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Greek Letters η and μ
Fraction $\frac{a}{b}$
Power a^b
Subscript a_b
Derivate $\frac{\partial y}{\partial t}$
Vector $\vec{n}$
Bold $\mathbf{n}$
To time differential $\dot{F}$
Matrix (lcr here means left, center or right for each column)

$$\begin{bmatrix} a1 & b22 & c333 \\ d444 & e555555 & f6 \end{bmatrix}$$

Equations(here & is the symbol for aligning different rows)

$$a + b = c \tag{1}$$
$$d = e + f + g \tag{2}$$

$$\begin{cases} a + b = c \\ d = e + f + g \end{cases}$$

$\int_a^b f(x)dx$

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$$\sum_{i=1}^{\infty} x_i$$

$$\lim_{x \to x_0} f(x) = A$$

$$\sum_{i,j,k=1}^{\infty} x_{i_{j_k}}$$

$$\prod_{i,j,k=1}^{\infty} x_{i_{j_k}}$$

$$\Gamma_{ij}^{k} = \frac{1}{2}(\frac{\partial g_{il}}{\partial u^{j}} + \frac{\partial g_{jl}}{\partial u^{i}} - \frac{\partial g_{ij}}{\partial u^{l}})$$

$$\sqrt[3]{x^4 - 3x + 1}$$

$$\iint_{\Omega} f(x,y)dxdy$$

$$\iiiint_{\Omega} f(x,y,z,u)dxdydzdu$$

$$\left\{ \begin{array}{ccc} 1 & 6 & 9 \\ 7 & 90 & f(x) \\ 9 & \psi(x) & g(x) \end{array} \right\}$$

$$\begin{cases} u_{tt}(x,t) = b(t)\triangle u(x,t-4) \\ \qquad\qquad -q(x,t)f[u(x,t-3)] + te^{-t}\sin^2 x, & t \neq t_k; \\ u(x,t_k^+) - u(x,t_k^-) = c_k u(x,t_k), & k = 1,2,3\ldots; \\ u_t(x,t_k^+) - u_t(x,t_k^-) = c_k u_t(x,t_k), & k = 1,2,3\ldots\ . \end{cases}$$

$$q(x,t) = \begin{cases} (t-k+1)x^2, & t \in \big(k-1, k-\frac{1}{2}\big], \\ (k-t)x^2, & t \in \big(k-\frac{1}{2}, k\big], \end{cases}$$

$$a \leq b, b \geq c$$

lable 1-1	label 1-2	label 1-3	label 1 -4	label 1-5
label 2-1	label 2-2	label 3-3	label 4-4	label 5-5
Multi-Row	Multi-Column		Multi-Row and Col	
	column-1	column-2		

Table 1: My first table