

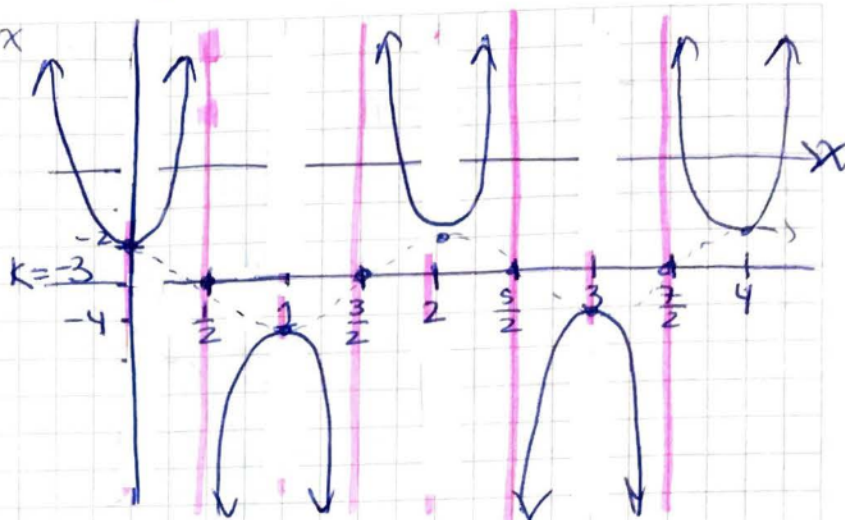
Sec 4.6 Graphing Sec & CSC pg 341 #17-19, 27, 30

