

## 维基百科

# 帮助:数学公式

---

这里所使用的 $\text{L}^{\text{A}}\text{T}_{\text{E}}\text{X}$ 版本是 $\text{A}^{\text{M}}\text{S}-\text{L}^{\text{A}}\text{T}_{\text{E}}\text{X}$ 标记的一个子集， $\text{L}^{\text{A}}\text{T}_{\text{E}}\text{X}$ 标记的一个超集，用于数学公式。只有 $\text{T}_{\text{E}}\text{X}$ 语言的有限的一部分得到支持。<sup>[a]</sup>

默认情况下会生成含不可见MathML的SVG图像。更老的PNG图像可通过用户设置来设置。<sup>[b]</sup>在像Firefox这样的浏览器上面可以通过安装扩展 (<https://addons.mozilla.org/firefox/addon/native-mathml>) 来使用MathML；详情请参阅mw:Extension:Math的扩展主页。[MathJax](#)的客户端不再被支持。

数学记号应该放在 $\langle \text{math} \rangle$ 与 $\langle / \text{math} \rangle$ 的标记之间。更详细的内容，或者关于 $\text{T}_{\text{E}}\text{X}$ 显示的讨论或者您有任何建议，请到[英文维基百科的相关页面](#)。

# 目录

## 函数、符号及特殊字符

[声调/变音符号](#)

[标准函数](#)

[界限](#)

[投射](#)

[微分及导数](#)

[类字母符号及常数](#)

[模算数](#)

[根号](#)

[运算符](#)

[集合](#)

[关系符号](#)

[几何符号](#)

[逻辑符号](#)

[箭头](#)

[特殊符号](#)

[未排序](#)

## 上标、下标及积分等

## 分数、矩阵和多行列式

## 字体

[混合字体](#)

## 括号

## 空格

## 颜色

## 小型数学公式

## 注释

## 参考资料

## 外部链接

# 函数、符号及特殊字符

声调/变音符号	
<span><span>    {\dot {a}}  </span></span> , <span><span>    {\ddot {a}}  </span></span> , <span><span>    {\acute {a}}  </span></span> , <span><span>    {\grave {a}}  </span></span>	<span><span>    a ˙<!-- ˙ --> , a ¨<!-- ¨ --> , a ́<!-- ´ --> , a ̀<!-- ` --> </span></span>
<span><span>    {\check {a}}  </span></span> , <span><span>    {\breve {a}}  </span></span> , <span><span>    {\tilde {a}}  </span></span> , <span><span>    {\bar {a}}  </span></span>	<span><span>    a ˇ<!-- ˇ --> , a ˘<!-- ˘ --> , a ~<!-- ~ --> , a ¯<!-- ¯ --> </span></span>
<span><span>    {\hat {a}}  </span></span> , <span><span>    {\widehat {a}}  </span></span> , <span><span>    {\vec {a}}  </span></span>	<span><span>    a ^<!-- ^ --> , a ^<!-- ^ --> ¯<!-- ¯ --> , a →<!-- → --> </span></span>
标准函数	
<span><span>    {\exp _a b}  </span></span> = <span><span>     a  b     </span></span> , <span><span>    {\exp b}  </span></span> = <span><span>     e  b     </span></span> , <span><span>     10  m     </span></span>	<span><span>     exp  a   b =  a  b   , exp b =  e  b   ,  10  m     </span></span>
<span><span>    {\ln c}  </span></span> , <span><span>    {\lg d}  </span></span> = <span><span>    {\log e}  </span></span> , <span><span>    {\log _{10}f}  </span></span>	<span><span>    ln c , lg d = log e ,  log  10   f   </span></span>
<span><span>    {\sin a}  </span></span> , <span><span>    {\cos b}  </span></span> , <span><span>    {\tan c}  </span></span> , <span><span>    {\cot d}  </span></span> , <span><span>    {\sec e}  </span></span> , <span><span>    {\csc f}  </span></span>	<span><span>    sin a , cos b , tan c , cot d , sec e , csc f   </span></span>
<span><span>    {\arcsin a}  </span></span> , <span><span>    {\arccos b}  </span></span> , <span><span>    {\arctan c}  </span></span>	<span><span>    arcsin a , arccos b , arctan c   </span></span>
<span><span>    {\operatorname {arccot} d}  </span></span> , <span><span>    {\operatorname {arcsec} e}  </span></span> , <span><span>    {\operatorname {arccsc} f}  </span></span>	<span><span>    arccot d , arcsec e , arccsc f   </span></span>
<span><span>    {\sinh a}  </span></span> , <span><span>    {\cosh b}  </span></span> , <span><span>    {\tanh c}  </span></span> , <span><span>    {\coth d}  </span></span>	<span><span>    sinh a , cosh b , tanh c , coth d   </span></span>
<span><span>    {\operatorname {sh} k}  </span></span> , <span><span>    {\operatorname {ch} l}  </span></span> , <span><span>    {\operatorname {th} m}  </span></span> , <span><span>    {\operatorname {coth} n}  </span></span>	<span><span>    sh k , ch l , th m , coth n   </span></span>
<span><span>    {\operatorname {argsh} o}  </span></span> , <span><span>    {\operatorname {argch} p}  </span></span> , <span><span>    {\operatorname {argth} q}  </span></span>	<span><span>    argsh o , argch p , argth q   </span></span>
<span><span>    {\operatorname {sgn} r}  </span></span> , <span><span>    {\left\  s \right\ }  </span></span>	<span><span>    sgn r ,   s     </span></span>
<span><span>    {\min (x,y)}  </span></span> , <span><span>    {\max (x,y)}  </span></span>	<span><span>    min ( x , y ) , max ( x , y )   </span></span>
界限	
<span><span>    {\min x}  </span></span> , <span><span>    {\max y}  </span></span> , <span><span>    {\inf s}  </span></span> , <span><span>    {\sup t}  </span></span>	<span><span>    min x , max y , inf s , sup t   </span></span>
<span><span>    {\lim u}  </span></span> , <span><span>    {\liminf v}  </span></span> , <span><span>    {\limsup w}  </span></span>	<span><span>    lim u , lim inf v , lim sup w   </span></span>
<span><span>    {\dim p}  </span></span> , <span><span>    {\deg q}  </span></span> , <span><span>    {\det m}  </span></span> , <span><span>    {\ker \phi}  </span></span>	<span><span>    dim p , deg q , det m , ker ϕ<!-- ϕ --> </span></span>
投射	
<span><span>    {\Pr j}  </span></span> , <span><span>    {\hom l}  </span></span> , <span><span>    {\lVert z \rVert}  </span></span> , <span><span>    {\arg z}  </span></span>	<span><span>    Pr j , hom l , ‖ z ‖ , arg z   </span></span>
微分及导数	
<span><span>    {\mathrm {d} t}  </span></span> , <span><span>    {\partial t}  </span></span> , <span><span>    {\nabla \psi}  </span></span>	<span><span>    d t , d t , ∂<!-- ∂ --> t , ∇<!-- ∇ --> ψ<!-- ψ --> </span></span>
<span><span>    {\mathrm {d} y\mathrm {d} x}  </span></span> , <span><span>    {\mathrm {d} y\mathrm {d} x}  </span></span> , <span><span>    {\frac {\mathrm {d} y}{\mathrm {d} x}}  </span></span> , <span><span>    {\frac {\mathrm {d} y}{\mathrm {d} x}}  </span></span> , <span><span>    {\frac {\partial ^2}{\partial x_1\partial x_2}}y  </span></span>	<span><span>    d y  /  d x , d y  /  d x ,   d y   d x   ,   d y   d x   ,   ∂<!-- ∂ -->  2     ∂<!-- ∂ -->  x  1   ∂<!-- ∂ -->  x  2     } y   </span></span>
<span><span>    {\prime }  </span></span> , <span><span>    {\backprime }  </span></span> , <span><span>    f ^<!-- ^ -->{\prime }  </span></span> , <span><span>    f ′<!-- ′ --> </span></span> , <span><span>    f ′<!-- ′ --> ′<!-- ′ --> </span></span> , <span><span>    f ^<!-- ^ -->{(3)}  </span></span> , <span><span>    {\dot y}  </span></span> , <span><span>    {\ddot t}  </span></span> <span><span>    y  </span></span>	<span><span>    ′<!-- ′ --> , ′<!-- ′ --> , f ′<!-- ′ --> , f ′<!-- ′ --> ′<!-- ′ --> ,  f  (3)   , y ˙<!-- ˙ --> ,  y ¨<!-- ¨ --> </span></span>
类字母符号及常数	

