

6.7 Graph tan, cot, sec, csc

LT40: I can graph the tangent, cotangent, secant, cosecant functions and perform transformations of amplitude, period, phase shift, and vertical shift.

* tan and cot functions have a period of π whereas all others (sin, cos, csc and sec) have a period of 2π

tan x has asymptotes at $x = \frac{\pi}{2}n$, n is an odd integer

cot x " " $x = \pi n$, n is any integer

tan x has x -intercepts at πn , n is an integer

Ex. $\tan(-3\pi) = 0$ $n = -3$

cot x has x -intercepts at $\frac{\pi}{2}n$, n is an odd integer

