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Greek Letters  $\eta$  and  $\mu$ 

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)

$$\left[\begin{array}{ccc} a1 & b22 & c333 \\ d444 & e555555 & f6 \end{array}\right]$$

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

$$a + b = c \tag{1}$$

$$d = e + f + g \tag{2}$$

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

$$\begin{split} E(S^2) &= E\left(\frac{1}{n}1n(X_i - \bar{X})^2\right) \\ &= E\left(\frac{1}{n}1nX_i^2\right) - E\left(\frac{1}{n}1n2\bar{X}X_i\right) + E\left(\frac{1}{n}1n\bar{X}^2\right) \\ &= EX^2 - E(\bar{X}^2) \\ &= DX + (EX)^2 - D\bar{X} - (E\bar{X})^2 \\ &= \frac{n-1}{n}DX \end{split}$$

 $\ln X$ 

$$E\left(\frac{1}{n}\ln(X_i - \bar{X})^2\right)$$