

# Demonstration Document

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At Home

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## 1 Introduction

### 1.1 Simple text

This first section contains simple text. On input, lines can be broken wherever one pleases, with extra spacing included to improve legibility, but the output lines will be broken to fit the line width available. Even additional spacing between words does not affect the output.

A new paragraph is indicated with a blank line.

### 1.2 Highlighting text

It is possible to emphasize text by setting it in *italic* or in **bold face**.

Another possibility is to offset a piece of text in a quote environment, like this with increased margins on either side.

## 2 Sophistications

### 2.1 Mathematics

There are special rules for entering math, and many commands that only exist in math mode. An in-line math formula like  $x^2 + \beta$  has automatic spacing between variables and operators, while displayed equations like

$$\vec{A} \times (\vec{B} \times \vec{C}) = (\vec{A} \cdot \vec{C})\vec{B} - (\vec{A} \cdot \vec{B})\vec{C} \quad (1)$$


$$\vec{A} \cdot (\vec{B} \times \vec{C}) = \begin{vmatrix} A_x & A_y & A_z \\ B_x & B_y & B_z \\ C_x & C_y & C_z \end{vmatrix} \quad (2)$$

are given automatic numbers.

### 2.2 Lists

1. Various lists are possible, to enumerate,
2. to itemize with bullets,
3. or to make descriptive lists.

### 2.3 Adding graphics

Pictures and graphics  produced by other programs are easily inserted.