My Document Title

Your Name

October 13, 2025

1 Headings and Paragraphs

This is the first section. Sections are the highest level of organization. You can write your main paragraphs directly under the section title. This is a placeholder paragraph to demonstrate how text flows. The quick brown fox jumps over the lazy dog.

1.1 This is a Subsection

Subsections help you break down a major section into smaller, more manageable parts. Notice the numbering automatically becomes 1.1, 1.2, etc. This is another placeholder paragraph.

1.1.1 This is a Subsubsection

For even finer detail, you can use a subsubsection. The numbering continues to nest. This is the final level of numbered headings in the standard article class.

2 Creating Lists

Here we demonstrate how to create lists with the specific spacing you requested.

2.1 Itemized (Bulleted) Lists

The `itemize` environment creates a bulleted list. We add `[itemsep=5pt]` to add 5 points of vertical space between the main bullet points, as per your "red line" rule.

- This is the first main item in the list.

- This is the second main item. Notice the space between this and the first item.

  - This is a nested item. Nested lists have their own default spacing.
  - This is another nested item.

- This is the third main item.

2.2 Enumerated (Numbered) Lists

The `enumerate` environment works the same way but creates a numbered list. We can apply the same custom spacing.

1. This is the first numbered item.

2. This is the second numbered item, showing the 5pt spacing.

3. And this is the third.

3 Writing Mathematics

LaTeX is famous for its beautiful math typesetting.

3.1 Inline and Display Math

You can place math directly within a line of text (inline math) by wrapping it in single dollar signs, like this: $E = mc^2$. This is useful for simple variables and equations.

For more complex or important equations, use a display math environment. The `align*` environment (from the `amsmath` package) is excellent for this. It centers the equations and allows you to align them neatly at the equals signs (using the `&` character). The asterisk (*) prevents equation numbering.

$$f(x) = x^2 + 2x + 1$$
$$g(x, y) = \frac{\sqrt{x^2 + y^2}}{x - y}$$
$$\int_0^\infty e^{-x^2}\, dx = \frac{\sqrt{\pi}}{2}$$

4 Images and PDFs

Here is how you can include external files like images and other PDFs.

4.1 Including an Image

To include an image, it's best to place it inside a `figure` environment. This allows LaTeX to place it nicely and lets you add a caption.
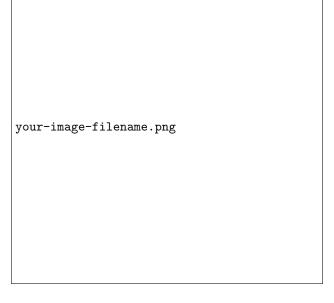
```
your-image-filename.png
```

Figure 1: This is the caption for the image.

4.2 Including a PDF

To include another PDF document, use the
includepdf command from the pdfpages package.

- The command below will insert all pages from the specified PDF file at this point in the document.

- **IMPORTANT:** The PDF file must be in the same folder as this .tex file.

- You must replace `"Your-PDF-Filename.pdf"` with the actual name of your PDF file.

width=!,height=!,pages=-