

Demonstration Document

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At Home

October 22, 2015

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**, which can be done in **variety** of ways.

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 (see Knuth 1987, chap 16) 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

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

and

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

are given automatic numbers. One can avoid numbering displayed equations,

$$\vec{E} = -\vec{\nabla}\Phi,$$

by using a slight variant of the equation environment. Sometimes in-line equations, such as $\frac{(x+1)^2}{2}$, can look too cramped. You can avoid this by writing the equation in a different way, $(x+1)^2/2$ or telling LaTeX to set the equation, $\frac{(x+1)^2}{2}$, with the same size characters and symbols as it uses in `displaystyle` (Knuth 1987; Lammport 1987).

2.2 Lists

Various lists are possible with default numbering schemes

1. Elephant
2. Panda
3. Eagle

your own numbering

- i) Cake
- ii) Biscuit
- iv) Cookie

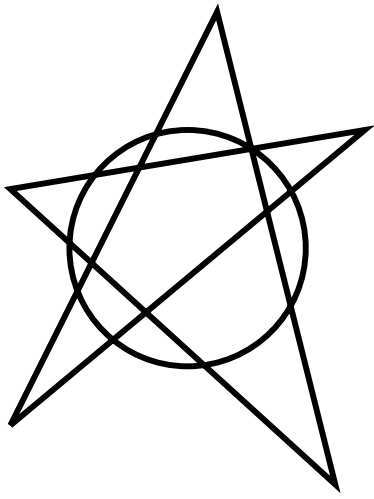


Figure 1: Cedric's star.

or just with bullets

- Star
- Galaxy
- Universe

2.3 Adding graphics



Pictures and graphics produced by other programs are easily inserted either direct into the text or with its own space and a caption (See Fig. 1).

References

[Knuth 1987] Knuth, D.E. (1987) "The TeXBook", Addison and Wesley.

[Lamport 1987] Lamport, L. (1994) "LaTeX: a Document Preparation System", Addison and Wesley.