Mathematical Document Test

This document tests various mathematical expressions and their rendering.

Inline Math Examples

Block Math Examples

Basic Equations

Integrals

Matrix Operations

Summations and Series

Complex Equations

Greek Letters and Sets

Trigonometric Functions

Limits

Fractions and Roots

Mixed Content

```
def fibonacci(n): if n <= 1: return n return fibonacci(n-1) +
fibonacci(n-2)</pre>
```

And then a mermaid diagram:

Finally, another block equation:

Error Testing

This might cause issues (intentionally malformed): \$\frac{\incomplete}{}