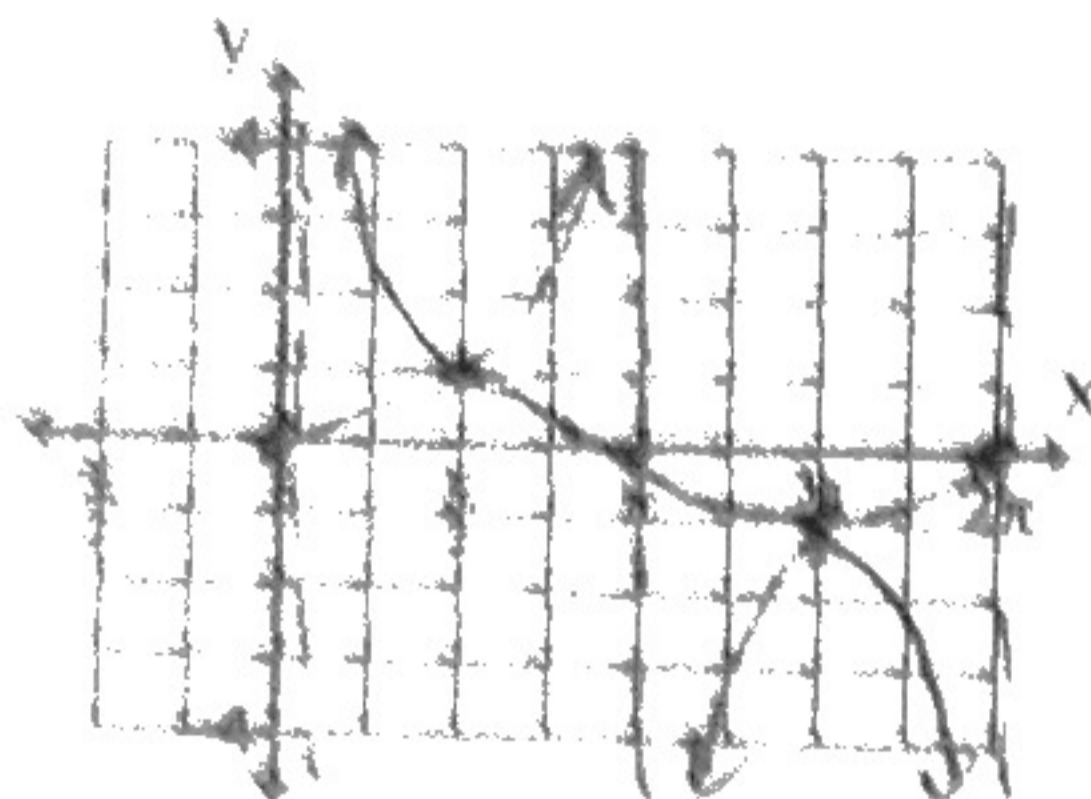


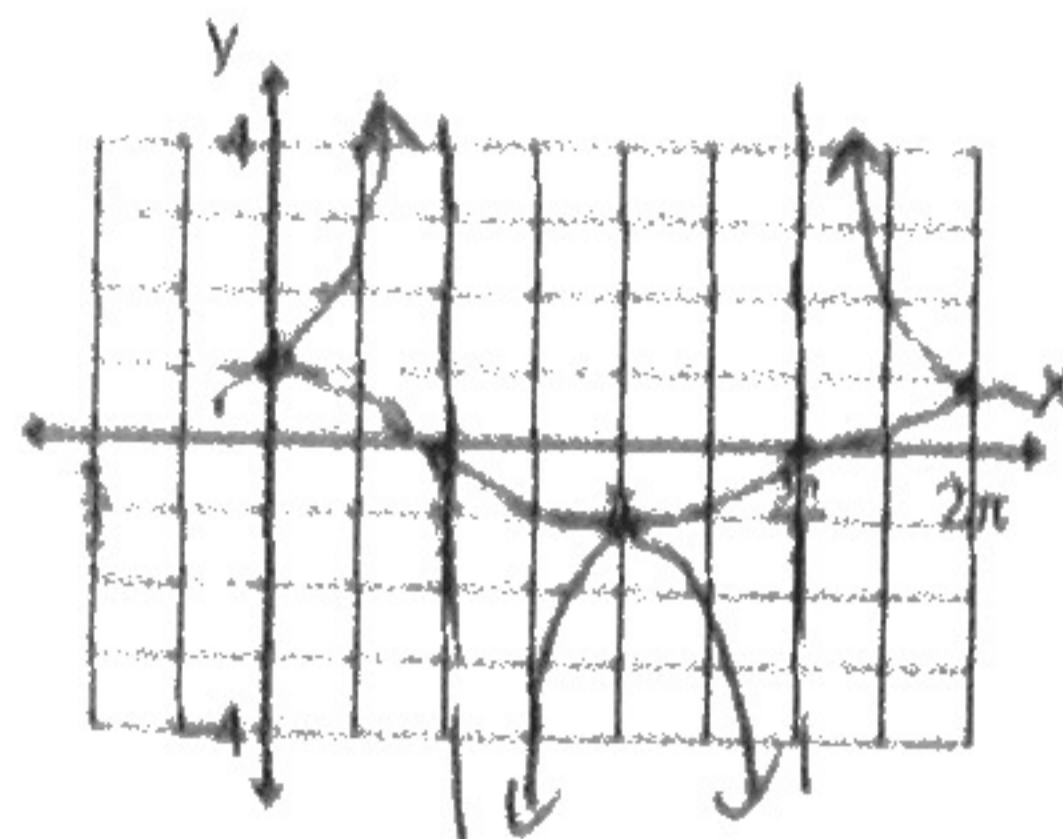
Graph each parent function over 1 period.

