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