

类型	公式	Latex 命令
等式与不等式	$a = b, \quad a \neq b,$ $a \leq b < c, \quad a \geq b$	$\$a=b$, \$a\neq b$, \$a\leq b<c$, \$a\geq b$ $
集合	$\varnothing, a \in \{1, 2, 3\}, b \notin A$	$\$\emptyset, a\in \{1,2,3\}, b\notin A$$
集合关系与运算	$A \cap B^c \subseteq A \Delta B \subset A \cup B$ $\bigcup_{k=1}^{\infty} A_k, \bigcap_{k=1}^{\infty} A_k$	$\$A\cap B^c\subseteq A\Delta B\subset A\cup B$$ $\$\bigcup\limits^{\infty}_{k=1}A_k$$ $\$\bigcap\limits^{\infty}_{k=1}A_k$$
逻辑	$A \subseteq B \Leftrightarrow \forall x(x \in A \Rightarrow x \in B)$ $A \subset B \Rightarrow \exists x \in B$ 使得 $x \notin A$	$\$A\subseteq B\Lefttrightarrow \forall x(x\in A\Rightarrow x\in B)$$ $\$A\subset B\Rightarrow \exists x\in B$ 使得 \$x\notin A$ $
数集	\mathbb{N}, \mathbb{Z} $\mathbb{Q}, \mathbb{R}, \mathbb{C}$	$\$\mathbb{N}, \mathbb{Z}$,$ $\$\mathbb{Q}, \mathbb{R}, \mathbb{C}$$
上、下标	$a^{bx} c_{i,j} x_k^i$	$\$a^{\{bx\}}c_{\{i,j\}}x^i_k$$
分式根式	$\sqrt{x} + \frac{a+b}{c-de} \sqrt[3]{y}$	$\$\sqrt{x}+\frac{a+b}{c-de}\sqrt[3]{y}$$
极限	$\lim_{n \rightarrow +\infty} a_n$	$\$\lim\limits_{n\rightarrow +\infty} a_n$$
导数	$f'(x), f''(x), f^{(n)}(x)$ $\frac{dy}{dx}, \frac{d^3y}{dx^3}$	$\$f\prime(x), f\prime\prime(x), f^{\{n\}}(x)$$ $\$\frac{dy}{dx}, \frac{d^3y}{dx^3}$$
偏导数	$u_{x,x,y}^{(3)}, \frac{\partial^3 u}{\partial x^2 \partial y}$	$\$u^{\{3\}}_{\{x,x,y\}}, \frac{\partial^3 u}{x^2\partial y}$$
积分	$\int \sin x dx = -\cos x + C$ $\int_a^b \sin x dx = \cos a - \cos b$	$\$\int \sin xdx=-\cos x+C$$ $\$\int^b_a \sin xdx=\cos a-\cos b$$
重积分	$\iint_A f(x, y) dx dy,$ $\iiint_A f(x, y, z) dx dy dz$	$\$\iint_A f(x,y) dx dy$$ $\$\iiint\limits_A f(x,y,z) dx dy dz$$
曲线积分 曲面积分	$\int_{\gamma} f(x, y) dl$	$\$\int\limits_{\gamma} f(x,y) dl$$ $\$\iiint\limits_{\Sigma} f(x,y) d\sigma$$

	$\iint_{\Sigma} f(x, y) d\sigma$	
向量	$\vec{a}, \mathbf{a}, \overrightarrow{AB}$	$\$\vec{a}$, \$\mathbf{a}$, \$\vec{AB}$$
希腊字母	$\alpha, \beta, \gamma, \delta, \varepsilon,$ $\xi, \eta, \zeta, \theta, \varphi, \psi,$ $\Delta, \Omega, \Sigma, \Theta$	$\$\alpha$, \$\beta$, \$\gamma$, \$\delta$, \$\varepsilon$, \$\xi$, \$\eta$, \$\zeta$, \$\theta$, \$\varphi$, \$\psi$, \$\Delta$, \$\Omega$, \$\Sigma$, \$\Theta$$
特殊字体	\mathcal{A}, \mathcal{F}	$\$\mathcal{A}$, \mathcal{F}$$
矩阵 行列式	$\begin{pmatrix} a_{11} & a_{12} & \cdots & a_{1n} \\ a_{21} & a_{22} & \cdots & a_{2n} \\ \vdots & \vdots & \ddots & \vdots \\ a_{m1} & a_{m2} & \cdots & a_{mn} \end{pmatrix}$ $\left[\begin{array}{cccc} a_{11} & a_{12} & \cdots & a_{1n} \\ a_{21} & a_{22} & \cdots & a_{2n} \\ \vdots & \vdots & \ddots & \vdots \\ a_{m1} & a_{m2} & \cdots & a_{mn} \end{array} \right]$ $\begin{vmatrix} a_{11} & a_{12} & \cdots & a_{1n} \\ a_{21} & a_{22} & \cdots & a_{2n} \\ \vdots & \vdots & \ddots & \vdots \\ a_{m1} & a_{m2} & \cdots & a_{mn} \end{vmatrix}$	$\$\left(\begin{matrix} a_{11} & a_{12} & \cdots & a_{1n} \\ a_{21} & a_{22} & \cdots & a_{2n} \\ \vdots & \vdots & \ddots & \vdots \\ a_{m1} & a_{m2} & \cdots & a_{mn} \end{matrix}\right)$$ $\$\left[\begin{matrix} a_{11} & a_{12} & \cdots & a_{1n} \\ a_{21} & a_{22} & \cdots & a_{2n} \\ \vdots & \vdots & \ddots & \vdots \\ a_{m1} & a_{m2} & \cdots & a_{mn} \end{matrix}\right]$$ $\$\left \begin{matrix} a_{11} & a_{12} & \cdots & a_{1n} \\ a_{21} & a_{22} & \cdots & a_{2n} \\ \vdots & \vdots & \ddots & \vdots \\ a_{m1} & a_{m2} & \cdots & a_{mn} \end{matrix}\right $$
	$\underline{ABC}, \overline{ABC}$ $\underbrace{AB\dots C}_{abc}, \overbrace{AB\dots C}^{abc}$	$\$\underline{ABC}$, \$\overline{ABC}$ \$\underbrace{AB\dots C}_{abc}$, \$\overbrace{AB\dots C}^{abc}$$