

1Introduction

This is a sample LaTeX document. LaTeX is a high-quality typesetting system that is particularly useful for technical and scientific documents.

Inline math: The quadratic formula is  $x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$ .

Display math:

$$E = mc^2 \tag{1}$$

A more complex equation:

2Basic Formatting

2.1Text Formatting

You can use **bold text**, *italic text*, and underlined text. You can also use `monospace text` for code.

2.2Lists

Here's an unordered list:

- First item
- Second item
- Third item

And here's an ordered list:

1. First numbered item
2. Second numbered item
3. Third numbered item

3Mathematics

LaTeX excels at typesetting mathematics. Here are some examples:

4Tables

Here's a simple table:

5References

You can reference sections, equations, and tables. For example, see Table ?? or Equation ??.

$$ax^2 + bx + c = 0 \tag{3}$$

6Conclusion

This sample document demonstrates many of the basic features of LaTeX. For more information, visit <https://www.latex-project.org/>.