数学符号篇

Symbol		Speak
+	or	plus positive
-	or	minus negative
× ·	or	multiplies times
÷ /		divided by
±		plus or minus
=	or	equals equal to
≠	or	does not equal not equal
<		less than
≪		much less than
>		greater than
≫		much greater than
(	or	open parenthesis left parenthesis
)	or	closed parenthesis right parenthesis
[	or	open bracket left bracket
]	or	closed bracket right bracket
{	or	open brace left brace
}	or	closed brace right brace
$\|a\|$		absolute value of a
a'		a prime
a''		a double prime
a^n	or	a superscript n a to the n

$\overline{a}$		a bar
a^*	or	a star a super asterisk
a_n	or	a subscript n a sub n
$\sqrt{a}$		square root of a
$\sqrt[3]{a}$		cube root of a
$\sqrt[n]{a}$		nth root of a
$\mathrm{d}/\mathrm{d}x$	or or	d by $\mathrm{d}\,x$ d by $\mathrm{d}\,x$ the derivative with respect to x
$\partial/\partial x$	or	the partial derivative with respect to x partial over partial x
a°		a degrees
$\therefore$		therefore
$\because$	or	since because
$\cdots$		dot, dot, dot
:		is to
$\sim$		tilde Example: $\tilde{n}$ is read n tilde.
$\rightarrow$		Arrow to the right
$\uparrow$	or	Arrow pointing up Upward arrow
$\downarrow$		Arrow pointing down Downward arrow
$\subset$	or	Contained in Subset of
$\supset$		contains
$\Rightarrow$		implies
$\Leftrightarrow$		equivalent
$\propto$		proportional to
#	or or	sharp pound sign number sign

数学表达式篇

Expression	Speak
$a-(b+c)$	*a* minus the difference *b* minus *c*
$a-(-b-c)$	*a* minus the quantity minus *b* minus *c*
$a-(b+c)-d$	*a* minus the quantity *b* plus *c* end of quantity minus *d*
ab	*a b* or *a* times *b*
$a\cdot -b$	*a* times minus *b*
$a(b+c)$	*a* times the sum *b* plus *c*
$ab-c$	*a b* minus *c*
$\frac{1}{3}$	one third or one over three
$\frac{a+b}{c}+d$	the quantity *a* plus *b* over *c*, that fraction plus *d*
$\frac{x^2}{a^2}+\frac{y^2}{b^2}=1$	the fraction *x* squared over *a* squared plus the fraction *y* squared over *b* squared equals 1
$ax^2+bxy+cy^2+dx+ey+f=0$	*a x* squared plus *b x y* squared plus *d x* plus *e y* plus f equals zero
a^x	*a* to the *x* or *a* raised to the *x* power
$\log_b a$	log to the base *b* of *a*
$\log_{10} 3\cdot 4$	log to the base 10 of the product 3 times 4
$\log_e \frac{2}{5}$	log to the base *e* of the fraction 2 over 5 or log to the base *e* of the ratio 2 over 5
$\ln x$	the natural log of *x* or l n of *x*
$a_1+a_2+...+a_n$	*a* sub 1 plus *a* sub 2 plus dot dot dot plus *a* sub *n*
$p(x)$	*p* of *x*
$p(x)=3x^2+2x-4$	*p* of *x* equals 3 *x* squared plus 2 *x* minus 4
$q(x)=x^3-8$	*q* of *x* equals *x* cubed minus 8
$p(x)=a_0x^n+a_1x^{n-1}+\ldots+a_{n-1}x+a_n$	*p* of *x* equals *a* sub zero *x* to the *n* plus *a* sub 1 *x* to the *n* minus 1plus dot dot dot plus *a* sub *n* minus 1 *x* plus *a* sub *n*
σ_x	sigma sub *x*

σ_{xy}	sigma sub *x y*
$\bar{x}$	*x* bar
μ	mu
μ_2	mu sub two
μ_r	mu sub *r*
β_1	beta sub one
β_2	beta sub two
η	eta
Q_1	Capital *q* sub one
Q_3	Capital *q* sub three
$E(x)$	Capital *e* of *x*
$j_{(p)}$	*j* sub *p* in parentheses
$\sum_{1}^{N}$	summation from one to capital *n*
$\sum_{i=1}^{\infty} x_i$	summation from *i* equals one to infinity of *x* sub *i*
$\prod$	product
$\prod_{1}^{n}$	product from one to *n*
$\prod_{i=1}^{\infty} y_i$	product from *i* equals one to infinity of *y* sub *i*
$\lim_{x \to a} y = b$	limit as *x* approaches *a* of *y* equals *b*
$f(x)$	*f* of *x*
$\lim_{x \to a-} f(x)$	limit as *x* approaches *a* minus of *f* of *x*
Δy	capital delta *y*
∂y	partial *y*

$\frac{dx}{dt}$	derivative with respect to *t* of *x*
$y^{'}$	*y* prime
$f^{'}(x)$	*f* prime of *x*
$\frac{d^n y}{dx^n}$	n^{th} derivative with respect to *x* of *y*
$y^{(n)}$	*y* to the n^{th} prime
$p^{'}, \dot{p}$	*p* prime or first derivative of *p*
$p^{''}, \ddot{p}$	*p* double prime or second derivative of *p*
$\frac{\partial u}{\partial x}$	partial derivative of *u* with respect to *x* or partial *u* over partial *x*
$\int f(x)dx$	integral of *f* of *x* d *x*
$\begin{bmatrix} 2 & 7 \\ 3 & 10 \end{bmatrix}$	two by two matrix first row two seven second row three ten
a_{ij}	*a* sub *i j*