Square roots
Square roots

\[ \sqrt{\pi} \]
Square roots

\[
\sqrt{\pi}
\]

$\sqrt{\pi}$
Square root in a sentence

Here is $\sqrt{\pi}$ in a sentence.
Here is $\sqrt{\pi}$ in a sentence.
Here is $\sqrt{\pi}$ in a sentence.
A displayed formula

$$\sqrt{\pi^2+1}$$

or

$$\sqrt{\pi^2+1}$$
Here is a displayed formula

$$\sqrt{\pi^2 + 1}$$

in the middle of text.
Here is a displayed formula

$$\sqrt{\pi^2 + 1}$$

in the middle of text.

$$\sqrt{\pi^2 + 1}$$
A displayed formula

Here is a displayed formula

$$\sqrt{\pi^2 + 1}$$

in the middle of text.

$$\sqrt{\pi^2 + 1}$$

or

$$\sqrt{\pi^2 + 1}$$
Fractions

\[ \frac{x^2+1}{x^2-1} \]
Fractions

\[ \frac{x^2+1}{x^2-1} \]
Fractions

\[\frac{x^2+1}{x^2-1}\]

\[\frac{x^2+1}{x^2-1}\]
Square roots of big hairy fractions
Square roots of big hairy fractions

\[ \sqrt{\frac{x^2+1}{x^2-1}} \]
Square roots of big hairy fractions

\[ \sqrt{\frac{x^2+1}{x^2-1}} \]

\[ \sqrt{\frac{x^2+1}{x^2-1}} \]
Integrals
Integrals

\[ \int f(x) \, dx \]
Integrals

\[ \int f(x) \, dx \]

\[ \int \square f(x) \, dx \]
More definite integrals
More definite integrals

\[ \int_a^b f(x) \, dx = F(b) - F(a) \]
More definite integrals

\[ \int_a^b f(x) \, dx = F(b) - F(a) \]

$\int_a^b f(x) \, dx = F(b) - F(a)$
Sine and Cosine

\[ \sin^2\theta + \cos^2\theta \equiv 1 \]
Sine and Cosine

\[ \sin^2 \theta + \cos^2 \theta \equiv 1 \]
Sine and Cosine

\[ \sin^2 \theta + \cos^2 \theta \equiv 1 \]
Something more complex

$$e^{-\pi \text{i}} + 1 = 0$$
Something more complex

\[ e^{-\pi i} + 1 = 0 \]
$e^{-\pi i} + 1 = 0$

$e^{-\pi i} + 1 = 0$
Calculus!
Calculus!

\[ \iint_{\Omega} f \, dx \wedge dy \]
Calculus!

$$\iint_{\Omega} f \ dx \wedge dy$$
More calculus
More calculus

\[ \frac{\partial^2 u}{\partial x \partial y} \]
More calculus

\[ \frac{\partial^2 u}{\partial x \partial y} \]

\[ \frac{\partial^2 \partial u}{\partial x \partial y} \]
Real and complex
Real and complex

$$\mathbb{R}^n \subset \mathbb{C}^n$$
$\mathbb{R}^n \subset \mathbb{C}^n$
Curly brackets
Curly brackets

$\Omega_n \subset \Omega_{n+1}$
Curly brackets

\[ \Omega_n \subset \Omega_{n+1} \]

\$\Omega_n \subset \Omega_{n+1}\$
A set \( \{x \in (0,1) \, : \, x \text{ is irrational} \} \)
A set

\[ \{ x \in (0,1) : \text{x is irrational} \} \]
A set

\{x \in (0, 1) : x \text{ is irrational}\}

\{x \in (0, 1) \mid x \text{ is irrational}\}$
Sums and products

\[
\sum_{n=0}^{\infty} a_n z^n = \prod_{n=0}^{\infty} \left(1 - \frac{z}{b_n}\right)
\]
Sums and products

$$\sum_{n=0}^{\infty} a_n z^n = \prod_{n=0}^{\infty} \left(1 - \frac{z}{b_n}\right)$$
Sums and products

\[ \sum_{n=0}^{\infty} a_n z^n = \prod_{n=0}^{\infty} \left(1 - \frac{z}{b_n}\right) \]

\$ \sum_{n=0}^{\infty} a_n z^n = \prod_{n=0}^{\infty} \left(1 - \frac{z}{b_n}\right) \$

\$ \prod_{n=0}^{\infty} \left(1 - \frac{z}{b_n}\right) \$
Big parentheses
Big parentheses

\( \left( \frac{x^2-1}{x^2+1} \right) \)
Big parentheses

\[
\left( \frac{x^2-1}{x^2+1} \right)
\]

\[
\left( \frac{x^2-1}{x^2+1} \right)
\]
Limits

\[
\lim_{x \to 0} \frac{\sin x}{x} = 1
\]
Limits

\[
\lim_{x \to 0} \frac{\sin x}{x} = 1
\]
Limits

\[
\lim_{{x \to 0}} \frac{\sin x}{x} = 1
\]

$\lim_{{x \to 0}} \frac{\sin x}{x} = 1$
Inequalities

$1 < 2 \leq x \neq y$
Inequalities

\[1 < 2 \leq x \neq y\]
Inequalities

$1 < 2 \leq x \neq y$

$1 < 2 \leq x \neq y$
Numbered equations

\[ \pi = 3 \] (1)

Equation 1 is only true in parts of Ohio.

\begin{equation}
\pi = 3
\end{equation}

Equation \ref{crazy} is only true in parts of Ohio.
Numbered equations

\[ \pi = 3 \] \hspace{1cm} (1)

Equation 1 is only true in parts of Ohio.
Numbered equations

\[ \pi = 3 \] (1)

Equation 1 is only true in parts of Ohio.

\[ \begin{equation} \label{crazy} \pi = 3 \end{equation} \]

Equation \ref{crazy} is only true in parts of Ohio.
Theorems

Theorem 1

$\sqrt{2}$ is an irrational number.

Isn't Theorem 1 lovely!

\begin{theorem}
\label{abiggy}
$\sqrt{2}$ is an irrational number.
\end{theorem}

Isn't Theorem \ref{abiggy} lovely!
Theorems

Theorem 1

$\sqrt{2}$ is an irrational number.

Isn’t Theorem 1 lovely!
Theorem 1
\( \sqrt{2} \) is an irrational number.

Isn’t Theorem 1 lovely!

\begin{align*}
\text{Isn’t Theorem } &\ref{abiggy} \text{ lovely!}
\end{align*}
Steve Bell's best theorem appears in his paper [1].

S. Bell, Unique continuation theorems for the $\bar\partial$-operator and applications, J. of Geometric Analysis 3 (1993), 195–224.
Steve Bell’s best theorem appears in his paper [1].

References

Steve Bell’s best theorem appears in his paper [1].


Steve Bell’s best theorem appears in his paper \cite{best}.

\bibitem{best} S. Bell, *Unique continuation theorems for the \( \bar{\partial} \)-operator and applications*, J. of Geometric Analysis 3 (1993), 195–224.