

# Beautiful Mathematics Part 1

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## 1 Inline Mathematics

Inline math:  $f(x) = 5x + 3$ .

Everyone knows that  $2 + 2 \neq 5$ .

The square root:  $\sqrt[3]{2}$ .

## 2 Greek letters and fractions

To write the Greek letters we use Inline Math:  $\alpha\pi\Pi$

Same with fractions:  $\frac{1}{2}$

## 3 Display Math and Subscripts

Display Math is a math displayed on a separate line & in center.

$$f(x) = 5x + 3$$

Superscript:  $ax^2$

Subscript:  $a_1x$

## 4 Trigonometric Functions

We write the trigonometric functions using inline math again.

sinus:  $\sin 2$

cosinus:  $\cos \pi$

$$\sin^2 x + \cos^2 x = 1$$

## 5 Exercise: Second Degree Polynomial

The real zeros of the second Degree Polynomial  $f(x) = ax^2 + bx + c$  is either:

- on the form

$$\frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

when there are two real zeros.

- on the form

$$\frac{-b}{2a}$$

when there is one real zero.

- There are no real zeros