How to type formulas?

Representing addition:

2+3 versus 2 + 3

Representing multiplication:

2 · 3 or 2 * 3 or 2 × 3

Representing fractions:

1/2 or \( \frac{1}{2} \) or \( \frac{1}{2} \)

Representing roots:

\( \sqrt{x} \) or \( \sqrt{x^2} \) or \( \sqrt{x^2} \)

Representing trigonometric functions:

\( \sin x \) or \( \sin x \) or \( \sin(2x + 3) \)

Representing subscripts and superscripts:

\( x_i \) vs. \( x^i \) vs. \( x^i \)

Representing summation:

\( \sum_{i=0}^{N} x_i \) vs. \( \sum_{i=0}^{N} x_i \)

Representing integrals:

\( \int_{0}^{1} \sin t \, dt \) vs. \( \int_{0}^{1} \sin t \, dt \) vs \( \int_{0}^{1} \sin t \, dt \)

\( \int_{0}^{1} f(t) \, dt \) vs. \( \int_{0}^{1} f(t) \, dt \)
Representing fractions with contents:

\[ \left( \frac{x^2 - 1}{e^x} \right) \text{ vs. } \left( \frac{x^2 - 1}{e^x} \right) \text{ vs. } \left( \frac{x^2 - 1}{e^x} \right) \]

Representing overlines and underlines:

\[ \overline{abc} \quad \underline{abc} \quad \overline{(abc)} \quad \underline{\overrightarrow{AB}}; \]

Representing an underbrace:

\[ \underbrace{1 + 1 + 1 + \cdots + 1}_{100} \]

Representing binomial coefficients:

\( \binom{n}{k} \text{ vs. } \binom{ij}{k} \text{ vs. } \binom{n}{k} \)