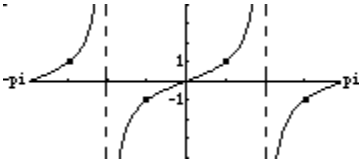
Pre-Calculus
141

f(x) = tan x

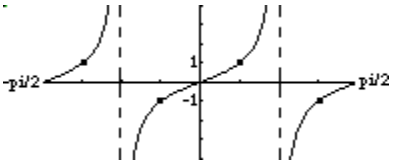
x	-π	-3π/4	-π/2	-π/4	0	π/4	π/2	3π/4	π
tan(x)	0	1	DNE	-1	0	1	DNE	-1	0



Period = π. The Tangent Graph is NOT Sinusoidal and therefore has NO AMPLITUDE.
The graph has an asymptote halfway through its Primary Cycle.
Also note that this parent graph has a height of 1 and -1 midway between 0 and the asymptotes.
For the primary cycle of this parent function, the start is at at x = 0, and the end is at x = π.
The Asymptote occurs at x = π/2.

f(x) = tan 2x

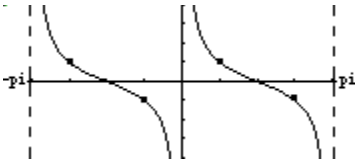
x	-π/2	-3π/8	-π/4	-π/8	0	π/8	π/4	3π/8	π/2
tan(x)	0	1	DNE	-1	0	1	DNE	-1	0



Period = π/2. Within the Primary Cycle, Targeted points are at (π/8, 1) and (3π/8, -1).
The Asymptote is at x = π/4.

f(x) = cot x

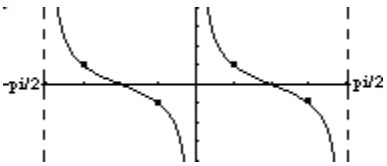
x	-π	-3π/4	-π/2	-π/4	0	π/4	π/2	3π/4	π
tan(x)	DNE	1	0	-1	DNE	1	0	-1	DNE



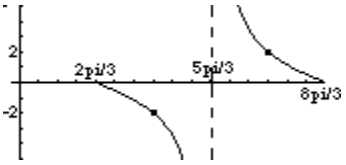
Period = π. Asymptotes in the Primary Cycle are at x = 0 and x = π.
Identifiable Targeted points are at (π/4, 1) and (3π/4, -1).

f(x) = cot 2x

x	-π/2	-3π/8	-π/4	-π/8	0	π/8	π/4	3π/8	π/2
tan(x)	0	1	DNE	-1	0	1	DNE	-1	0



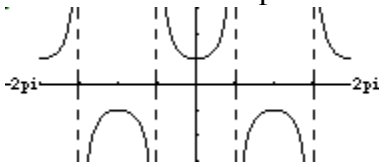
$y = -2 \tan(x/2 - \pi/3)$
Period = 2π. Phase Shift $x = 2\pi/3$. Primary Cycle Ends at $x = 8\pi/3$.



$f(x) = \sec x$

x	-2π	$-3\pi/2$	$-\pi$	$-\pi/2$	0	$\pi/2$	π	$3\pi/2$	2π
sin(x)	1	DNE	-1	DNE	1	DNE	-1	DNE	1

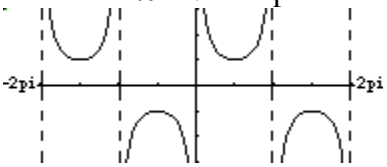
Period = 2π. No Amplitude.



$f(x) = \csc x$

x	-2π	$-3\pi/2$	$-\pi$	$-\pi/2$	0	$\pi/2$	π	$3\pi/2$	2π
sin(x)	DNE	1	DNE	-1	DNE	1	DNE	-1	DNE

Period = 2π. No Amplitude.



Assignment 141
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