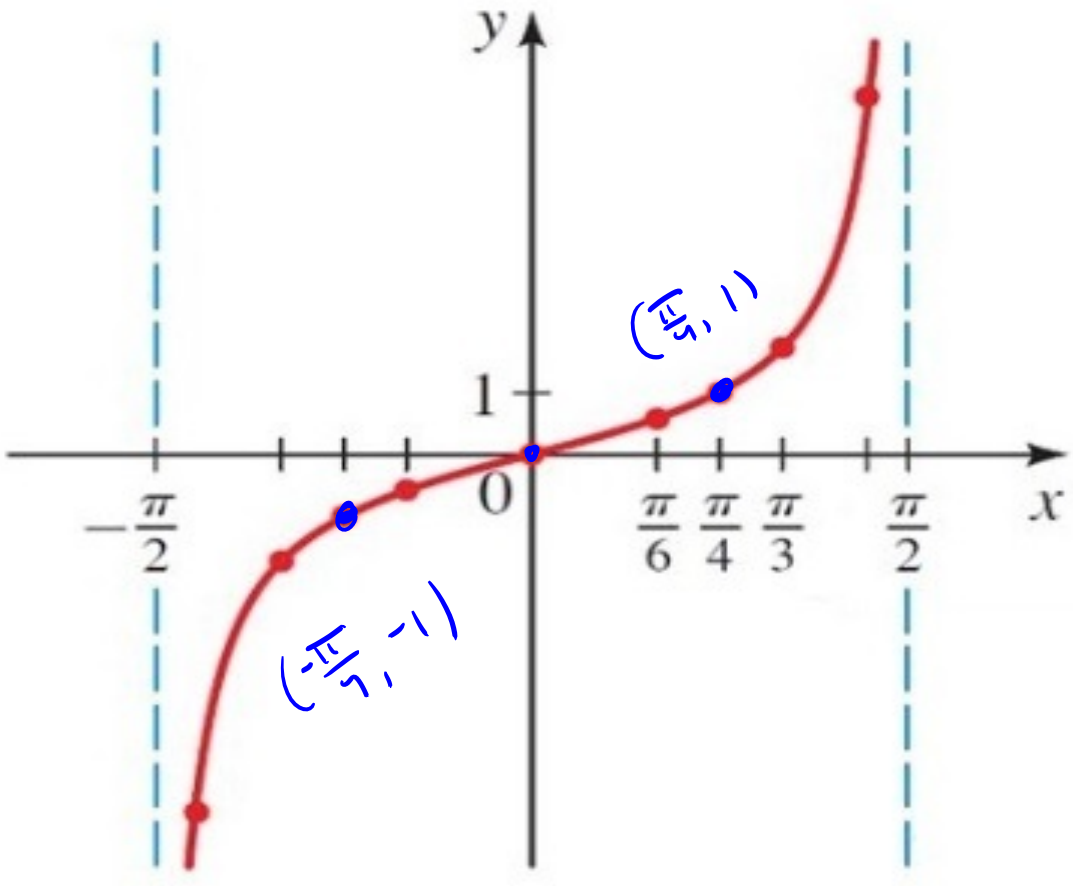
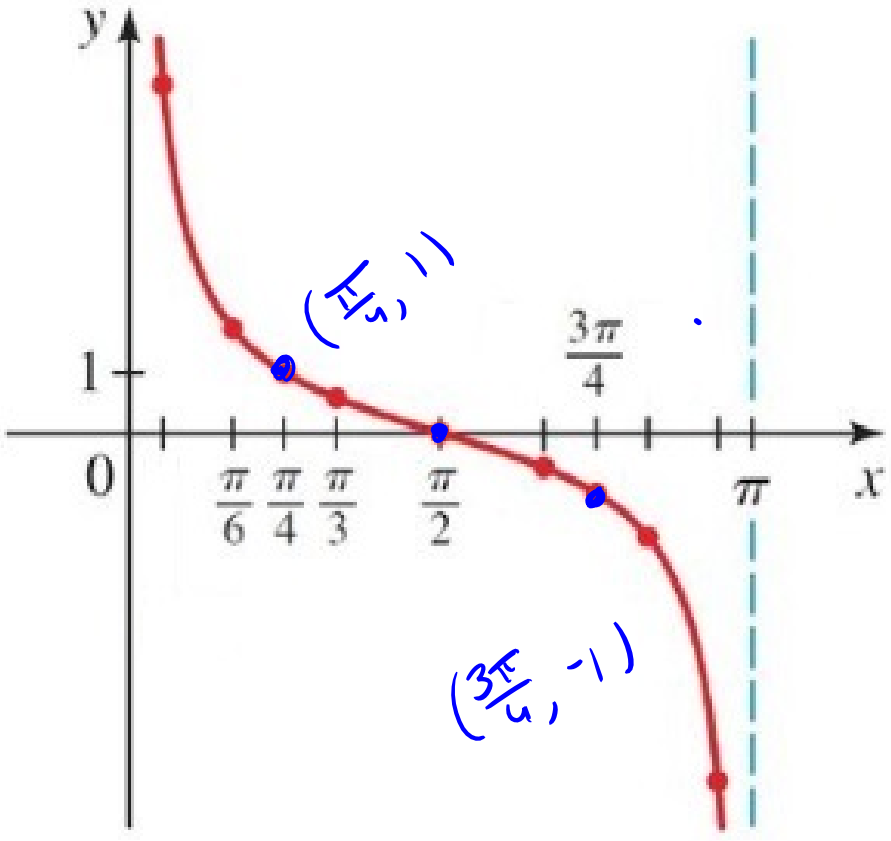
March 2 MATH 1112 sec. 52 Spring 2020



One period of $y = \tan x$

x	$\tan x$
$-\frac{\pi}{2}$	Asympt.
$-\frac{\pi}{4}$	-1
0	0
$\frac{\pi}{4}$	1
$\frac{\pi}{2}$	Asympt.



One period of $y = \cot x$

x	$\cot x$
0	Asympt.
$\frac{\pi}{4}$	1
$\frac{\pi}{2}$	0
$\frac{3\pi}{4}$	-1
π	Asympt.

Plot $y = 3\tan(2x) + 1$

$y = a\tan(bx) + d$

period is $\frac{\pi}{b}$

x	$\tan x$
$-\frac{\pi}{2}$	undef.
$-\frac{\pi}{4}$	-1
0	0
$\frac{\pi}{4}$	1
$\frac{\pi}{2}$	undef.

The period is $\frac{\pi}{2} = \frac{\pi}{2}$

x	$2x$
$-\frac{\pi}{4}$	$-\frac{\pi}{2}$
$-\frac{\pi}{8}$	$-\frac{\pi}{4}$
0	0
$\frac{\pi}{8}$	$\frac{\pi}{4}$
$\frac{\pi}{4}$	$\frac{\pi}{2}$

Plot $y = 3\tan(2x) + 1$

x	$\tan(2x)$	$3\tan(2x)+1$
$-\frac{\pi}{4}$	und	und ef
$-\frac{\pi}{8}$	-1	-2
0	0	1
$\frac{\pi}{8}$	1	4
$\frac{\pi}{4}$	und	und def

Plot $y = 3\tan(2x) + 1$