Afleiður nokkurra falla

$f(x)=x^n$	$f'(x)=nx^{n-1}$
$f(x)=\sqrt{x}$	$f'(x)=\frac{1}{2\sqrt{x}}$
$f(x)=\sin(x)$	$f'(x)=\cos(x)$
$f(x)=\cos(x)$	$f'(x)=-\sin(x)$
$f(x)=\tan(x)$	$f'(x)=1+\tan^2(x)$
$f(x)=\tan(x)$	$f'(x)=\frac{1}{\cos^2(x)}$
$f(x)=\cot(x)$	$f'(x)=-(1+\cot^2(x))$
$f(x)=\cot(x)$	$f'(x)=\frac{-1}{\sin^2(x)}$
$f(x)=\ln(x)$	$f'(x)=\frac{1}{x}$
$f(x)=\log_a(x)$	$f'(x)=\frac{1}{x\cdot\ln(a)}$
$f(x)=e^x$	$f'(x)=e^x$
$f(x)=a^x$	$f'(x)=a^x\ln(a)$

Diffrunarreglur

$y=k\cdot f(x)$	$y'=k\cdot f'(x)$
$y=f(x)+g(x)$	$y'=f'(x)+g'(x)$
$y=f(x)\cdot g(x)$	$y'=f'(x)\cdot g(x)+f(x)\cdot g'(x)$
$y=\frac{f(x)}{g(x)}$	$y'=\frac{f'(x)g(x)-f(x)g'(x)}{g^2(x)}$
$y=f(g(x))$	$y'=f'(g(x))\cdot g'(x)$

Reglur um diffur

$d(f\cdot g)=df\cdot g+f\cdot dg$	$d\left(\frac{f}{g}\right)=\frac{df\cdot g-f\cdot dg}{g^2}$
$d(f\pm g)=df\pm dg$	$d(f(g(x)))=f'(g(x))\cdot dg(x)$

Línuleg nálgun

$$l(x)=f(x_0)+f'(x_0)(x-x_0)$$