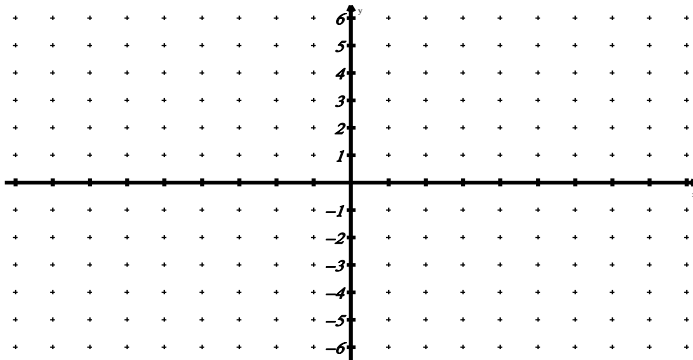
Period: \_\_\_\_\_

Unit: \_\_\_\_\_

Phase Shift: \_\_\_\_\_

Vertical Shift: \_\_\_\_\_

c)  $y = -\sec(3x - 2\pi) + 2$



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

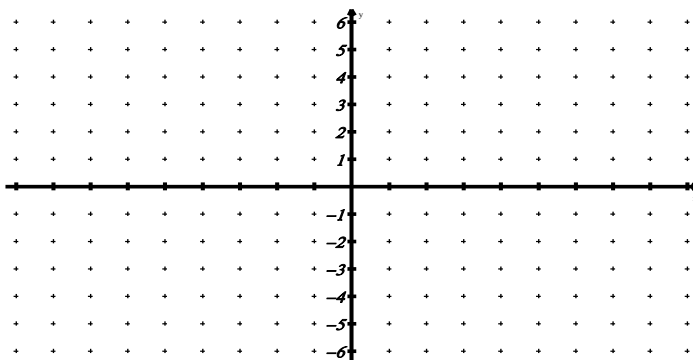
Period: \_\_\_\_\_

Unit: \_\_\_\_\_

Phase Shift: \_\_\_\_\_

Vertical Shift: \_\_\_\_\_

d)  $x(t) = 3\sec(2t - \pi) - 2$



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

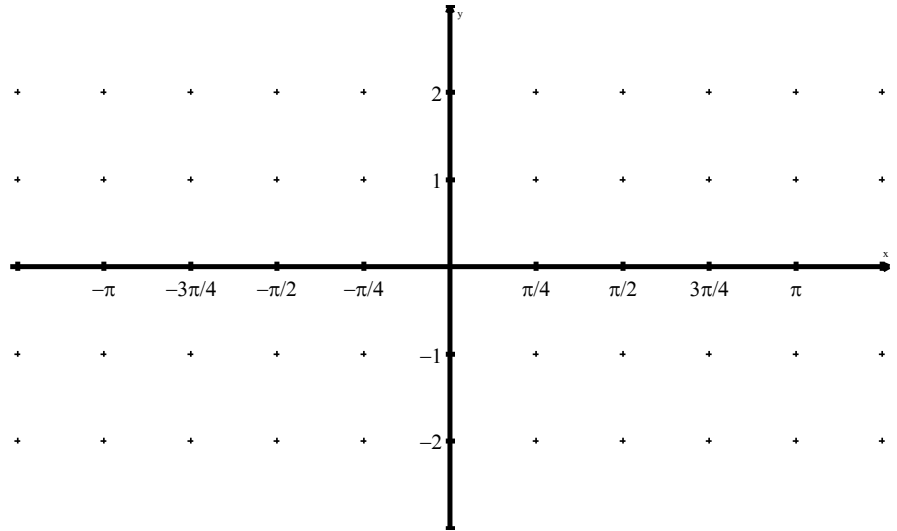
Period: \_\_\_\_\_

Unit: \_\_\_\_\_

Phase Shift: \_\_\_\_\_

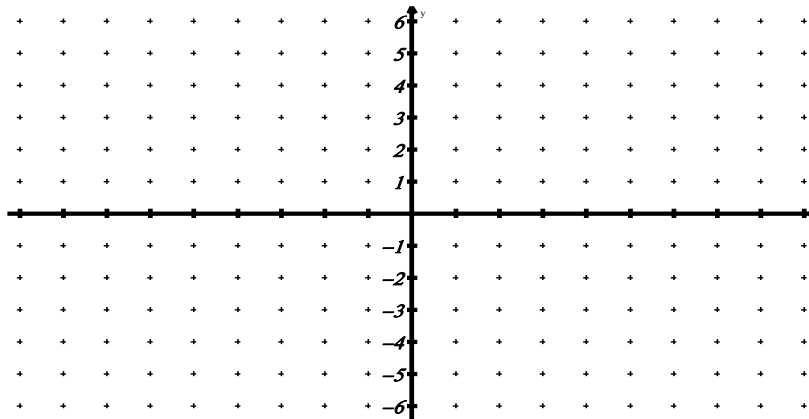
Vertical Shift: \_\_\_\_\_

x	y = cot(x)
$-\pi$	
$-\frac{3\pi}{4}$	
$-\frac{\pi}{2}$	
$-\frac{\pi}{4}$	
0	
$\frac{\pi}{4}$	
$\frac{\pi}{2}$	
$\frac{3\pi}{4}$	
$\pi$	



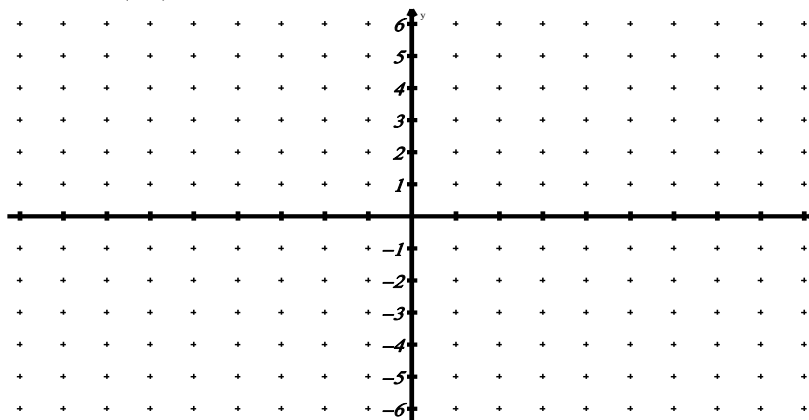
**EXAMPLE TWO → Graphing Cotangent**

a)  $v(t) = 2\cot(2t + \pi) - 1$



Amplitude: \_\_\_\_\_  
 Period: \_\_\_\_\_  
 Unit: \_\_\_\_\_  
 Phase Shift: \_\_\_\_\_  
 Vertical Shift: \_\_\_\_\_

b)  $y = -\cot(4x) + 3$



Amplitude: \_\_\_\_\_  
 Period: \_\_\_\_\_  
 Unit: \_\_\_\_\_  
 Phase Shift: \_\_\_\_\_  
 Vertical Shift: \_\_\_\_\_