

Exercise - Creating simple equation

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Tasks to be performed

Tasks to be performed:

1. Execute

$$ds^2 = dx_1^2 + dx_2^2 + dx_3^2 - c^2 dt^2$$

2. Write the equation for square of a+b.

Demonstration

Testing notation for limits

The well known Pythagorean theorem $x^2 + y^2 = z^2$ was proved to be invalid for other exponents. Meaning the next equation has no integer solutions:

$$x^n + y^n = z^n$$

$$ds^2 = dx_1^2 + dx_2^2 \tag{1}$$

Equation 1 represents square.

$$\sqrt{4} = 2 \tag{2}$$

$$\sum_{i=0}^n x_i \tag{3}$$

$$\sqrt[n]{\frac{x}{y}} \tag{4}$$

$$\frac{\sin \theta}{\cos \theta} = \tan \theta \tag{5}$$

$$\alpha^3 + \beta^3 = \gamma^3 \tag{6}$$

$$\int_a^b x^2 dx \int_a^b \tag{7}$$

$$f'(x) = \lim_{h \rightarrow 0} \frac{f(x+h) - f(x)}{h} \partial^2 \tag{8}$$

$$\partial^2\psi\tag{9}$$

$$\begin{pmatrix}1&2&3\\a&b&c\end{pmatrix}\begin{pmatrix}a&b\\c&d\end{pmatrix}\sqrt{4}=2\tag{10}$$

$$\sum_{i=0}^n x_i\tag{11}$$

$$\sqrt[n]{\frac{x}{y}}\tag{12}$$

$$\frac{\sin\theta}{\cos\theta}=\tan\theta\tag{13}$$

$$\alpha^3+\beta^3=\gamma^3\tag{14}$$

$$\int_a^b x^2 dx \int_a^b \tag{15}$$

$$f'(x)=\lim_{h\rightarrow 0}\frac{f(x+h)-f(x)}{h}\partial^2\tag{16}$$

$$\partial^2\psi\tag{17}$$

$$\begin{pmatrix}1&2&3\\a&b&c\end{pmatrix}\begin{pmatrix}a&b\\c&d\end{pmatrix}\tag{18}$$