#17) $y = \sec \pi x - 3 = \frac{1}{\cos x}$

x	
0	-2
$\frac{1}{2}$	-3
1	-4
$\frac{3}{2}$	-3
2	-2

Per = $\frac{2\pi}{\pi} = 2$

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

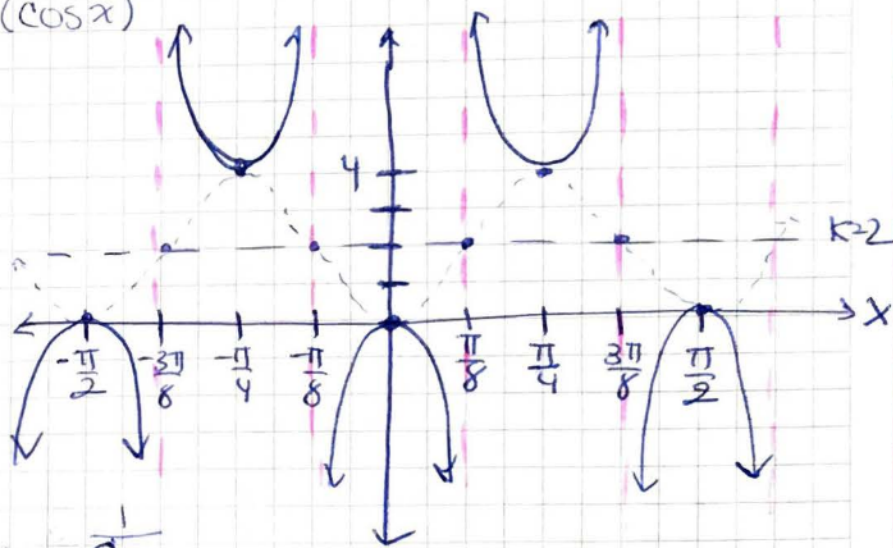


#18) $y = -2\sec 4x + 2 = \frac{1}{\cos x}$

x	
0	0
$\frac{\pi}{4}$	2
$\frac{\pi}{2}$	4
$\frac{3\pi}{4}$	2
π	0

Per: $\frac{2\pi}{4} = \frac{\pi}{2}$

Inc = $\frac{\pi}{8}$

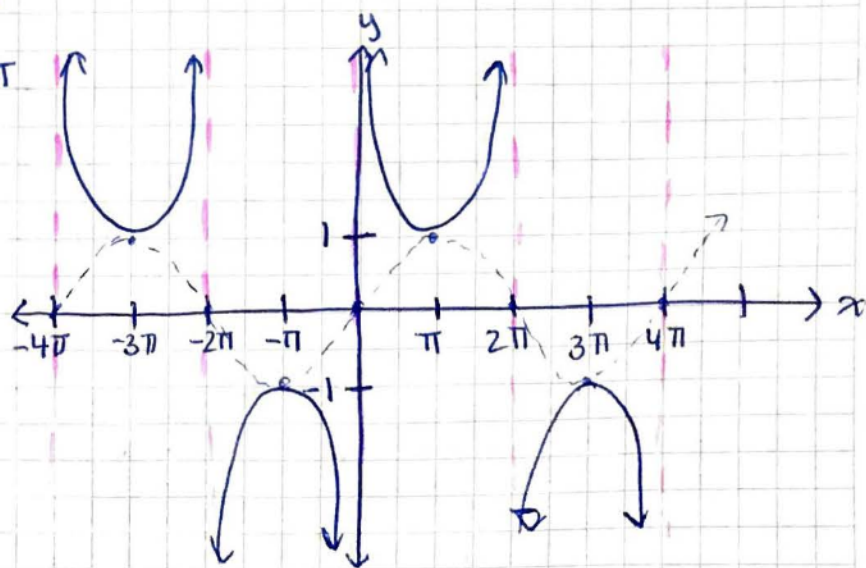


#19) $y = \csc \frac{x}{2} = \csc \frac{1}{2}(x) = \frac{1}{\sin x}$

x	
0	0
π	1
2π	0
3π	-1
4π	0

Per: $\frac{2\pi}{1/2} = 4\pi$

Inc = $\frac{4\pi}{4} = \pi$



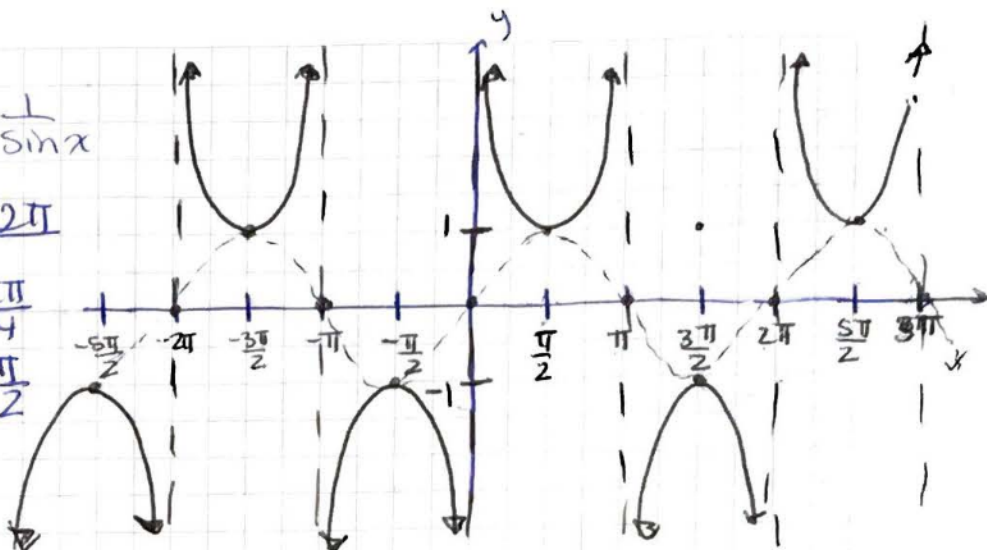
#27) $y = \csc(\pi - x)$

$y = \csc(x - \pi) = \frac{1}{\sin x}$

X	New	y
0	π	0
$\frac{\pi}{2}$	$\frac{3\pi}{2}$	-1
π	2π	0
$\frac{3\pi}{2}$	$\frac{5\pi}{2}$	1
2π	3π	0

Period = 2π

Int: $\frac{2\pi}{4} = \frac{\pi}{2}$



#30) $y = \frac{1}{4} \csc(x + \frac{\pi}{4}) = \frac{1}{4 \sin x}$

X	New	y
0	$-\frac{\pi}{4}$	0
$\frac{\pi}{4}$	$\frac{\pi}{4}$	$\frac{1}{4}$
π	$\frac{5\pi}{4}$	0
$\frac{3\pi}{4}$	$\frac{3\pi}{4}$	$-\frac{1}{4}$
2π	$\frac{7\pi}{4}$	0

Period = 2π

Int: $\frac{2\pi}{4} = \frac{\pi}{2}$

