

OpenOffice WRITER: Formule

Tabella di riferimento per la scrittura di formule usando l'editor matematico di OpenOffice

Operatori Unari/Binari

Comando	Risultato
+1	+1
-1	-1
+-1	± 1
neg 1	∓ 1
neg a	$\neg a$
a + b	$a + b$
a cdot b	$a \cdot b$
a times b	$a \times b$
a * b	$a * b$
a and b	$a \wedge b$
a - b	$a - b$
a over b	$\frac{a}{b}$
a div b	$a \div b$
a / b	a / b
a or b	$a \vee b$
a circ b	$a \circ b$

Operatori Relazionali

Comando	Risultato
a = b	$a = b$
a <> b	$a \neq b$
a approx 2	$a \approx 2$
a divides b	$a b$
a ndivides b	$a \nmid b$
a < 2	$a < 2$
a > 2	$a > 2$
a simeq b	$a \simeq b$
a parallel b	$a \parallel b$
a ortho b	$a \perp b$
a leslant b	$a \leq b$
a geslant b	$a \geq b$
a sim b	$a \sim b$
a equiv b	$a \equiv b$
a <= b	$a \leq b$
a >= b	$a \geq b$
a prop b	$a \propto b$
a toward b	$a \rightarrow b$
a dlarrow b	$a \leftarrow b$
a dlrarrow b	$a \leftrightarrow b$
a drarrow b	$a \Rightarrow b$

Insiemi

<i>Comando</i>	<i>Risultato</i>
a in b	$a \in b$
a notin b	$a \notin b$
a owns b	$a \ni b$
emptyset	\emptyset
a intersection b	$a \cap b$
a union b	$a \cup b$
a setminus b	$a \setminus b$
a slash b	a / b
aleph	\aleph
a subset b	$a \subset b$
a subseteq b	$a \subseteq b$
a supset b	$a \supset b$
a supseteq b	$a \supseteq b$
a nsubset b	$a \not\subset b$
a nsubseteq b	$a \not\subseteq b$
a nsupset b	$a \not\supset b$
a nsupseteq b	$a \not\supseteq b$
setN	\mathbb{N}
setZ	\mathbb{Z}
setQ	\mathbb{Q}
setR	\mathbb{R}
setC	\mathbb{C}

Funzioni

Comando	Risultato
func $e^{\{a\}}$	e^a
ln(a)	$\ln(a)$
exp(a)	$\exp(a)$
log(a)	$\log(a)$
$a^{\{b\}}$	a^b
sin(a)	$\sin(a)$
cos(a)	$\cos(a)$
tan(a)	$\tan(a)$
cot(a)	$\cot(a)$
sqrt{a}	\sqrt{a}
arcsin(a)	$\arcsin(a)$
arccos(a)	$\arccos(a)$
arctan(a)	$\arctan(a)$
arccot(a)	$\operatorname{arccot}(a)$
nroot{a}{b}	$\sqrt[b]{a}$
sinh(a)	$\sinh(a)$
cosh(a)	$\cosh(a)$
tanh(a)	$\tanh(a)$
coth(a)	$\operatorname{coth}(a)$
abs{a}	$ a $
arsinh(a)	$\operatorname{arsinh}(a)$
arcosh(a)	$\operatorname{arcosh}(a)$
artanh(a)	$\operatorname{artanh}(a)$
arcoth(a)	$\operatorname{arcoth}(a)$
fact(a)	$a!$

Operatori

Comando	Risultato
Lim(a)	$\lim a$
sum(a)	$\sum a$
prod(a)	$\prod a$
coprod(a)	$\coprod a$
int from {r_0} to {r_t} a	$\int_{r_0}^{r_t} a$
int{a}	$\int a$
iint{a}	$\iint a$
iiint{a}	$\iiint a$
sum from{3}b	$\sum_3 b$
lint a	$\oint a$
llint a	$\oiint a$
lllint a	$\oiiint a$
prod to{3} r	$\prod_3 r$

Attributi

Comando	Risultato
acute a	á
grave a	à
check a	ǎ
breve a	ă
circle a	â
vec a	→a
tilde a	ã
hat a	â
bar a	ā
dot a	ȃ
widevec abc	→abc
widetilde abc	~abc
widehat abc	̂abc
ddot	¨
overline abc	¯abc
Underline abc	<u>abc</u>
overstrike acb	⌘acb
dddot a	˙˙˙a
phantom a	
bold a	a
ital a	<i>a</i>
size 16 qv	qv
font sans qv	qv
font serif qv	qv
font fixed qv	qv
color cyan qv	qv
color yellow qv	qv
color green qv	qv
color blue qv	qv
color white qv	qv
color red qv	qv
color green X qv	X qv
color green {X qv}	X qv