<span><span>\infty</span></span> , <span><span>\aleph</span></span> , <span><span>\complement</span></span> , <span><span>\backepsilon</span></span> , <span><span>\eth</span></span> , <span><span>\Finv</span></span> , <span><span>\hbar</span></span>	<span><span>∞</span></span> , <span><span>ℵ</span></span> , <span><span>ℭ</span></span> , <span><span>⚭</span></span> , <span><span>℔</span></span> , <span><span>⊥</span></span> , <span><span>ℏ</span></span>
<span><span>\Im</span></span> , <span><span>\imath</span></span> , <span><span>\jmath</span></span> , <span><span>\Bbbk</span></span> , <span><span>\ell</span></span> , <span><span>\mho</span></span> , <span><span>\wp</span></span> , <span><span>\Re</span></span> , <span><span>\circledS</span></span> , <span><span>\S</span></span> , <span><span>\P</span></span> , <span><span>\AA</span></span>	<span><span>ℑ</span></span> , <span><span>ı</span></span> , <span><span>ℵ</span></span> , <span><span>℔</span></span> , <span><span>ℓ</span></span> , <span><span>℧</span></span> , <span><span>℘</span></span> , <span><span>℞</span></span> , <span><span>Ⓢ</span></span> , <span><span>§</span></span> , <span><span>¶</span></span> , <span><span>Å</span></span>
模算数	
<span><span>s_k \equiv 0 \pmod{m}</span></span>	<span><span><i>s</i><sub><i>k</i></sub> ≡ 0 (mod <i>m</i>)</span></span>
<span><span>a \bmod b</span></span>	<span><span><i>a</i> mod <i>b</i></span></span>
<span><span>\gcd(m, n)</span></span> , <span><span>\operatorname{lcm}(m, n)</span></span>	<span><span>gcd(<i>m</i>, <i>n</i>)</span></span> , <span><span>lcm(<i>m</i>, <i>n</i>)</span></span>
<span><span>\mid</span></span> , <span><span>\nmid</span></span> , <span><span>\shortmid</span></span> , <span><span>\nshortmid</span></span>	<span><span> </span></span> , <span><span>⋮</span></span> , <span><span>⌋</span></span> , <span><span>⌑</span></span>
根号	
<span><span>\surd</span></span> , <span><span>\sqrt{2}</span></span> , <span><span>\sqrt[n]{}{}</span></span> , <span><span>\sqrt[3]{}{\frac{x^3+y^3}{2}}</span></span>	<span><span>√</span></span> , <span><span>√2</span></span> , <span><span>√<span><span>⁠</span><span><span></span></span><span><span>⁠</span></span></span></span>, <span><span>√<span><span>⁠</span><span><span></span></span><span><span>⁠</span></span></span><span><span>3</span></span><span><span>√<span><span>⁠</span><span><span></span></span><span><span>⁠</span></span></span><span><span><i>x</i><sup>3</sup>+<i>y</i><sup>3</sup></span></span><span><span>⁠</span><span><span></span></span><span><span>⁠</span></span><span><span>2</span></span></span></span></span></span></span></span>
运算符	
<span><span>+</span></span> , <span><span>-</span></span> , <span><span>\pm</span></span> , <span><span>\mp</span></span> , <span><span>\dotplus</span></span>	<span><span>+</span></span> , <span><span>-</span></span> , <span><span>±</span></span> , <span><span>∓</span></span> , <span><span>⊕</span></span>
<span><span>\times</span></span> , <span><span>\div</span></span> , <span><span>\divideontimes</span></span> , <span><span>/</span></span> , <span><span>\backslash</span></span>	<span><span>×</span></span> , <span><span>÷</span></span> , <span><span>⋈</span></span> , <span><span>/</span></span> , <span><span>\</span></span>
<span><span>\cdot</span></span> , <span><span>*</span></span> <span><span>\ast</span></span> , <span><span>\star</span></span> , <span><span>\circ</span></span> , <span><span>\bullet</span></span>	<span><span>⋅</span></span> , <span><span>**</span></span> , <span><span>★</span></span> , <span><span>∘</span></span> , <span><span>•</span></span>
<span><span>\boxplus</span></span> , <span><span>\boxminus</span></span> , <span><span>\boxtimes</span></span> , <span><span>\boxdot</span></span>	<span><span>⊞</span></span> , <span><span>⊟</span></span> , <span><span>⊠</span></span> , <span><span>⊡</span></span>
<span><span>\oplus</span></span> , <span><span>\ominus</span></span> , <span><span>\otimes</span></span> , <span><span>\oslash</span></span> , <span><span>\odot</span></span>	<span><span>⊕</span></span> , <span><span>⊖</span></span> , <span><span>⊗</span></span> , <span><span>⊘</span></span> , <span><span>⊙</span></span>
<span><span>\circleddash</span></span> , <span><span>\circledcirc</span></span> , <span><span>\circledast</span></span>	<span><span>⊖</span></span> , <span><span>⊙</span></span> , <span><span>⊛</span></span>
<span><span>\bigoplus</span></span> , <span><span>\bigotimes</span></span> , <span><span>\bigodot</span></span>	<span><span>⊕</span></span> , <span><span>⊗</span></span> , <span><span>⊙</span></span>
集合	
<span><span>\{ \}</span></span> , <span><span>\0 \empty \emptysetset</span></span> , <span><span>\varnothing</span></span>	<span><span>{}</span></span> , <span><span>∅</span></span> , <span><span>∅</span></span> , <span><span>∅</span></span>
<span><span>\in</span></span> , <span><span>\notin</span></span> <span><span>\not\in</span></span> , <span><span>\ni</span></span> , <span><span>\not\ni</span></span>	<span><span>∈</span></span> , <span><span>∉</span></span> , <span><span>∉</span></span> , <span><span>∋</span></span> , <span><span>⋈</span></span>
<span><span>\cap</span></span> , <span><span>\Cap</span></span> , <span><span>\sqcap</span></span> , <span><span>\bigcap</span></span>	<span><span>∩</span></span> , <span><span>⋈</span></span> , <span><span>∩</span></span> , <span><span>∩</span></span>
<span><span>\cup</span></span> , <span><span>\Cup</span></span> , <span><span>\sqcup</span></span> , <span><span>\bigcup</span></span> , <span><span>\bigsqcup</span></span> , <span><span>\uplus</span></span> , <span><span>\biguplus</span></span>	<span><span>∪</span></span> , <span><span>⋈</span></span> , <span><span>∪</span></span> , <span><span>∪</span></span> , <span><span>∪</span></span> , <span><span>⋈</span></span> , <span><span>⊕</span></span>
<span><span>\setminus</span></span> , <span><span>\smallsetminus</span></span> , <span><span>\times</span></span>	<span><span>\</span></span> , <span><span>\</span></span> , <span><span>×</span></span>
<span><span>\subset</span></span> , <span><span>\Subset</span></span> , <span><span>\sqsubset</span></span>	<span><span>⊂</span></span> , <span><span>⊆</span></span> , <span><span>⊂</span></span>
<span><span>\supset</span></span> , <span><span>\Supset</span></span> , <span><span>\sqsupset</span></span>	<span><span>⊃</span></span> , <span><span>⊇</span></span> , <span><span>⊃</span></span>
<span><span>\subseteq</span></span> , <span><span>\nsubseteq</span></span> , <span><span>\subsetneq</span></span> , <span><span>\varsubsetneq</span></span> , <span><span>\sqsubseteq</span></span>	<span><span>⊆</span></span> , <span><span>⊄</span></span> , <span><span>⊆</span></span> , <span><span>⊄</span></span> , <span><span>⊆</span></span>
<span><span>\supseteq</span></span> , <span><span>\nsupseteq</span></span> , <span><span>\supsetneq</span></span> , <span><span>\varsupsetneq</span></span> , <span><span>\sqsupseteq</span></span>	<span><span>⊇</span></span> , <span><span>⊈</span></span> , <span><span>⊇</span></span> , <span><span>⊇</span></span> , <span><span>⊇</span></span>
<span><span>\subseteqq</span></span> , <span><span>\nsubseteqq</span></span> , <span><span>\subsetneqq</span></span> , <span><span>\varsubsetneqq</span></span>	<span><span>⊆</span></span> , <span><span>⊄</span></span> , <span><span>⊆</span></span> , <span><span>⊄</span></span>
<span><span>\supseteqq</span></span> , <span><span>\nsupseteqq</span></span> , <span><span>\supsetneqq</span></span> , <span><span>\varsupsetneqq</span></span>	<span><span>⊇</span></span> , <span><span>⊈</span></span> , <span><span>⊇</span></span> , <span><span>⊇</span></span>

