Differentation

f(x)	f'(x)
sin x	cos x
cos x	- sin x
tan x	$\sec^2 x$
cosec x	- cosec x cot x
sec x	sec x tan x
cot x	$-\csc^2 x$
ln x	1 / x

Trig Identitys

cosec x	1 / sin x
sec x	1 / cos x
cot x	1 / tan x
$\cos^2 x + \sin^2 x$	1
$\sec^2 x$	$1 + \tan^2 x$
$\csc^2 x$	$1 + \cot^2 x$

Inverse a function

1. Replace f(x) with y

2. Rearrange for x

3. Replace x with $f^{-1}(x)$ and y with x

4. Swap the domain and range of the function

Differentitation rules

If y = f(u) and u = g(x)	dy/dx = dy/du x du/dx
If y = u(x)v(x)	dy/dx = u(dv/dx) + v(du/dx)
If y = u(x)/v(x)	dy/dx =