Altri

Comando	Risultato
infinity	∞
partial	∂
nabla	∇
exists	\exists
forall	\forall
hbar	$\hbar a$
lambdabar	$\bar{\lambda}$
re	\Re
im	\Im
wp	\wp
leftarrow	\leftarrow
rightarrow	\rightarrow
uparrow	\uparrow
downarrow	\downarrow
dotslow	\dots
dotsaxis	\dots
dotsvert	\vdots
dotsup	$\dot{\cdot}$
dottdown	$\ddot{\cdot}$

Esempi

Risultato	Comando
$1 + 2 = 3$	<code>1 + 2 = 3</code>
$\frac{(1+2)}{(3+4)}$	<code>(1 + 2) over (3 + 4)</code>
$\frac{1+2}{3+4}$	<code>{1 + 2} over {3 + 4}</code>

$\frac{\{1+2\}}{\{3+4\}}$	lbrace 1 + 2 rbrace over lbrace 3 + 4 rbrace
$\frac{\frac{1}{5}+4}{5+\frac{4+1}{3+3+1}}$	{{1 over 5} +4} over {5+{4+1}over{3+3+1}}
2^3	2^3
$5^{(1+3+3^2)}$	5^(1+3+3^2)
2_3	2_3
$\left(\frac{1}{2}\right)_\alpha + 4_3$	(1 over 2)_%alpha +4_3
$(123)2$	2 lsub (123)
$2_{(123)}$	2 rsub (123)
$(123)2$	2 lsup (123)
$2^{(123)}$	2 rsup (123)
${}^{209}\text{Bi} + {}^{58}\text{fe} \rightarrow {}^{266}_{109}\text{Mt} + {}^1_0\text{n}$	Bi lsup{209}+fe lsup{58} toward Mt lsup{266}lsub{109} +n lsup {1}
$2-4*3_{(123)}$	{2-4*3} csub (123)

$+18 \overset{\textit{plus}}{-} \underbrace{(1+2+3+4)}_{\textit{minus}}$	+18 csup (plus) - (1+2+3+4) csub {minus}
$\underbrace{+18}_{\textit{plus}} - \underbrace{(1+2+3+4)}_{\textit{minus}}$	+ 18 underbrace plus - (1 + 2 + 3 + 4) underbrace minus
$\overbrace{+18}^{\textit{plus}} - \overbrace{(1+2+3+4)}^{\textit{minus}}$	+ 18 overbrace plus - (1 + 2 + 3 + 4) overbrace minus
$(1+2-2 \cdot \left(\frac{2}{2-1}\right))$	(1+2 - 2 cdot (2 over (2 - 1)))
$\left(1+2-2 \cdot \left(\frac{2}{2-1}\right)\right)$	left (1+2-2 cdot left (2 over {2-1} right) right)
$\{a^2+b^2=c^2\}$	left lbrace a^2+b^2=c^2 right rbrace

Caratteri speciali

In molte equazioni oltre ai normali caratteri dell'alfabeto si usano simboli. Durante l'inserimento di una formula è possibile usare l'icona "sigma" per attivare il menù dei caratteri speciali. In alternativa è possibile inserire i caratteri speciali mettendo il simbolo %immediatamente seguito dal nome del simbolo desiderato, per esempio %SIGMA produce Σ e %mu produce μ

$\int_0^{\infty} \frac{a^2}{3} = ?$	int from {0} to {infinity}{a^2 over 3} = "?"
$\textit{sgn}(\sigma) \cdot \sum_{\Sigma \in \Phi} \frac{1}{1 - \aleph_{\sigma}^2}$	sgn (%sigma) cdot sum from {%SIGMA in %PHI}{1 over {1 - aleph_%sigma^2}}
$\prod_{i=1}^{i=100} \frac{(x_i+1) \cdot x_i^3}{x_i^2-1} = ?$	prod from {i=1} to {i=100}{{ (x_i+1) cdot x_i^3 } over { x_i^2 - 1 } } = "?"
$5^{(1+3+3^2)}$	5^(1+3+3^2)

Vettori e Matrici

Per creare vettori e matrici si usano i comandi 'stack' e 'matrix' rispettivamente. Questi comandi usano il simbolo # (chiamato hash) per indicare gli elementi, mentre ## indica un ritorno a capo. Un elemento vuoto è generato dalle parentesi graffe.

