Some maths

Izaak van Dongen

October 15, 2017

Experimentations in \LaTeX

I hereby decree the following:

$$1 + 2 = 3$$

$$1 = 3 - 2$$

$$1 + 2 = 3$$

 $1 = 3 - 2$

$$f(x) = x^2$$

$$g(x) = \frac{1}{2}$$

$$g(x) = \frac{1}{x}$$

$$F(x) = \int_{b}^{a} \frac{1}{3}x^{3}$$

$$\frac{1}{\sqrt{x}}$$

1 0

 $\begin{bmatrix} 1 & 0 \\ 0 & 1 \end{bmatrix}$

 $\lambda\Lambda\alpha\epsilon\delta\Delta$

Let

$$E = \frac{\sigma}{\epsilon}$$

$$\sigma = \frac{F}{A}$$

$$\epsilon = \frac{x}{l_0}$$

$$\Rightarrow E = \frac{Fl_0}{Ax}$$

Given that

$$n = 2k + 1$$

$$M = n^2$$

$$\Rightarrow M = (2k + 1)^2 = 4k^2 + 4k + 1$$

$$\Rightarrow M = 4(k^2 + k) + 1$$

$$\Rightarrow M = 4q + 1 : q \in \mathbb{Z}$$

$$\Rightarrow M = 1 \mod 4$$

 $A_{circle} = \pi r^2$

 $\vec{BC} = \vec{OC} - \vec{OB}$

Cardinality something something pope \aleph_0

$$\int_{a}^{b} x^{2} dx$$

$$\sum_{n=1}^{\infty} 2^{-n} = 1$$

$$\prod_{i=a}^{b} f(i)$$

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

Integral
$$\int_a^b x^2 dx$$
 inside text Improved integral $\int_a^b x^2 dx$ inside text Sum $\sum_{n=1}^{\infty} 2^{-n} = 1$ inside text Improved sum $\sum_{n=1}^{\infty} 2^{-n} = 1$ inside text