<https://zh.wikipedia.org/wiki/Help:数学公式> 5/19

<span>\</span> therefore, <span>\</span> because, <span>\</span> And	$\therefore, \because, \&$
<span>\</span> or <span>\</span> lor <span>\</span> vee, <span>\</span> curlyvee, <span>\</span> bigvee	$\vee, \vee, \vee, \curlyvee, \bigvee$
<span>\</span> and <span>\</span> land <span>\</span> wedge, <span>\</span> curlywedge, <span>\</span> bigwedge	$\wedge, \wedge, \wedge, \curlywedge, \bigwedge$
<span>\</span> bar{q}, <span>\</span> bar{abc}, <span>\</span> overline{q}, <span>\</span> overline{abc}, <span>\</span> lnot <span>\</span> neg, <span>\</span> not <span>\operatorname{R}</span> , <span>\</span> bot, <span>\</span> top	$\bar{q}, \overline{abc}, \bar{q}, \overline{abc},$ $\neg, \neg, \mathbf{R}, \bot, \top$
<span>\</span> vdash <span>\</span> dashv, <span>\</span> vDash, <span>\</span> Vdash, <span>\</span> models	$\vdash, \vdash, \models, \models, \models$
<span>\</span> Vvdash <span>\</span> nvdash <span>\</span> nVdash <span>\</span> nvDash <span>\</span> nVDash	$\Vdash, \nvdash, \nVdash, \nvDash, \nVDash$
<span>\</span> ulcorner <span>\</span> urcorner <span>\</span> llcorner <span>\</span> lrcorner	$\ulcorner \urcorner \llcorner \lrcorner$
箭头	
<span>\</span> Rightarrow, <span>\</span> Lleftarrow	$\Rightarrow, \Leftarrow$
<span>\</span> Rightarrow, <span>\</span> nRightarrow, <span>\</span> Longrightarrow <span>\</span> implies	$\Rightarrow, \nRightarrow, \Longrightarrow, \implies$
<span>\</span> Leftarrow, <span>\</span> nLeftarrow, <span>\</span> Longleftarrow	$\Leftarrow, \nLeftarrow, \Longleftarrow$
<span>\</span> Leftrightarrow, <span>\</span> nLeftrightarrow, <span>\</span> Longleftrightarrow <span>\</span> iff	$\Leftrightarrow, \nLeftrightarrow, \Longleftrightarrow \iff$
<span>\</span> Uparrow, <span>\</span> Downarrow, <span>\</span> Updownarrow	$\Uparrow, \Downarrow, \Updownarrow$
<span>\</span> rightarrow <span>\</span> to, <span>\</span> nrightarrow, <span>\</span> longrightarrow	$\rightarrow, \rightarrow, \nrightarrow, \longrightarrow$
<span>\</span> leftarrow <span>\</span> gets, <span>\</span> nleftarrow, <span>\</span> longleftarrow	$\leftarrow, \leftarrow, \nleftarrow, \longleftarrow$
<span>\</span> leftrightharpoon, <span>\</span> nleftrightharpoon, <span>\</span> longleftrightharpoon	$\leftrightharpoon, \nleftrightharpoon, \longleftrightharpoon$
<span>\</span> uparrow, <span>\</span> downarrow, <span>\</span> updownarrow	$\uparrow, \downarrow, \updownarrow$
<span>\</span> nearrow, <span>\</span> swarrow, <span>\</span> nwarrow, <span>\</span> searrow	$\nearrow, \swarrow, \nwarrow, \searrow$
<span>\</span> mapsto, <span>\</span> longmapsto	$\mapsto, \longmapsto$
<span>\</span> rightharpoonup <span>\</span> rightharpoondown <span>\</span> leftharpoonup <span>\</span> leftharpoondown <span>\</span> upharpoonleft <span>\</span> upharpoonright <span>\</span> downharpoonleft <span>\</span> downharpoonright <span>\</span> rightleftharpoons <span>\</span> leftrightharpoons	$\rightharpoonup, \rightharpoondown, \leftharpoonup, \leftharpoondown,$ $\upharpoonleft, \upharpoonright, \downharpoonleft, \downharpoonright,$ $\rightleftharpoons, \leftrightharpoons$
<span>\</span> curvearrowleft <span>\</span> circlearrowleft <span>\</span> Lsh <span>\</span> upuparrows <span>\</span> rightrightarrows <span>\</span> rightleftarrows <span>\</span> rightarrowtail <span>\</span> looparrowright	$\curvearrowleft, \circlearrowleft, \Lsh, \upuparrows, \rightrightarrows,$ $\rightleftarrows, \rightarrowtail, \looparrowright$
<span>\</span> curvearrowright <span>\</span> circlearrowright <span>\</span> Rsh <span>\</span> downdownarrows <span>\</span> leftleftarrows <span>\</span> leftrightharpoons <span>\</span> leftarrowtail <span>\</span> looparrowleft	$\curvearrowright, \circlearrowright, \Rsh, \downdownarrows, \leftleftarrows,$ $\leftrightharpoons, \leftarrowtail, \looparrowleft$
<span>\</span> hookrightarrow <span>\</span> hookleftarrow <span>\</span> multimap <span>\</span> leftrightsquigarrow <span>\</span> rightsquigarrow <span>\</span> twoheadrightarrow <span>\</span> twoheadleftarrow	$\hookrightarrow, \hookleftarrow, \multimap, \leftrightsquigarrow, \rightsquigarrow,$ $\twoheadrightarrow, \twoheadleftarrow$
特殊符号	
<span>\</span> amalg <span>\</span> P <span>\</span> S <span>\</span> % <span>\</span> dagger <span>\</span> ddagger <span>\</span> ldots <span>\</span> cdots	$\amalg, \mathbb{P}, \mathbb{S}, \%, \dagger, \ddagger, \ldots, \cdots$
<span>\</span> smile <span>\</span> frown <span>\</span> wr <span>\</span> triangleleft <span>\</span> triangleright	$\smile, \frown, \wr, \triangleleft, \triangleright$
<span>\</span> diamondsuit, <span>\</span> heartsuit, <span>\</span> clubsuit, <span>\</span> spadesuit, <span>\</span> Game, <span>\</span> flat, <span>\</span> natural, <span>\</span> sharp	$\diamond, \heartsuit, \clubsuit, \spadesuit, \mathbb{G}, \flat, \natural, \sharp$

未排序	
<code>\diagup \diagdown \centerdot \ltimes \rtimes \leftthreetimes \rightthreetimes</code>	$\diagup, \diagdown, \cdot, \ltimes, \rtimes, \leftthreetimes, \rightthreetimes$
<code>\eqcirc \circeq \triangleq \bumpeq \Bumpeq \doteqdot \risingdotseq \fallingdotseq</code>	$\eqcirc, \circeq, \triangleq, \bumpeq, \Bumpeq, \doteqdot, \risingdotseq, \fallingdotseq$
<code>\intercal \barwedge \veebar \doublebarwedge \between \pitchfork</code>	$\intercal, \bar{\wedge}, \veebar, \doublebarwedge, \between, \pitchfork$
<code>\vartriangleleft \ntriangleleft \vartriangleright \ntriangleright</code>	$\vartriangleleft, \ntriangleleft, \vartriangleright, \ntriangleright$
<code>\trianglelefteq \ntrianglelefteq \trianglerighteq \ntrianglerighteq</code>	$\trianglelefteq, \ntrianglelefteq, \trianglerighteq, \ntrianglerighteq$
<code>\not6, \frac{1\not6}{\not64}=\frac{1}{4}</code>	$\not6, \frac{1\not6}{\not64}=\frac{1}{4}$

