

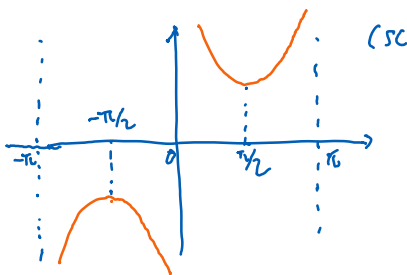
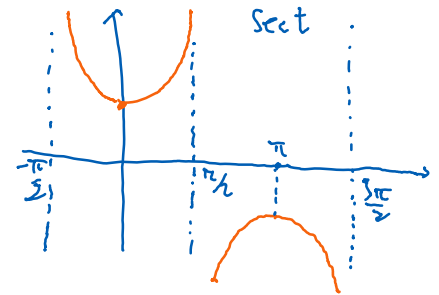
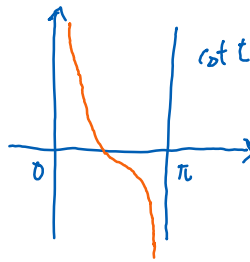
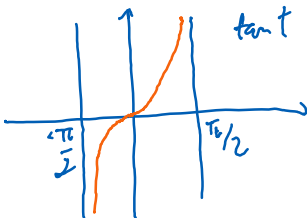
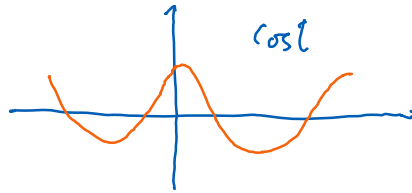
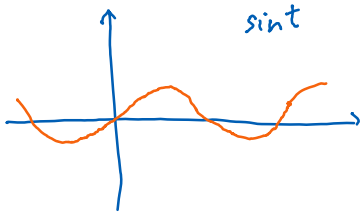
Lecture 4

Thursday, May 9, 2024 9:16 PM

Compute trigonometric functions on a calculator: make sure to use the radian mode.

Ex $\sin 1$, $\cos 20$, $\tan 30$, $\cot 40$, ...

Graph of sine, cosine, tangent, ...



$$f(x) = A \sin(\omega(x - \phi)) + B$$

↑ amplitude ↑ angular frequency ↑ phase shift vertical shift

	Domain	Range
sin	$(-\infty, \infty)$	$[-1, 1]$
cos	$(-\infty, \infty)$	$[-1, 1]$
tan	All except $\frac{\pi}{2} + k\pi, k$ integer	$(-\infty, \infty)$
cot	All except π, k integer	$(-\infty, \infty)$
sec	same as tan	$(-\infty, -1] \cup [1, \infty)$
csc	same as cot	$(-\infty, -1] \cup [1, \infty)$

Inverse functions