Name Key

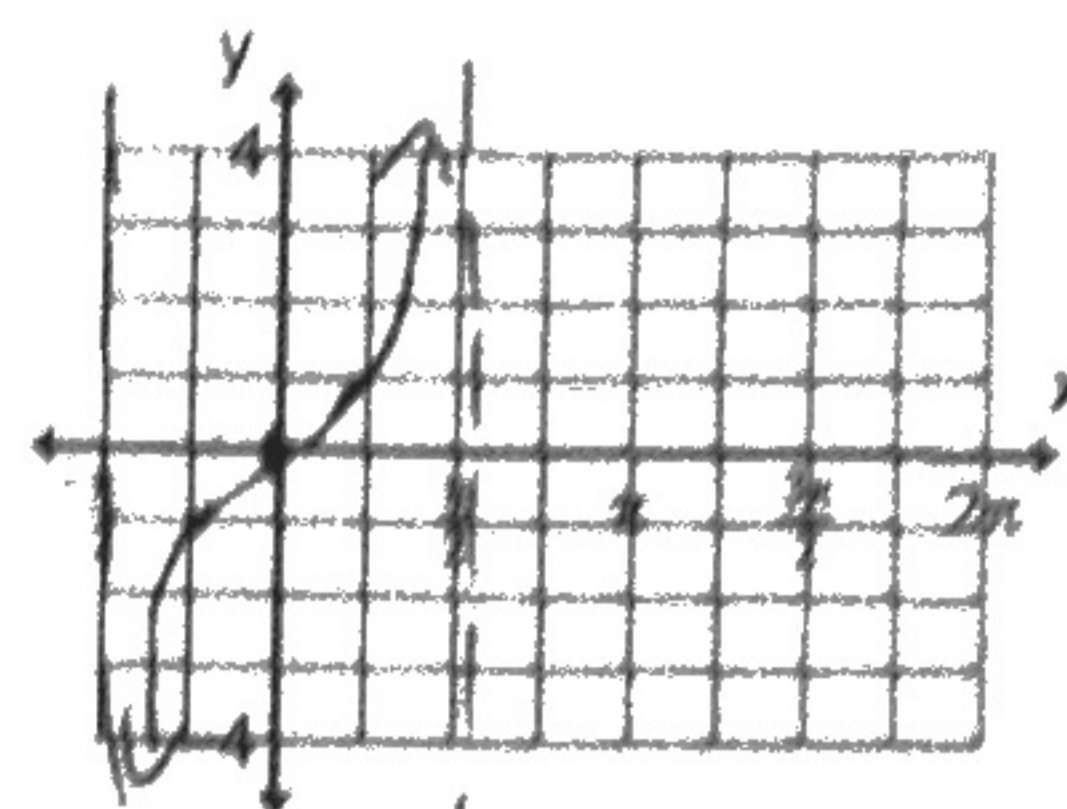
Per _____
1. $y = \sin x$ and $y = \csc x$