关于这些符号的更多语义，参阅TeX Cookbook (<https://web.archive.org/web/20160305074303/https://www.math.upenn.edu/tex-stuff/cookbook.pdf>) 的简述。

## 上标、下标及积分等

功能	语法	效果
上标	<code>a^2</code>	$a^2$
下标	<code>a_2</code>	$a_2$
组合	<code>a^{2+2}</code>	$a^{2+2}$
	<code>a_{i,j}</code>	$a_{i,j}$
结合上下标	<code>x_2^3</code>	$x_2^3$
前置上下标	<code>{_1^2\!X_3^4}</code>	${}_1^2X_3^4$
上下标错开	<code>{x_1}^2=x_1\times x_1</code>	$x_1^2 = x_1 \times x_1$
导数 (HTML)	<code>x'</code>	$x'$
导数 (PNG)	<code>x^\prime</code>	$x'$
导数 (错误)	<code>x\prime</code>	$x'$
导数点	<code>\dot{x}</code>	$\dot{x}$
	<code>\ddot{y}</code>	$\ddot{y}$
向量	<code>\vec{c}</code>	$\vec{c}$
	<code>\overleftarrow{a\ b}</code>	$\overleftarrow{ab}$
	<code>\overrightarrow{c\ d}</code>	$\overrightarrow{cd}$
	<code>\overleftrightarrow{a\ b}</code>	$\overleftrightarrow{ab}$
	<code>\widehat{e\ f\ g}</code>	$\widehat{efg}$
上弧 (注: 正确应该用 <code>\overarc</code> , 但在这里行不通。要用建议的语法作为解决办法。) (使用 <code>\overarc</code> 时需要引入 <code>{arcs}</code> 包。)	<code>\overset{\frown}{AB}</code>	$\widehat{AB}$
上划线	<code>\overline{h\ i\ j}</code>	$\overline{hij}$
下划线	<code>\underline{k\ l\ m}</code>	$\underline{klm}$
上括号	<code>\overbrace{1+2+\cdots+100}</code>	$\overbrace{1+2+\cdots+100}$
	<code>\overbrace{1+2+\cdots+100}^{5050}</code>	$\overbrace{1+2+\cdots+100}^{5050}$
下括号	<code>\underbrace{a+b+\cdots+z}</code>	$\underbrace{a+b+\cdots+z}$
	<code>\underbrace{a+b+\cdots+z}_{26}</code>	$\underbrace{a+b+\cdots+z}_{26}$
求和	<code>\sum_{k=1}^N k^2</code>	$\sum_{k=1}^N k^2$
	<code>\begin{matrix} \sum_{k=1}^N k^2 \end{matrix}</code>	$\sum_{k=1}^N k^2$



求积	$\backslash\mathrm{prod}_{i=1}^N x_i$	$\prod_{i=1}^N x_i$
	$\backslash\mathrm{begin}\{\mathrm{matrix}\} \backslash\mathrm{prod}_{i=1}^N x_i \backslash\mathrm{end}\{\mathrm{matrix}\}$	$\prod_{i=1}^N x_i$
上积	$\backslash\mathrm{coprod}_{i=1}^N x_i$	$\coprod_{i=1}^N x_i$
	$\backslash\mathrm{begin}\{\mathrm{matrix}\} \backslash\mathrm{coprod}_{i=1}^N x_i \backslash\mathrm{end}\{\mathrm{matrix}\}$	$\coprod_{i=1}^N x_i$
极限	$\backslash\mathrm{lim}_{n \rightarrow \infty} x_n$	$\lim_{n \rightarrow \infty} x_n$
	$\backslash\mathrm{begin}\{\mathrm{matrix}\} \backslash\mathrm{lim}_{n \rightarrow \infty} x_n \backslash\mathrm{end}\{\mathrm{matrix}\}$	$\lim_{n \rightarrow \infty} x_n$
积分	$\backslash\mathrm{int}_{-N}^N e^x \backslash, \backslash\mathrm{mathrm}\{d\} x$	$\int_{-N}^N e^x dx$
	$\backslash\mathrm{begin}\{\mathrm{matrix}\} \backslash\mathrm{int}_{-N}^N e^x \backslash, \backslash\mathrm{mathrm}\{d\} x \backslash\mathrm{end}\{\mathrm{matrix}\}$	$\int_{-N}^N e^x dx$
双重积分	$\backslash\mathrm{iint}_D^W \backslash, \backslash\mathrm{mathrm}\{d\} x \backslash, \backslash\mathrm{mathrm}\{d\} y$	$\iint_D^W dx dy$
三重积分	$\backslash\mathrm{iiint}_E^V \backslash, \backslash\mathrm{mathrm}\{d\} x \backslash, \backslash\mathrm{mathrm}\{d\} y \backslash, \backslash\mathrm{mathrm}\{d\} z$	$\iiint_E^V dx dy dz$
四重积分	$\backslash\mathrm{iiiiint}_F^U \backslash, \backslash\mathrm{mathrm}\{d\} x \backslash, \backslash\mathrm{mathrm}\{d\} y \backslash, \backslash\mathrm{mathrm}\{d\} z \backslash, \backslash\mathrm{mathrm}\{d\} t$	$\iiint_F^U dx dy dz dt$
闭合的曲线积分、曲面积分	$\backslash\mathrm{ooint}_C x^3 \backslash, \backslash\mathrm{mathrm}\{d\} x + 4y^2 \backslash, \backslash\mathrm{mathrm}\{d\} y$	$\oint_C x^3 dx + 4y^2 dy$
交集	$\backslash\mathrm{bigcap}_1^n p$	$\bigcap_1^n p$
并集	$\backslash\mathrm{bigcup}_1^k p$	$\bigcup_1^k p$

## 分数、矩阵和多行列式

功能	语法	效果
分数	<code>\frac{2}{4}=0.5</code>	$\frac{2}{4} = 0.5$
	<code>{2 \over 3}</code>	$\frac{2}{3}$
	<code>{{a+b} \over {a-b}}</code>	$\frac{a+b}{a-b}$
小型分数	<code>\tfrac{2}{4} = 0.5</code>	$\frac{2}{4} = 0.5$
大型分数 (嵌套)	<code>\cfrac{2}{c + \cfrac{2}{d + \cfrac{2}{4}}} = a</code>	$\frac{2}{c + \frac{2}{d + \frac{2}{4}}} = a$
大型分数 (不嵌套)	<code>\dfrac{2}{4} = 0.5 \quad \dfrac{2}{c + \dfrac{2}{d + \dfrac{2}{4}}} = a</code>	$\frac{2}{4} = 0.5 \qquad \frac{2}{c + \frac{2}{d + \frac{2}{4}}} = a$
二项式系数	<code>\dbinom{n}{r}=\binom{n}{n-r}</code> <code>r=\mathrm{C}_n^r=\mathrm{C}_{n-r}^n</code>	$\binom{n}{r} = \binom{n}{n-r} = C_n^r = C_n^{n-r}$
	<code>n \choose n-r, n^2 \choose r_1, a-b \choose c+d, {n \choose 0}+{n \choose 1}</code>	$\binom{n}{n-r} \binom{n^2}{r_1} \binom{a-b}{c+d} \\ \binom{n}{0} + \binom{n}{1}$
小型二项式系数	<code>\tbinom{n}{r}=\tbinom{n}{n-r}</code> <code>r=\mathrm{C}_n^r=\mathrm{C}_{n-r}^n</code>	$\binom{n}{r} = \binom{n}{n-r} = C_n^r = C_n^{n-r}$
大型二项式系数	<code>\binom{n}{r}=\dbinom{n}{n-r}</code> <code>r=\mathrm{C}_n^r=\mathrm{C}_{n-r}^n</code>	$\binom{n}{r} = \binom{n}{n-r} = C_n^r = C_n^{n-r}$
矩阵	<div><code>\begin{matrix} x &amp; y \\ z &amp; v \end{matrix}</code></div>	$\begin{matrix} \boldsymbol{x} & \boldsymbol{y} \\ \boldsymbol{z} & \boldsymbol{v} \end{matrix}$
	<div><code>\begin{vmatrix} x &amp; y \\ z &amp; v \end{vmatrix}</code></div>	$\begin{vmatrix} \boldsymbol{x} & \boldsymbol{y} \\ \boldsymbol{z} & \boldsymbol{v} \end{vmatrix}$
	<div><code>\begin{Vmatrix} x &amp; y \\ z &amp; v \end{Vmatrix}</code></div>	$\left\  \begin{matrix} \boldsymbol{x} & \boldsymbol{y} \\ \boldsymbol{z} & \boldsymbol{v} \end{matrix} \right\ $
	<div><code>\begin{bmatrix} 0 &amp; \cdots &amp; 0 \\ \vdots &amp; \ddots &amp; \vdots \end{bmatrix}</code></div>	

