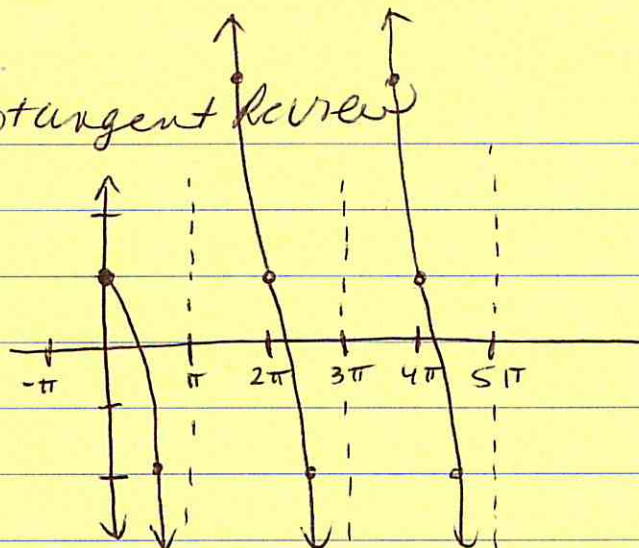


Graphing Tangent + Cotangent Review

1. $y = -3 \tan \frac{x}{2} + 1$

x	y	$2x$	$-3y$	x	$y+1$
0	0	0	0	0	1
$\pi/2$	undef	π	undef	π	undef
π	0	2π	0	2π	1
$3\pi/2$	undef	3π	undef	3π	undef
2π	0	4π	0	4π	1
$\pi/4$	1	$\pi/2$	-3	$\pi/2$	-2

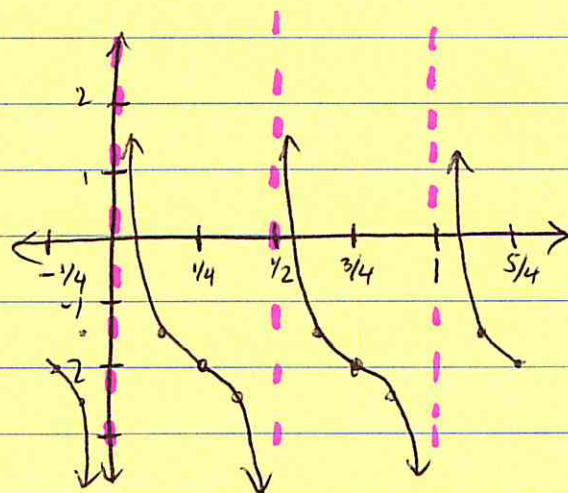


Asymptotes $x = (2n+1)\pi$
zeros $x = 2n\pi$ (before translation)

Domain: $x \neq (2n+1)\pi$ Range $(-\infty, \infty)$

2. $y = \frac{1}{2} \cot 2\pi x - 2$

x	y	$\frac{1}{2\pi}x$	$\frac{1}{2}y$	x	$y+2$
0	undef	0	undef	0	undef
$\pi/2$	0	$1/4$	0	$1/4$	-2
π	undef	$1/2$	undef	$1/2$	undef
$3\pi/2$	0	$3/4$	0	$3/4$	-2
2π	undef	1	undef	1	undef
$\pi/4$	1	$1/8$	$1/2$	$1/8$	$-3/2$



Domain: $x \neq \frac{n}{2}$

Range: $(-\infty, \infty)$

Asymptotes: $x = \frac{n}{2}$
zeros: $x = (2n+1)/4$ (before 2D)