$x^x \longrightarrow x^x(1+\log x)$

$f(x)$	$f'(x)$
x^n	nx^{n-1}
constant	0
$\sqrt{x}$	$\frac{1}{2\sqrt{x}}$
$\log x$	$\frac{1}{x}$
e^x	e^x
a^x	$a^x . \log a$
$\frac{1}{x}$	$\frac{-1}{x^2}$
$\frac{1}{x^n}$	$\frac{-n}{x^{n+1}}$

$\sin x$	$\cos x$
$\cos x$	$-\sin x$
$\tan x$	$\sec^2 x$
$\cot x$	$-\operatorname{cosec}^2 x$
$\sec x$	$\sec x . \tan x$
$\operatorname{cosec} x$	$-\operatorname{cosec} x . \cot x$

x^n	$\frac{x^{n+1}}{n+1}$
$\frac{1}{x}$	$\log x$
e^x	e^x
a^x	$\frac{a^x}{\log a}$
$\frac{1}{x^2}$	$\frac{-1}{x}$
$\log x$	$x(\log x - 1)$

$\sin x$	$-\cos x$
$\cos x$	$\sin x$
$\sec^2 x$	$\tan x$
$\operatorname{cosec}^2 x$	$-\cot x$
$\sec x \cdot \tan x$	$\sec x$
$\operatorname{cosec} x \cdot \cot x$	$-\operatorname{cosec} x$