	<div><div><div><div>0 &amp; \cdots &amp; 0</div><div>\end{bmatrix}</div></div></div></div>	<div><math display="block">\begin{bmatrix} 0 &amp; \cdots &amp; 0 \\ \vdots &amp; \ddots &amp; \vdots \\ 0 &amp; \cdots &amp; 0 \end{bmatrix}</math></div>
	<div><div><div><div>\begin{Bmatrix}</div><div>x &amp; y \\ z &amp; v</div><div>\end{Bmatrix}</div></div></div></div>	<div><math display="block">\begin{Bmatrix} x &amp; y \\ z &amp; v \end{Bmatrix}</math></div>
	<div><div><div><div>\begin{pmatrix}</div><div>x &amp; y \\ z &amp; v</div><div>\end{pmatrix}</div></div></div></div>	<div><math display="block">\begin{pmatrix} x &amp; y \\ z &amp; v \end{pmatrix}</math></div>
	<div><div><div><div>\bigl( \begin{smallmatrix}</div><div>a&amp;b\\ c&amp;d</div><div>\end{smallmatrix} \bigr)</div></div></div></div>	<div><math display="block">\begin{pmatrix} a &amp; b \\ c &amp; d \end{pmatrix}</math></div>
条件定义	<div><div><div><div>f(n) =</div><div>\begin{cases}</div><div>n/2, &amp; \mbox{if } n\mbox{ is even} \\ 3n+1, &amp; \mbox{if } n\mbox{ is odd}</div><div>\end{cases}</div></div></div></div>	<div><math display="block">f(n) = \begin{cases} n/2, &amp; \text{if } n \text{ is even} \\ 3n + 1, &amp; \text{if } n \text{ is odd} \end{cases}</math></div>
多行等式、同余式	<div><div><div><div>\begin{align}</div><div>f(x) &amp;= (m+n)^2 \\ &amp;= m^2+2mn+n^2 \\ \end{align}</div></div></div></div>	<div><math display="block">\begin{aligned} f(x) &amp;= (m+n)^2 \\ &amp;= m^2 + 2mn + n^2 \end{aligned}</math></div>
	<div><div><div><div>\begin{align}</div><div>3^{6n+3}+4^{6n+3}</div><div>&amp;\equiv (3^3)^{2n+1}+(4^3)^{2n+1} \\ &amp;\equiv 27^{2n+1}+64^{2n+1} \\ &amp;\equiv 27^{2n+1}+(-27)^{2n+1} \\ &amp;\equiv 27^{2n+1}-27^{2n+1} \\ &amp;\equiv 0 \pmod{91} \\ \end{align}</div></div></div></div>	<div><math display="block">\begin{aligned} 3^{6n+3} + 4^{6n+3} &amp;\equiv (3^3)^{2n+1} + (4^3)^{2n+1} \\ &amp;\equiv 27^{2n+1} + 64^{2n+1} \\ &amp;\equiv 27^{2n+1} + (-27)^{2n+1} \\ &amp;\equiv 27^{2n+1} - 27^{2n+1} \\ &amp;\equiv 0 \pmod{91} \end{aligned}</math></div>
	<div><div><div><div>\begin{alignat}{3}</div><div>f(x) &amp;= (m-n)^2 \\ f(x) &amp;= (-m+n)^2 \\ &amp;= m^2-2mn+n^2 \\ \end{alignat}</div></div></div></div>	<div><math display="block">\begin{aligned} f(x) &amp;= (m-n)^2 \\ f(x) &amp;= (-m+n)^2 \\ &amp;= m^2 - 2mn + n^2 \end{aligned}</math></div>
多行等式 (左对齐)	<div><div><div><div>\begin{array}{lcl}</div><div>z &amp; = &amp; a \\ f(x,y,z) &amp; = &amp; x+y+z</div></div></div></div>	<div><math display="block">\begin{array}{lcl} z &amp; = &amp; a \\ f(x,y,z) &amp; = &amp; x+y+z \end{array}</math></div>

	<div><pre>f(x, y, z) &amp; = &amp; x + y + z \end{array}</pre></div>																
多行等式 (右对齐)	<div><pre>\begin{array}{lcr} z &amp; = &amp; a \\ f(x, y, z) &amp; = &amp; x + y + z \end{array}</pre></div>	<div><math display="block">\begin{array}{rcl} z &amp; = &amp; a \\ f(x, y, z) &amp; = &amp; x + y + z \end{array}</math></div>															
长公式换行	<div><pre>&lt;math&gt;f(x) \ , \ !&lt;/math&gt; &lt;math&gt;= \sum_{n=0}^{\infty} a_n x^n &lt;/math&gt; &lt;math&gt;= a_0+a_1x+a_2x^2+\cdots&lt;/math&gt;</pre></div>	<div><math display="block">\begin{aligned} f(x) &amp;= \sum_{n=0}^{\infty} a_n x^n \\ &amp;= a_0 + a_1 x + a_2 x^2 + \cdots \end{aligned}</math></div>															
方程组	<div><pre>\begin{cases} 3x + 5y + z \\ 7x - 2y + 4z \\ -6x + 3y + 2z \end{cases}</pre></div>	<div><math display="block">\begin{cases} 3x + 5y + z \\ 7x - 2y + 4z \\ -6x + 3y + 2z \end{cases}</math></div>															
数组	<div><pre>\begin{array}{ c c c } a &amp; b &amp; S \\ \hline 0&amp;0&amp;1\\ 0&amp;1&amp;1\\ 1&amp;0&amp;1\\ 1&amp;1&amp;0\\ \end{array}</pre></div>	<div><table><tr><th><i>a</i></th><th><i>b</i></th><th><i>S</i></th></tr><tr><td>0</td><td>0</td><td>1</td></tr><tr><td>0</td><td>1</td><td>1</td></tr><tr><td>1</td><td>0</td><td>1</td></tr><tr><td>1</td><td>1</td><td>0</td></tr></table></div>	<i>a</i>	<i>b</i>	<i>S</i>	0	0	1	0	1	1	1	0	1	1	1	0
<i>a</i>	<i>b</i>	<i>S</i>															
0	0	1															
0	1	1															
1	0	1															
1	1	0															

