

LaTeX Practice Document

Hello! This is my first L^AT_EX document.

2nd line

3rd line

Inline and Display Math

Inline equation: $A(x) = x^2 + 2x + 1$

Display equation:

$$A(x) = x^2 + 2x + 1$$

Exponents and Subscripts

Incorrect exponent (wrong syntax): $x^23 + 3$

Correct exponent: $x^{23} + 3$

Nested exponents:

$$x^{x^{x^3+2x+1}+x^{3x+1}}$$

Subscripts: H_2O , H_{23}

Sequence notation: $a_1, a_2, a_3, \dots, a_{100}$

Greek Letters

Lowercase: π

Uppercase: Π

Trigonometric and Hyperbolic Functions

Trigonometric: $\sin x$, $\csc \theta$

Hyperbolic: $\sinh x$

Roots

Square root: $\sqrt{x+1}$

Cube root: $\sqrt[3]{25}$

Fractions and Displaystyle

Inline fraction: $\frac{1}{2}$

Nested fraction with "displaystyle":

$$\frac{\frac{2}{3}}{5}$$

Spacing Tips

To add vertical space between elements, use: `\\[6pt]` For example:

Line 1

Line 2 (with 6pt space above)