

1 First example

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:

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

2 Second example

In physics, the mass-energy equivalence is stated by the equation $E = mc^2$, discovered in 1905 by Albert Einstein.

The mass-energy equivalence is described by the famous equation

$$E = mc^2$$

discovered in 1905 by Albert Einstein. In natural units ($c = 1$), the formula expresses the identity

$$E = m \tag{1}$$

3 Third example

This is a simple math expression $\sqrt{x^2 + 1}$ inside text. And this is also the same: $\sqrt{x^2 + 1}$ but by using another command.

This is a simple math expression without numbering

$$\sqrt{x^2 + 1}$$

separated from text.

This is also the same:

$$\sqrt{x^2 + 1}$$

...and this:

$$\sqrt{x^2 + 1}$$