## 字体

希腊字母	
<span>\Alpha \Beta \Gamma \Delta \Epsilon \Zeta \Eta \Theta</span>	ΑΒΓΔΕΖΗΘ
<span>\Iota \Kappa \Lambda \Mu \Nu \Xi \Omicron \Pi</span>	ΙΚΑΜΝΞΟΠ
<span>\Rho \Sigma \Tau \Upsilon \Phi \Chi \Psi \Omega</span>	ΡΣΤΥΦΧΨΩ
<span>\alpha \beta \gamma \delta \epsilon \zeta \eta \theta</span>	αβγδεζηθ
<span>\iota \kappa \lambda \mu \nu \xi \omicron \pi</span>	ικλμνξοπ
<span>\rho \sigma \tau \upsilon \phi \chi \psi \omega</span>	ρστυφχψω
<span>\varepsilon \digamma \varkappa \varpi</span>	εϜκω
<span>\varrho \varsigma \vartheta \varphi</span>	ρςθφ
希伯来符号	
<span>\aleph \beth \gimel \daleth</span>	אבגד
黑板报粗体	
<span>\mathbb{A}\mathbb{B}\mathbb{C}\mathbb{D}\mathbb{E}\mathbb{F}\mathbb{G}\mathbb{H}\mathbb{I}</span>	ΑΒΓΔΕΖΗΘ
<span>\mathbb{J}\mathbb{K}\mathbb{L}\mathbb{M}\mathbb{N}\mathbb{O}\mathbb{P}\mathbb{Q}\mathbb{R}</span>	ΙΚΑΜΝΞΟΠ
<span>\mathbb{S}\mathbb{T}\mathbb{U}\mathbb{V}\mathbb{W}\mathbb{X}\mathbb{Y}\mathbb{Z}</span>	ΡΣΤΥΦΧΨΩ
粗体	
<span>\mathbf{A}\mathbf{B}\mathbf{C}\mathbf{D}\mathbf{E}\mathbf{F}\mathbf{G}\mathbf{H}\mathbf{I}</span>	ΑΒΓΔΕΖΗΘ
<span>\mathbf{J}\mathbf{K}\mathbf{L}\mathbf{M}\mathbf{N}\mathbf{O}\mathbf{P}\mathbf{Q}\mathbf{R}</span>	ΙΚΑΜΝΞΟΠ
<span>\mathbf{S}\mathbf{T}\mathbf{U}\mathbf{V}\mathbf{W}\mathbf{X}\mathbf{Y}\mathbf{Z}</span>	ΡΣΤΥΦΧΨΩ
<span>\mathbf{a}\mathbf{b}\mathbf{c}\mathbf{d}\mathbf{e}\mathbf{f}\mathbf{g}\mathbf{h}\mathbf{i}\mathbf{j}\mathbf{k}\mathbf{l}\mathbf{m}</span>	αβγδεζηθ
<span>\mathbf{n}\mathbf{o}\mathbf{p}\mathbf{q}\mathbf{r}\mathbf{s}\mathbf{t}\mathbf{u}\mathbf{v}\mathbf{w}\mathbf{x}\mathbf{y}\mathbf{z}</span>	ικλμνξοπ
<span>\mathbf{0}\mathbf{1}\mathbf{2}\mathbf{3}\mathbf{4}\mathbf{5}\mathbf{6}\mathbf{7}\mathbf{8}\mathbf{9}</span>	ρστυφχψω
粗体希腊字母	
<span>\boldsymbol{\Alpha}\boldsymbol{\Beta}\boldsymbol{\Gamma}\boldsymbol{\Delta}\boldsymbol{\Epsilon}\boldsymbol{\Zeta}\boldsymbol{\Eta}\boldsymbol{\Theta}</span>	ΑΒΓΔΕΖΗΘ
<span>\boldsymbol{\Iota}\boldsymbol{\Kappa}\boldsymbol{\Lambda}\boldsymbol{\Mu}\boldsymbol{\Nu}\boldsymbol{\Xi}\boldsymbol{\Pi}\boldsymbol{\Rho}</span>	ΙΚΑΜΝΞΟΠ
<span>\boldsymbol{\Sigma}\boldsymbol{\Tau}\boldsymbol{\Upsilon}\boldsymbol{\Phi}\boldsymbol{\Chi}\boldsymbol{\Psi}\boldsymbol{\Omega}</span>	ΡΣΤΥΦΧΨΩ
<span>\boldsymbol{\alpha}\boldsymbol{\beta}\boldsymbol{\gamma}\boldsymbol{\delta}\boldsymbol{\epsilon}\boldsymbol{\zeta}\boldsymbol{\eta}\boldsymbol{\theta}</span>	αβγδεζηθ
<span>\boldsymbol{\iota}\boldsymbol{\kappa}\boldsymbol{\lambda}\boldsymbol{\mu}\boldsymbol{\nu}\boldsymbol{\xi}\boldsymbol{\pi}\boldsymbol{\rho}</span>	ικλμνξοπ
<span>\boldsymbol{\sigma}\boldsymbol{\tau}\boldsymbol{\upsilon}\boldsymbol{\phi}\boldsymbol{\chi}\boldsymbol{\psi}\boldsymbol{\omega}</span>	ρστυφχψω
<span>\boldsymbol{\varepsilon}\boldsymbol{\digamma}\boldsymbol{\varkappa}\boldsymbol{\varpi}</span>	εϜκω
<span>\boldsymbol{\varrho}\boldsymbol{\varsigma}\boldsymbol{\vartheta}\boldsymbol{\varphi}</span>	ρςθφ
斜体（拉丁字母默认）	
<span>\mathit{0123456789}</span>	0123456789
斜体希腊字母（小写字母默认）	
<span>\mathit{\Alpha}\mathit{\Beta}\mathit{\Gamma}\mathit{\Delta}\mathit{\Epsilon}\mathit{\Zeta}\mathit{\Eta}\mathit{\Theta}</span>	ΑΒΓΔΕΖΗΘ
<span>\mathit{\Iota}\mathit{\Kappa}\mathit{\Lambda}\mathit{\Mu}\mathit{\Nu}\mathit{\Xi}\mathit{\Pi}\mathit{\Rho}</span>	ΙΚΑΜΝΞΟΠ

$\mathrm{\Sigma\Tau\Upsilon\Phi\Chi\Psi\Omega}$	$\Sigma\Tau\Upsilon\Phi\Chi\Psi\Omega$
罗马体	
$\mathrm{ABCDEFGHI}$	ABCDEFGHI
$\mathrm{JKLMNOPQR}$	JKLMNOPQR
$\mathrm{STUVWXYZ}$	STUVWXYZ
$\mathrm{abcdefghijklm}$	abcdefghijklm
$\mathrm{nopqrstuvwxyz}$	nopqrstuvwxyz
$\mathrm{0123456789}$	0123456789
无衬线体	
$\mathrm{ABCDEFGHI}$	ABCDEFGHI
$\mathrm{JKLMNOPQR}$	JKLMNOPQR
$\mathrm{STUVWXYZ}$	STUVWXYZ
$\mathrm{abcdefghijklm}$	abcdefghijklm
$\mathrm{nopqrstuvwxyz}$	nopqrstuvwxyz
$\mathrm{0123456789}$	0123456789
无衬线体希腊字母（仅大写）	
$\mathrm{\Alpha\Beta\Gamma\Delta\epsilon\Zeta\Theta}$	ΑΒΓΔΕΖΗΘ
$\mathrm{\Iota\Kappa\Lambda\Mu\Nu\Xi\Pi\Rho}$	ΙΚΛΜΝΞΠΡ
$\mathrm{\Sigma\Tau\Upsilon\Phi\Chi\Psi\Omega}$	ΣΤΥΦΧΨΩ
手写体/花体	
$\mathrm{ABCDEFGHI}$	<i>ABCDEFGHI</i>
$\mathrm{JKLMNOPQR}$	<i>JKLMNOPQR</i>
$\mathrm{STUVWXYZ}$	<i>STUVWXYZ</i>
Fraktur体	
$\mathrm{ABCDEFGHI}$	𝔸𝔹𝔼𝔻𝔼𝔣𝔾𝔥𝔦
$\mathrm{JKLMNOPQR}$	𝔙𝔸𝔻𝔸𝔸𝔸𝔸𝔸𝔸𝔸
$\mathrm{STUVWXYZ}$	𝔖𝔗𝔘𝔧𝔸𝔸𝔸
$\mathrm{abcdefghijklm}$	𝔞𝔟𝔠𝔡𝔢𝔣𝔤𝔥𝔦𝔧𝔩𝔪
$\mathrm{nopqrstuvwxyz}$	𝔡𝔡𝔡𝔡𝔡𝔡𝔡𝔡𝔡
$\mathrm{0123456789}$	𝔠𝔡𝔡𝔡𝔡𝔡𝔡𝔡
小型手写体	
$\scriptstyle\mathrm{abcdefghijklm}$	𝔞𝔟𝔠𝔡𝔢𝔣𝔤𝔥𝔦𝔧𝔩𝔪

