

Name: Key

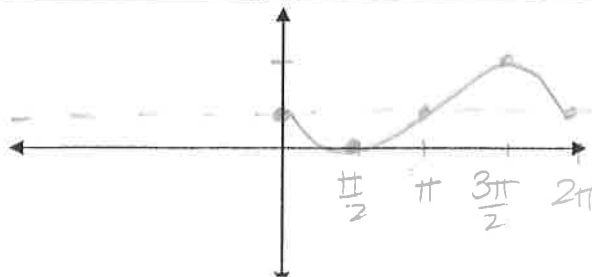
**Graphing All Trig Functions Review Worksheet (Sin, Cos, Tan, Csc, Sec, & Cot)**

Sketch the graph of each function for one period.

Determine the amplitude or vertical stretch, period, phase shift, and vertical shift for each.

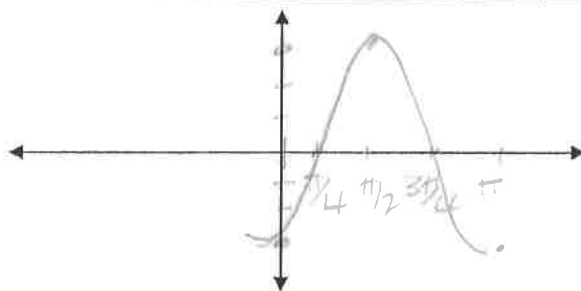
1)  $y = -\sin x + 1$

Amplitude	Period	Qtr Period	Phase Shift	Vertical Shift
1	$2\pi$	$\pi/2$	0	1



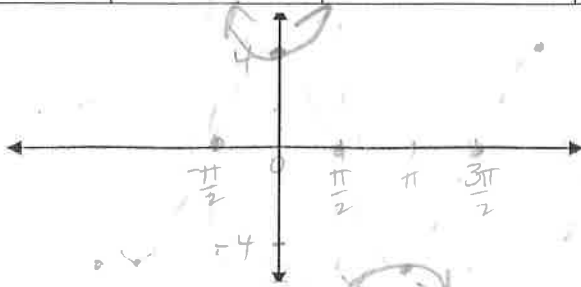
2)  $y = -3 \cos 2x$

Amplitude	Period	Qtr Period	Phase Shift	Vertical Shift
3	$\pi$	$\pi/4$	0	0



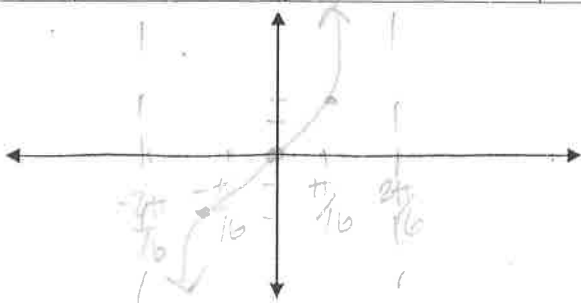
3)  $y = 4 \csc\left(x + \frac{\pi}{2}\right)$

Amplitude	Period	Qtr Period	Phase Shift	Vertical Shift
4	$2\pi$	$\pi/2$	$-\pi/2$	0



4)  $y = 2 \tan 4x$

Amplitude	Period	Qtr Period	Phase Shift	Vertical Shift
2	$\pi/4$	$\pi/16$	0 center	0

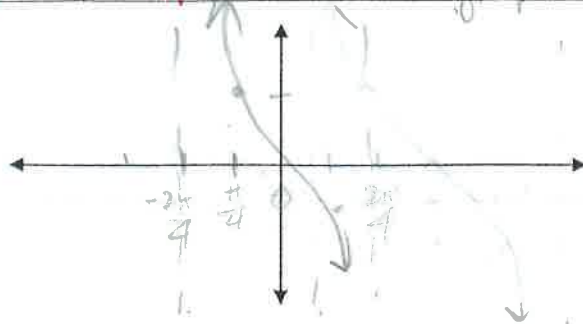


5)  $y = 2\cot(x - \frac{\pi}{2})$

$b=1$

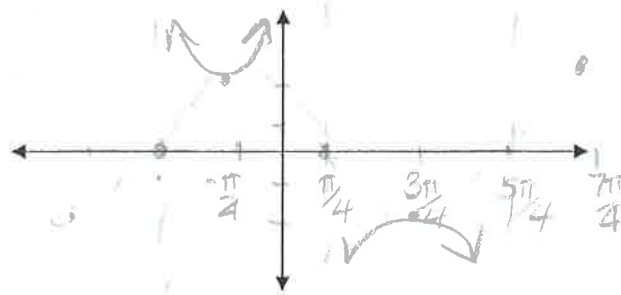
$\frac{\pi}{b}$

Amplitude	Period	Qtr Period	Phase Shift	Vertical Shift
2	$2\pi$	$\pi/2$	$\pi/2$ asymptote	0



6)  $y = 2\sec(x + \frac{\pi}{4})$

Amplitude	Period	Qtr Period	Phase Shift	Vertical Shift
2	$2\pi$	$\pi/2$	$-\pi/4$	0



