

## 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 for  $n > 2$ :

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

## 2 Second 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:

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