## 混合字体

特征	语法	渲染效果
斜体字符（忽略空格）	<code>x y z</code>	<i>xyz</i>
非斜体字符	<code>\text{x y z}</code>	<b>x y z</b>
混合斜体（差）	<code>\text{if} n \text{is even}</code>	<b>if</b> <i>n</i> <b>is even</b>
混合斜体（好）	<code>\text{if } n\text{ is even}</code>	<b>if</b> <i>n</i> <b>is even</b>
混合斜体（替代品：~ 或者"\"强制空格）	<code>\text{if}~n\ \text{is even}</code>	<b>if</b> <i>n</i> <b>is even</b>

## 括号

功能	语法	显示
短括号	<code>(\frac{1}{2})</code>	$(\frac{1}{2})$
长括号	<code>\left(\frac{1}{2}\right)</code>	$\left(\frac{1}{2}\right)$

您可以使用 `\left` 和 `\right` 来显示不同的括号：

功能	语法	显示
<u>圆括号</u> ， <u>小括号</u>	<code>\left( \frac{a}{b} \right)</code>	$\left(\frac{a}{b}\right)$
<u>方括号</u> ， <u>中括号</u>	<code>\left[ \frac{a}{b} \right]</code>	$\left[\frac{a}{b}\right]$
<u>花括号</u> ， <u>大括号</u>	<code>\left\{ \frac{a}{b} \right\}</code>	$\left\{\frac{a}{b}\right\}$
<u>角括号</u>	<code>\left \langle \frac{a}{b} \right \rangle</code>	$\left\langle\frac{a}{b}\right\rangle$
<u>单竖线</u> ， <u>绝对值</u>	<code>\left  \frac{a}{b} \right </code>	$\left \frac{a}{b}\right $
<u>双竖线</u> ， <u>范数</u>	<code>\left \  \frac{a}{b} \right \ </code>	$\left\ \frac{a}{b}\right\ $
<u>高斯符号</u>	<code>\left \lfloor \frac{a}{b} \right \rfloor</code>	$\left\lfloor\frac{a}{b}\right\rfloor$
<u>取底符号</u>	<code>\left \lceil \frac{a}{b} \right \rceil</code>	$\left\lceil\frac{a}{b}\right\rceil$
<u>取顶符号</u>	<code>\left \lfloor \frac{c}{d} \right \rfloor</code>	$\left\lfloor\frac{c}{d}\right\rfloor$
<u>斜线</u> 与 <u>反斜线</u>	<code>\left / \frac{a}{b} \right \backslash</code>	$\left/\frac{a}{b}\right\backslash$
上下箭头	<code>\left \uparrow \frac{a}{b} \right \downarrow</code>	$\uparrow\frac{a}{b}\downarrow$
	<code>\left \Uparrow \frac{a}{b} \right \Downarrow</code>	$\Uparrow\frac{a}{b}\Downarrow$
	<code>\left \updownarrow \frac{a}{b} \right \Updownarrow</code>	$\updownarrow\frac{a}{b}\Updownarrow$
混合括号	<code>\left [ 0,1 \right )</code>	$[0,1)$
	<code>\left \langle \psi \right  </code>	$\langle\psi $
单左括号	<code>\left \{ \frac{a}{b} \right .</code>	$\left\{\frac{a}{b}\right.$
单右括号	<code>\left . \frac{a}{b} \right \}</code>	$\left.\frac{a}{b}\right\}$

备注：

- 可以使用 `\big`，`\Big`，`\bigg`，`\Bigg` 控制括号的大小，比如代码

```
\Bigg ( \bigg [ \Big \{ \big \langle \left | \backslash \frac{a}{b} \backslash \right | \big \rangle \Big \} \bigg ] \Bigg )
```

显示：

$$\left(\left[\left\{\left\|\frac{a}{b}\right\|\right\}\right]\right)$$

## 空格



注意T<sub>E</sub>X能够自动处理大多数的空格，但是您有时候需要自己来控制。

功能	语法	显示	宽度
2个quad空格	<code>\alpha\quad\beta</code>	$\alpha\quad\beta$	$2m$
quad空格	<code>\alpha\quad\beta</code>	$\alpha\quad\beta$	$m$
大空格	<code>\alpha\ \ \beta</code>	$\alpha\beta$	$\frac{m}{3}$
中等空格	<code>\alpha\;\;\beta</code>	$\alpha\beta$	$\frac{2m}{7}$
小空格	<code>\alpha\,\,\beta</code>	$\alpha\beta$	$\frac{m}{6}$
没有空格	<code>\alpha\beta</code>	$\alpha\beta$	0
紧贴	<code>\alpha\!\!\beta</code>	$\alpha\beta$	$-\frac{m}{6}$

## 颜色

### 语法

- 字体颜色：`{\color{色调} 表达式}`
- 背景颜色：~~`{\pagecolor{色调} 表达式}`~~<sup>[c]</sup>

### 支持色调表

Colors supported			
Apricot	Aquamarine	Bittersweet	Black
Blue	BlueGreen	BlueViolet	BrickRed
Brown	BurntOrange	CadetBlue	CarnationPink
Cerulean	CornflowerBlue	Cyan	Dandelion
DarkOrchid	Emerald	ForestGreen	Fuchsia
Goldenrod	Gray	Green	GreenYellow
JungleGreen	Lavender	LimeGreen	Magenta
Mahogany	Maroon	Melon	MidnightBlue
Mulberry	NavyBlue	OliveGreen	Orange
OrangeRed	Orchid	Peach	Periwinkle
PineGreen	Plum	ProcessBlue	Purple
RawSienna	Red	RedOrange	RedViolet
Rhodamine	RoyalBlue	RoyalPurple	RubineRed
Salmon	SeaGreen	Sepia	SkyBlue
SpringGreen	Tan	TealBlue	Thistle
Turquoise	Violet	VioletRed	
WildStrawberry	Yellow	YellowGreen	YellowOrange

\*注：输入时第一个字母必需以大写输入，如`\color{OliveGreen}`。

例子

- `{\color{Blue}x^2}+{\color{Brown}2x} - {\color{OliveGreen}1}`

$x^2 + 2x - 1$
- `x_{\color{Maroon}1,2}=\frac{-b\pm\sqrt{{\color{Maroon}b^2-4ac}}}{2a}`

$x_{1,2} = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$

小型数学公式

此功能并不常用。

10 的  $f(x) = 5 + \frac{1}{5}$  是 2。

-  并不好看。

10 的  $f(x)=5+\frac{1}{5}$  是 2。

-  好看些了。

可以使用

```
\begin{smallmatrix}...\end{smallmatrix}
```

或直接使用`{{Smallmath}}`模板。

```
{{Smallmath|f= f(x)=5+\frac{1}{5} }}
```

注释

- a. 虽然在所有情况下， $\text{T}_{\text{E}}\text{X}$ 是由编译器而不是解释器生成，在高德纳的 $\text{T}_{\text{E}}\text{X}$ 或兰波特的 $\text{L}^{\text{A}}\text{T}_{\text{E}}\text{X}$ 及现有的实现之间存在着一个基本的区别：前两种情况下编译器产生“一体化”的可打印的输出成果，有着拥有全部章节的书籍的质量，没有一行是“特殊的”，现有的实现通常有着用于公式的 $\text{T}_{\text{E}}\text{X}$ 图像（更准确的说：PNG图像）的混合，嵌入一般的文本中，并含有简短的 $\text{T}_{\text{E}}\text{X}$ 元素常常被HTML部分取代。作为结果，多数情况下的 $\text{T}_{\text{E}}\text{X}$ 元素，如向量符号、伸出文本行的下方（或上方）的部分。这个“伸出”的部分不是上文中所提到情况下的原始产物，而且用于小号 $\text{T}_{\text{E}}\text{X}$ 附件到文本的HTML替代对于许多读者来说常常在质量上是不够充分的。虽然存在这些缺陷，以“最多嵌入的PNG图像”为特性的当前产物应该推荐使用于小号文本，在那里公式不是最主要的。
- b. 这个会造成的设置垂直对齐时的基线时的一些困难也会成为问题（参阅bug 32694）
- c. 该命令已失效，参见Phabricator (<https://phabricator.wikimedia.org/T195861>)

