Sample Technical Document

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1 Introduction

This document demonstrates basic mathematical notations using LaTeX.

2 Mathematical Examples

Below are some sample equations.

2.1 Quadratic Formula

The quadratic formula solves equations of the form $ax^2 + bx + c = 0$:

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a} \tag{1}$$

2.2 Summation

A simple summation example:

$$\sum_{i=1}^{n} i = \frac{n(n+1)}{2} \tag{2}$$

2.3 Pythagorean Theorem

For a right triangle with sides a, b, and hypotenuse c:

$$a^2 + b^2 = c^2 (3)$$

3 Conclusion

These equations are rendered using LaTeX and can be compiled into a PDF.