The Newton's second law is F=ma.

The Newton's second law is $F = ma$.

The Newton's second law is

$$F = ma$$

The Newton's second law is

$$F = ma$$

Greek Letters $\eta$ and $\mu$

Fraction $\frac{a}{ab}$

Power $a^b$

Subscript $a_b, \mu_{max}, \mu_{min}$

Derivate $\frac{\partial y}{\partial t}$

Vector $\vec{n}$

Bold **n**

To time differential $\dot{F}$

Funktionaler Bereich: $\forall x \in X, \quad \exists y \leq \epsilon$

Greek letters: $\alpha, A, \beta, B, \gamma, \Gamma, \pi, \Pi, \phi, \varphi, \mu, \Phi$

Operator:

$$\cos(2\theta) = \cos^2\theta - \sin^2\theta$$

$$\lim_{x \to \infty} f(x) = 0$$

Power and indices: $k_{n+1} = n^2 + k_n^2 - k_{n-1}$

$$f(n) = n^5 + 4n^2 + 2|_{n=17}$$

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)

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

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