$\begin{pmatrix} A \\ B \\ a+b=c \end{pmatrix}$	left (stack {A # B # a+b=c } right)
$\begin{pmatrix} 1 \\ 2 \end{pmatrix} + \begin{pmatrix} 2 \\ 3 \end{pmatrix} + \begin{pmatrix} 3 \\ 1 \end{pmatrix}$	left(stack {alignr 1 # 2 } right) + left(stack { 2 # 3 } right) + left(stack { 3 # 1 } right)
$\begin{pmatrix} 1 & 2 \\ 2 & 3 \end{pmatrix} = x$	left(matrix { 1 # 2 ## 2 # 3 } right) = x
$\begin{vmatrix} a & b \\ c & \end{vmatrix} = y$	abs matrix { a # b ## c # {} } = y
$\begin{vmatrix} \frac{1}{2} & b \\ c & d \end{vmatrix} = z$	abs matrix { {1 over 2} # b ## c # d } = z
$a+b=C$	size -2 { a+b} = size +10 {C}
$abcdefghijkl M noprstuv$	color black {abcdefghil} color blue M color black {noprstuv}
$\begin{pmatrix} 1 & 2 \\ 3 & 4 \end{pmatrix} = x$	left(matrix { { color red 1 } # { color blue 2 } ## {color green 3} # 4 } right) = color black {x}
bold newline	bold {"bold"} newline "newline"
$a=12$ $b+c+d=b^2-2$	stack{ alignr a ={} # alignr b+c+d ={}} stack{ alignl 12 # alignl b^2-2 }
$5^{(1+3+3^2)}$	5^(1+3+3^2)
Alcuni esempi più complessi	
$\sqrt[4]{\sqrt[3]{\frac{1}{3}+x^2}}$	nroot{4}{nroot {3} {1 over 3+x^2} }

$\ R_\alpha\ = \begin{vmatrix} \sin \alpha & -\cos \alpha \\ \cos \alpha & \sin \alpha \end{vmatrix}$	$\begin{matrix} \text{ldline} & R_\alpha & \text{rdline} \\ =\text{left} & \text{ldline} & \text{matrix} \{ \sin \\ \alpha & \# & -\cos \alpha \\ \# & \# & \cos \alpha \\ \# & \# & \sin \alpha \} \\ \text{right} & \text{rdline} & \end{matrix}$
$\frac{\partial}{\partial t} x(t) + a(x) = \lambda \cdot F(x, t)$	$\{\text{partial over } \{\text{partial } t\} x(t)\} + a(x) = \lambda \cdot \text{cdot } F(x, t)$
$\begin{matrix} a_{11} & a_{12} & \cdots & a_{1m} \\ a_{21} & a_{22} & \cdots & a_{2m} \\ \vdots & \vdots & \ddots & \vdots \\ a_{n1} & a_{n2} & \cdots & a_{nm} \end{matrix}$	$\text{matrix}\{ \\ a_{11} \# a_{12} \# \text{dotsaxis} \# a_{1m} \} \# \# \\ a_{21} \# a_{22} \# \text{dotsaxis} \# a_{2m} \} \# \# \\ \text{dotsvert} \# \text{dotsvert} \# \text{dotsdown} \# \text{dotsvert} \# \# \\ a_{n1} \# a_{n2} \# \text{dotsaxis} \# a_{nm} \} \\ \}$
$\sqrt{1-x} = 1 - \frac{x}{2} - \frac{1}{2} \frac{x^2}{4} - \dots$	$\text{sqrt}\{1-x\} = 1 - x \text{ over } 2 - 1 \text{ over } 2 x^2 \text{ over } 4 - \text{dotslow}$
$t = \int_{r_0}^{r_1} \frac{dr}{\sqrt{\frac{2}{my} [E_{cm} - V(r)] - \frac{l^2}{my^2 r^2}}}$	$t = \text{size} +6 \text{int from } \{r_0\} \text{ to } \{r_1\} \text{ size} -8 \{dr \text{ over } \text{sqrt} \{2 \text{ over } \%my [E_{cm} - V(r)] - l^2 \text{ over } \{\%my^2 r^2\} \} \}$
$\binom{n}{k} = \frac{n!}{k! \cdot (n-k)!}$	$\text{left} (\text{stack}\{n \# k\} \text{right}) = \text{fact } n \text{ over } \{\text{fact } k \text{ cdot fact } (n-k)\}$
$f(x) = \begin{cases} 1 & x \in \mathbb{Z} \\ \frac{1}{x} & x \in \mathbb{Q} \\ 0 & x \in \mathbb{R} \end{cases}$	$f(x) = \text{left} \text{lbrace} \text{matrix} \{1 \# x \text{ in setZ} \# \# 1 \text{ over } x \# x \text{ in setQ} \# \# 0 \# x \text{ in setR} \} \text{right none}$
$[a; a_0, a_1, a_2, \dots] = a + \frac{1}{a_0 + \frac{1}{a_1 + \frac{1}{a_2 + \dots}}}$	$[a; a_0, a_1, a_2, \text{dotslow}] = a + \{1 \text{ over } \{a_0 + 1 \text{ over } \{a_1 + \{1 \text{ over } \{a_2 + 1 \text{ over } \text{dotslow}\}\}\}\}$