First document

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### Abstract

This is a simple paragraph at the beginning of the document. A brief introduction about the main subject.

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## Chapter 1

## First Chapter

#### 1.1 Introduction

The first line after section is always fucked like this. Feels like an introduction to the section though.

First document. This is a simple example, with no extra parameters or packages included. Maybe if I put in more words, the difference between oneside and twoside will be revealed. I am not sure but this is what I would do. Unfortunately the experiment failed, I guess oneside and twoside implies a different meaning than what I have thought. Oh! I tried again, and it had nothing to do with the formatting of the content, but of the document itself! The margins are changed, they are shifted, together with the footnotes. I don't know if there are more things that change! So this is what working with LaTeX feels like! Some of the **greatest** discoveries in <u>science</u> were made by **accident**. Below are some unordered lists stuff:

- The individual entries are indicated with a black dot, a so-called bullet.
- The text in the entries may be of any length.

What if I want to continue the thing. Would I do it like this? Yes, yes it is. Now here it comes to the ordered lists:

- 1. This is the first entry in our list
- 2. The list numbers increase with each entry we add

And then some texts follow that to be less awkward! In physics, the massenergy equivalence is stated by the equation  $E = mc^2$ , discovered in 1905 by Albert Einstein. Again, the equation but in display mode will be written as

$$E = mc^2$$

for aesthetic. In natural units (c=1), the formula expresses the identity

$$E = m \tag{1.1}$$

Okay, that's cool. Now we are testing some texts after that.

#### 1.2 Second Section

Well of-course this is the case too. Introduction stuff on the first line! Some of the greatest *discoveries* in science were made by accident.



Figure 1.1: potato world

As you can see in the figure 1.1, this is the world of potato. Also for your curiosity, page 3 is the page of that image.

#### 1.2.1 First Subsection

I mean like why not? Introduction on the first line seems cool.

Some of the greatest discoveries in science were made by accident.

Some of the greatest discoveries in science were made by accident.

#### Unnumbered Section

Well maybe it will become uncool somehow, but for the matter of writting, this first line introduction seems like a good convention. Subscripts in math mode are written as  $a_b$  and superscripts are written as  $a^b$ . These can be combined an nested to write expressions such as

$$T^{i_1 i_2 \dots i_p}_{j_1 j_2 \dots j_q} = T(x^{x_1}, \dots, x^{i_p}, e_{j_1}, \dots, e_{j_q})$$

We write integrals using  $\int$  and fractions using  $\frac{a}{b}$ . Limits are placed on integrals using superscripts and subscripts:

$$\int_0^1 \frac{dx}{e^x} = \frac{e-1}{e}$$

Lower case Greek letters are written as  $\omega$   $\delta$  etc. while upper case Greek letters are written as  $\Omega$   $\Delta$ .

Mathematical operators are prefixed with a backslash as  $\sin(\beta)$ ,  $\cos(\alpha)$ ,  $\log(x)$  etc.

cell1	cell2	cell3
cell4	cell5	cell6
cell7	cell8	cell9

Okay, I guess that's enough playing with toy table. It's time for some real shit. Table 1.1 is an example of referenced LaTeX elements.

No.	Col1	Col2	Col3
1	6	87837	787
2	7	78	5415
3	545	778	7507
4	545	18744	7560
5	88	788	6344

Table 1.1: Table to test captions and labels