

Arithmetic Operators		Lists	
$x + y$	$x + y$	<code>list(x, y, z)</code>	x, y, z
$x - y$	$x - y$	Relations	
$x * y$	xy	$x == y$	$x = y$
x/y	x/y	$x != y$	$x \neq y$
$x \%+-\% y$	$x \pm y$	$x < y$	$x < y$
$x \%/\% y$	$x \div y$	$x \leq y$	$x \leq y$
$x \%*\% y$	$x \times y$	$x > y$	$x > y$
$x \%. \% y$	$x \cdot y$	$x \geq y$	$x \geq y$
$-x$	$-x$	$x \% \sim \sim \% y$	$x \approx y$
$+x$	$+x$	$x \% = \sim \% y$	$x \equiv y$
Sub/Superscripts		$x \% == \% y$	$x \equiv y$
$x[i]$	x_i	$x \% \text{prop} \% y$	$x \propto y$
x^2	x^2	$x \% \sim \% y$	$x \sim y$
Juxtaposition		Typeface	
$x * y$	xy	<code>plain(x)</code>	x
<code>paste(x, y, z)</code>	xyz	<code>italic(x)</code>	x
Radicals		<code>bold(x)</code>	\mathbf{x}
<code>sqrt(x)</code>	\sqrt{x}	<code>bolditalic(x)</code>	\mathbf{x}
<code>sqrt(x, y)</code>	$\sqrt[y]{x}$	<code>underline(x)</code>	\underline{x}

Ellipsis		Arrows	
list(x[1], ..., x[n])	x_1, \dots, x_n	x %<->% y	$x \leftrightarrow y$
x[1] + ... + x[n]	$x_1 + \dots + x_n$	x %>% y	$x \rightarrow y$
list(x[1], cdots, x[n])	x_1, \dots, x_n	x %<-% y	$x \leftarrow y$
x[1] + ldots + x[n]	$x_1 + \dots + x_n$	x %up% y	$x \uparrow y$
Set Relations		x %down% y	$x \downarrow y$
x %subset% y	$x \subset y$	x %<=>% y	$x \Leftrightarrow y$
x %subseteq% y	$x \subseteq y$	x %=>% y	$x \Rightarrow y$
x %supset% y	$x \supset y$	x %<=% y	$x \Leftarrow y$
x %supseteq% y	$x \supseteq y$	x %dblup% y	$x \Uparrow y$
x %notsubset% y	$x \not\subset y$	x %dbldown% y	$x \Downarrow y$
x %in% y	$x \in y$	Symbolic Names	
x %notin% y	$x \notin y$	Alpha - Omega	$A - \Omega$
Accents		alpha - omega	$\alpha - \omega$
hat(x)	\hat{x}	phi1 + sigma1	$\phi + \varsigma$
tilde(x)	\tilde{x}	Upsilon1	Υ
ring(x)	$\overset{\circ}{x}$	infinity	∞
bar(xy)	\overline{xy}	32 * degree	32°
widehat(xy)	\widehat{xy}	60 * minute	$60'$
widetilde(xy)	\widetilde{xy}	30 * second	$30''$

Style	
<code>displaystyle(x)</code>	x
<code>textstyle(x)</code>	x
<code>scriptstyle(x)</code>	x
<code>scriptscriptstyle(x)</code>	x
Spacing	
<code>$x \sim y$</code>	$x \ y$

<code>$x + + y$</code>	$x + \ +y$
<code>$x + \over{1, }$</code>	$x + \overset{1}{-}$
Fractions	
<code>$\frac{x}{y}$</code>	$\frac{x}{y}$
<code>$\over{x}{y}$</code>	$\frac{x}{y}$
<code>$\atop{x}{y}$</code>	$\frac{x}{y}$

Big Operators	
sum(x[i], i = 1, n)	$\sum_1^n x_i$
prod(plain(P)(X == x), x)	$\prod_x P(X = x)$
integral(f(x) * dx, a, b)	$\int_a^b f(x) dx$
union(A[i], i == 1, n)	$\bigcup_{i=1}^n A_i$
intersect(A[i], i == 1, n)	$\bigcap_{i=1}^n A_i$
lim(f(x), x %->% 0)	$\lim_{x \rightarrow 0} f(x)$
min(g(x), x >= 0)	$\min_{x \geq 0} g(x)$
inf(S)	$\inf S$
sup(S)	$\sup S$

Grouping	
$(x + y) * z$	$(x + y)z$
$x^y + z$	$x^y + z$
$x^{(y + z)}$	$x^{(y+z)}$
$x^{\{y + z\}}$	x^{y+z}
<code>group("(", list(a, b), ")")</code>	(a, b]
<code>bgroup("(", atop(x, y), ")")</code>	$\begin{pmatrix} x \\ y \end{pmatrix}$
<code>group(lceil, x, rceil)</code>	$\lceil x \rceil$
<code>group(lfloor, x, rfloor)</code>	$\lfloor x \rfloor$
<code>group(" ", x, " ")</code>	$ x $