7)  $y = 2\csc(\frac{1}{2}(x + \frac{\pi}{3})) + 1$

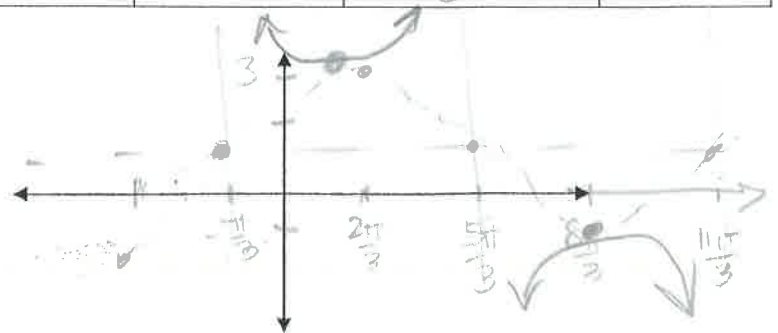
$\frac{2\pi}{\frac{1}{2}} = 4\pi$

$(\frac{1}{2}x + \frac{\pi}{6}) + 1$

$\frac{1}{2}x = -\frac{\pi}{6}$

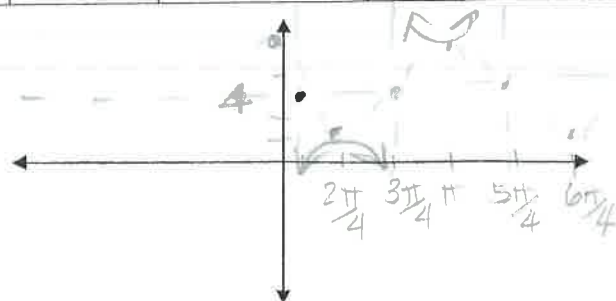
$x = -\frac{\pi}{3}$

Amplitude	Period	Qtr Period	Phase Shift	Vertical Shift
2	$4\pi$	$\pi$	$-\pi/3$ or $2\pi/6$	1



8)  $y = -2\sec(2x - \pi) + 4$

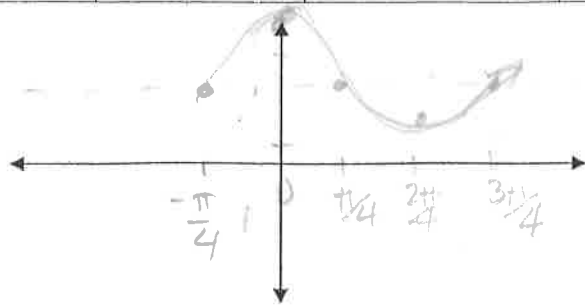
Amplitude	Period	Qtr Period	Phase Shift	Vertical Shift
2	$\pi$	$\pi/4$	$\pi/2$ or $2\pi/4$	-4



9)  $y = 2 \sin(2x + \frac{\pi}{2}) + 3$

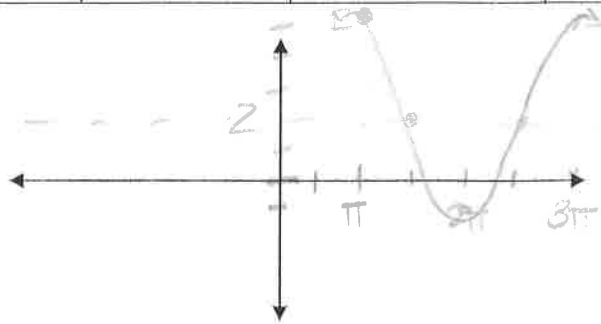
$\frac{\pi}{2} \cdot \frac{1}{2}$

Amplitude	Period	Qtr Period	Phase Shift	Vertical Shift
2	$\pi$	$\pi/4$	$-\pi/4$	3



10)  $y = 3 \cos(x - \pi) + 2$

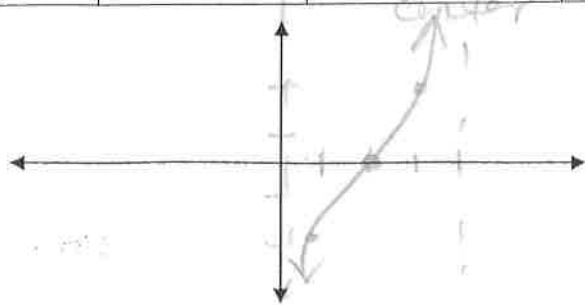
Amplitude	Period	Qtr Period	Phase Shift	Vertical Shift
3	$2\pi$	$\pi/2$	$\pi$	2



11)  $y = 2 \tan(\frac{1}{2}x - \frac{\pi}{2})$

$\frac{\pi}{2} \cdot 2$

Amplitude	Period	Qtr Period	Phase Shift	Vertical Shift
2	$2\pi$	$\pi/2$	$\pi$ or $\frac{2}{2}\pi$	0



12)  $y = 2 \cot(x + \frac{\pi}{4})$

Amplitude	Period	Qtr Period	Phase Shift	Vertical Shift
2	$\pi$	$\pi/4$	$-\pi/4$	