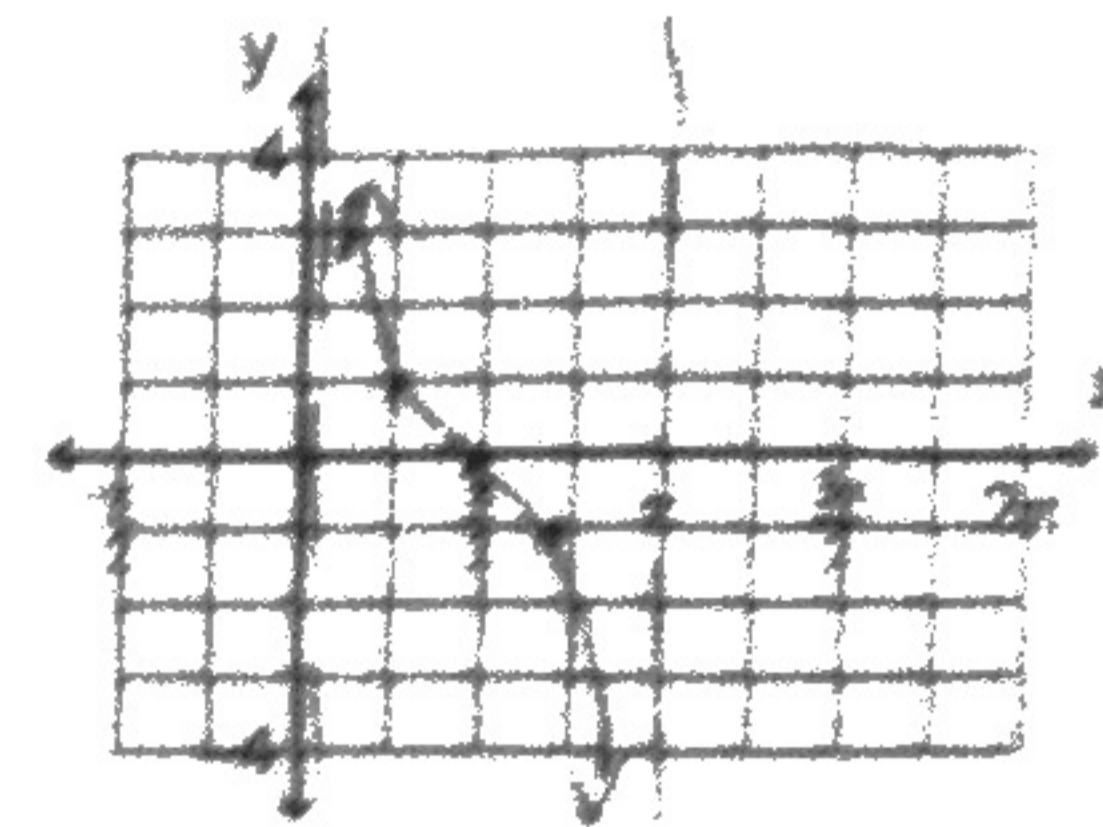
2. $y = \cos x$ and $y = \sec x$



3. $y = \tan x$



4. $y = \cot x$



Complete the Table, use the graphs above to help you!!

	$y = \sin x$	$y = \cos x$	$y = \csc x$ $y = \sec x$	$y = \tan x$	$y = \cot x$
1. Zeros	$0 + \pi N$	$\frac{\pi}{2} + \pi N$	none	none	$0 + \pi N$
2. Asymptotes	none	$x = \frac{\pi}{2} + \pi N$ none	$y = 0 + \pi N$	$y = \frac{\pi}{2} + \pi N$	$y = 0 + \pi N$
3. Domain	\mathbb{R}	\mathbb{R}	\mathbb{R} except $\theta \neq 0 + \pi N$	\mathbb{R} except $\theta \neq \frac{\pi}{2} + \pi N$	\mathbb{R} except $\theta \neq \frac{\pi}{2} + \pi N$
4. Range	$[-1, 1]$	$[-1, 1]$	\mathbb{R}	\mathbb{R}	\mathbb{R}
5. Maximum	+1	1	∞	∞	∞
6. Minimum	-1	-1	$-\infty$	$-\infty$	$-\infty$
7. Amplitude	1	1	"V. stretch" none	none	none
8. Period	2π	2π	2π	2π	π
9. Reciprocal Function	$\sin \theta = \frac{1}{\csc \theta}$	$\cos \theta = \frac{1}{\sec \theta}$	$\csc x = \frac{1}{\sin x}$	$\sec x = \frac{1}{\cos x}$	$\tan x = \frac{1}{\cot x}$
10. Even or Odd	odd	even	odd	even	odd