参考资料

## 外部链接

- 一个介绍 $\mathrm{T_{E}X}$ 的PDF文档 (英文) : http://www.ctan.org/tex-archive/info/gentle/gentle.pdf
- 完整的参考列表 (英文) : http://wso.williams.edu/how/lshort2e/node61.html
- 手画公式输出 $\mathrm{L_{A}T_{E}X}$ : http://webdemo.visionobjects.com/equation.html
- 手画符号搜索 $\mathrm{L_{A}T_{E}X}$ 代码: http://detexify.kirelabs.org/classify.html
- LaTeX在线编辑器 (http://www.codecogs.com/latex/eqneditor.php)
- AMS-LaTeX指南 (http://www.ams.org/tex/amslatex.html)

维基百科帮助页面	
<b>论述指引</b>	<span>链接</span> <span> </span> <span>•</span> <span> </span> <span>搜索</span> <span> </span> <span>•</span> <span> </span> <span>分类</span> <span> </span> <span>•</span> <span> </span> <span>章节</span> <span> </span> <span>•</span> <span> </span> <span>名字空间</span> （ <span>伪名字空间</span> ） <span> </span> <span>•</span> <span> </span> <span>URL</span> <span> </span> <span>•</span> <span> </span> <span>跨语言链接</span> <span> </span> <span>•</span> <span> </span> <span>打印页面</span> <span> </span> <span>•</span> <span> </span> <span>随机条目</span> <span> </span> <span>•</span> <span> </span> <span>特殊页面</span> <span> </span> <span>•</span> <span> </span> <span>讨论页</span> <span> </span> <span>•</span> <span> </span> <span>规范控制</span> <span> </span> <span>•</span> <span> </span> <span>生物信息框</span> <span> </span> <span>•</span> <span> </span> <span>分类单元识别码</span>
<b>账户相关</b>	<span>访问</span> <span> </span> <span>•</span> <span> </span> <span>登录</span> <span> </span> <span>•</span> <span> </span> <span>参数设置</span> <span> </span> <span>•</span> <span> </span> <span>用户样式</span> <span> </span> <span>•</span> <span> </span> <span>用户页</span> <span> </span> <span>•</span> <span> </span> <span>电子邮件确认</span> <span> </span> <span>•</span> <span> </span> <span>我被封禁了</span>
<b>跟踪更改</b>	<span>页面历史</span> <span> </span> <span>•</span> <span> </span> <span>差异</span> <span> </span> <span>•</span> <span> </span> <span>链入页面</span> <span> </span> <span>•</span> <span> </span> <span>相关更改</span> <span> </span> <span>•</span> <span> </span> <span>最近更改</span> <span> </span> <span>•</span> <span> </span> <span>监视列表</span> <span> </span> <span>•</span> <span> </span> <span>编辑摘要</span> <span> </span> <span>•</span> <span> </span> <span>用户贡献</span> <span> </span> <span>•</span> <span> </span> <span>小修改</span>
<b>编辑问题</b>	<span>创建新页面</span> <span> </span> <span>•</span> <span> </span> <span>编辑页面</span> <span> </span> <span>•</span> <span> </span> <span>链接颜色</span> <span> </span> <span>•</span> <span> </span> <span>列表</span> <span> </span> <span>•</span> <span> </span> <span>表格</span> <span> </span> <span>•</span> <span> </span> <span>图像</span> <span> </span> <span>•</span> <span> </span> <span>模板</span> （ <span>模板原理</span> <span> </span> <span>•</span> <span> </span> <span>模板分类</span> <span> </span> <span>•</span> <span> </span> <span>模板消息</span> ） <span> </span> <span>•</span> <span> </span> <span>HTML</span> <span> </span> <span>•</span> <span> </span> <span>页面更名</span> <span> </span> <span>•</span> <span> </span> <span>特殊字符</span> <span> </span> <span>•</span> <span> </span> <span>回退</span> <span> </span> <span>•</span> <span> </span> <span>脚注</span> （ <span>如何引用来源</span> <span> </span> <span>•</span> <span> </span> <span>相关工具</span> ） <span> </span> <span>•</span> <span> </span> <span>国际标准书号</span> <span> </span> <span>•</span> <span> </span> <span>签名</span> <span> </span> <span>•</span> <span> </span> <span>高级字词变换处理</span> <span> </span> <span>•</span> <span> </span> <span>重定向</span> <span> </span> <span>•</span> <span> </span> <span>可视化编辑器</span> <span> </span> <span>•</span> <span> </span> <span>翻译</span> <span> </span> <span>•</span> <span> </span> <span>更新搜索引擎结果</span>
<b>高级功能</b>	<span>魔术字</span> <span> </span> <span>•</span> <span> </span> <span>默认参数</span> <span> </span> <span>•</span> <span> </span> <span>解析器函数</span> （ <span>时间序号</span> <span> </span> <span>•</span> <span> </span> <span>随机功能</span> ） <span> </span> <span>•</span> <span> </span> <span>替换引用</span> <span> </span> <span>•</span> <span> </span> <span>乐谱</span> <span> </span> <span>•</span> <span> </span> <span>计算</span> <span> </span> <span>•</span> <span> </span> <span>数学公式</span> <span> </span> <span>•</span> <span> </span> <span>简易时间线语法</span> <span> </span> <span>•</span> <span> </span> <span>输入框</span> <span> </span> <span>•</span> <span> </span> <span>小测</span> <span> </span> <span>•</span> <span> </span> <span>扩展</span> <span> </span> <span>•</span> <span> </span> <span>LiquidThreads</span> <span> </span> <span>•</span> <span> </span> <span>层叠样式表 (CSS)</span> <span> </span> <span>•</span> <span> </span> <span>模板数据</span> <span> </span> <span>•</span> <span> </span> <span>手工字词转换</span> <span> </span> <span>•</span> <span> </span> <span>中文维基百科的繁简、地区词处理</span> <span> </span> <span>•</span> <span> </span> <span>折叠显示</span> <span> </span> <span>•</span> <span> </span> <span>铁路系统标示</span>
<b>姊妹计划</b>	<span>元维基</span> <span> </span> <span>•</span> <span> </span> <span>维基新闻</span> <span> </span> <span>•</span> <span> </span> <span>维基语录</span> <span> </span> <span>•</span> <span> </span> <span>维基词典</span> <span> </span> <span>•</span> <span> </span> <span>维基教科书</span> <span> </span> <span>•</span> <span> </span> <span>维基文库</span> <span> </span> <span>•</span> <span> </span> <span>维基共享资源</span> <span> </span> <span>•</span> <span> </span> <span>维基物种</span> <span> </span> <span>•</span> <span> </span> <span>维基学院</span> <span> </span> <span>•</span> <span> </span> <span>维基导游</span> <span> </span> <span>•</span> <span> </span> <span>维基数据</span> <span> </span> <span>•</span> <span> </span> <span>MediaWiki</span>
另请参见： <span> </span> <span>方针与指引</span> <span> </span> <span>•</span> <span> </span> <span>格式手册</span>	

取自 “https://zh.wikipedia.org/w/index.php?title=Help:数学公式&oldid=68931417”

本页面最后修订于2021年12月3日 (星期五) 11:28。

本站的全部文字在知识共享 署名-相同方式共享 3.0协议之条款下提供，附加条款亦可能应用。（请参阅使用条款）  
Wikipedia®和维基百科标志是维基媒体基金会的注册商标；维基™是维基媒体基金会的商标。  
维基媒体基金会是按美国国内税收法501(c)(3)登记的非营利慈善机构。