Wiskunde: calculus en lineaire algebra

Afgeleiden

f(x)	f'(x)	f(x)	f'(x)
С	0	sin x	COS X
X	1	COS X	— sin <i>x</i>
x ^a	$a.x^{a-1}$	tan x	$sec^2 x$
\sqrt{X}	$\frac{1}{2\sqrt{x}}$	cot x	$-\csc^2 x$
e ^x	e ^x	Bgsin <i>x</i>	$\frac{1}{\sqrt{1-x^2}}$
a ^x	<i>a</i> ^x . In <i>a</i>	Bgcos x	$-\frac{1}{\sqrt{1-x^2}}$
ln x	$\frac{1}{x}$	Bgtan x	$\frac{1}{1+x^2}$
log _a x	$\frac{1}{x \cdot \ln a}$	Bgcot <i>x</i>	$-\frac{1}{1+x^2}$

Integralen

$$\int x^{a} dx = \frac{x^{a+1}}{a+1} + c \quad (a \neq -1)$$

$$\int \frac{1}{x} dx = \ln|x| + c$$

$$\int a^{x} dx = \frac{a^{x}}{\ln a} + c \quad (a \neq 1)$$

$$\int e^{x} dx = e^{x} + c$$

$$\int \sin x dx = -\cos x + c$$

$$\int \cos x dx = \sin x + c$$

$$\int \csc^{2} x dx = \tan x + c$$

$$\int \frac{1}{1+x^{2}} dx = \operatorname{Bgtan} x + c$$

$$\int \frac{1}{\sqrt{1-x^{2}}} dx = \operatorname{Bgsin} x + c$$