

ISSN: 2639-0108

Original Article

Advances in Theoretical & Computational Physics

Principle of Division by Zero

Uchida Keitaroh

Applied Mathematics Department

*Corresponding Author

Uchida Keitaroh, Applied Mathematics Department, Japan.

Submitted: 2023, Apr 24; **Accepted:** 2023, Apr 28; **Published:** 2023, May 05

Citation: Uchida, K. (2023). Principle of division by zero. Adv Theo Comp Phy, 6(2), 95.

Abstract

I insist on existance of principle of division by zero; therefore, I will express the details of the principle.

Principle of division by zero.

$$0_{x} := \{x \in R \mid x = 0\},\$$

$$0 := \{ y \in R \mid y = 0 \}.$$

Let
$$\frac{0_x}{0_x} = 1$$
 and $\frac{0_y}{0_y} = 1$ be defined as conventions parmanently.

 0_x 0_y In addition, If the x and y axes are orthogonal, $\frac{0_y}{0_x} = 0$ and $\frac{0_x}{0_y} = 0$ are defined especially.

Then, the result for the above to lead to is as follows.

$$0 = \frac{0_y}{0_x} = \frac{\frac{0_y}{0_y}}{\frac{0_x}{0_y}} = \frac{1}{0} ,$$

or

$$0 = \frac{0_x}{0_y} = \frac{\frac{0_x}{0_x}}{\frac{0_y}{0_{xx}}} = \frac{1}{0} .$$

•

[Principle of division by zero.]

$$\frac{0_x}{0_x} = \frac{0_y}{0_y} = 1$$
and
$$\frac{0_y}{0_x} = \frac{0_x}{0_y} = 0$$

$$\Leftrightarrow$$

$$\frac{1}{0} = 0$$

Acknowledge

This paper is Uchida Keitaroh's original one.

Copyright: ©2023 Uchida Keitaroh. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.