The rain in Spain falls *mainly* on the plain.

- Tea
- Milk
- Biscuits

$$\alpha + \beta + 1 \tag{1}$$

Words are separated by one or more spaces.
Paragraphs are separated by one or more blank lines.
The rain in Spain falls mainly on the plain.
Quotation marks are a bit tricky: use a backtick on the left and an apostrophe on the right.
Single quotes: ‘text’ .
Double quotes: “text” .

Some common characters have special meanings in LaTeX
$%&#!

In March 2006, Congress raised that ceiling an additional $0.79 trillion to $8.97 trillion, which is approximately 68% of GDP. As of October 4, 2008, the "Emergency Economic Stabilization Act of 2008" raised the current debt ceiling to $11.3 trillion.

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Let $y = mx + b$ be ...

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Use caret for superscripts and underscore for subscripts.

$y = c_2x^2 + c_1x + c_0$

Use curly braces to group superscripts and subscripts.

$F_n = F_n - 1 + F_n - 2$

$F_n = F_{n-1} + F_{n-2}$

There are commands for Greek letters and common notation.

$$\mu = Ae^{Q/RT}$$

$$\Omega = \sum_{k=1}^{n} \omega_k$$

The roots of a quadratic equation are given by:

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

where a, b and c are ... the coefficients of the quadratic equation.

Caution: LATEX mostly ignores your spaces in mathematics, but it can't handle blank lines in equations — don't put blank lines in your mathematics.

- Biscuits
- Tea

1. Biscuits
2. Tea

$$\Omega = \sum_{k=1}^{n} \omega_k$$

$$min_{x,y}(1-x)^2 + 100(y-x^2)^2$$

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$$\beta_i = \frac{\operatorname{Cov}(R_i, R_m)}{\operatorname{Var}(R_m)}$$

$$\begin{aligned}(x+1)^3 &= (x+1)(x+1)(x+1) \\ &= (x+1)(x^2+2x+1) \\ &= x^3+3x^2+3x+1\end{aligned}$$

An ampersand & separates the left column (before the =) from the right column (after the =).

A double backslash starts a new line.

Let $X_1, X_2, \ldots, X_n$ be a sequence of independent and identically distributed random variables with $E[X_i] = \mu$ and $\operatorname{VAR}[X_i] = \sigma^2 < \infty$, and let

$$S_n = \frac{1}{n}\sum_{i=1}^{n} X_i$$

denote their mean. Then as n approaches infinity, the random variables $\sqrt{n}(S_n - \mu)$ converge in distribution to a normal $N(0, \sigma^2)$

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