# "Hands on" LaTeX is not for me Examples

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## Abstract

The purpose of this document is to provide some insight on how LaTeX works.

# 1 Introduction

This document was constructed "on-the fly" during a talk about LaTeX.

# 2 Example of a Section Heading

Text included in this section. Sub-section

## 2.1 Example of a Sub-Section Heading

Text included in this sub-section. Sub-sub-section

### 2.1.1 Example of a Sub-Sub-Section Heading

Text included in this sub-sub-section. Paragraph

**Example of a Paragraph Heading**   Text of paragraph. SubParagraph (do not mention this)

Inserting a numbered equation or mathematical expression is simple:

$$P(X = x) = \frac{\alpha x_m}{x^{\alpha+1}}, \alpha > 0, x \geq x_m > 0. \tag{1}$$

Inserting na inline mathematical expression is done by defining the expression within the text using $expression$. Example:

The Pareto probability density function is given by $P(X = x) = \frac{\alpha \times x_m}{x^{\alpha+1}}$, where $\alpha > 0$ and $x \geq x_m > 0$.

# 3 Numbering and Bulleting

Buy the following stuff:

- Fruit;

- Tuna;

- Cerveja...

The following three items are obligatory:

1. Vodka;

2. Xixa;

3. Cocaine.

Lists are created using the following environments:

- This is the first item;

- This is the other item;

+ This is the first item;

+ This is the other item;

List environments may be cascaded:

- The following sub-items are numbered:

    1. This is the first item;
    2. This is the other item;

- This is the other item;

# 4   Figure with Caption

This section only contains a figure.

**Example 6 – Figure with Caption**

```
\section{Figure with Caption}
\label{secFig}

This section only contains a figure.

\begin{figure}[!ht]
  % Requires \usepackage{graphicx}
    \centering
    \label{figExample}

\includegraphics[width=0.85\textwidth]{fig1
.pdf}\\

  \caption{Caption of this very figure.}
\end{figure}
```

Figure 1: Caption of this very figure.

| 1 | 2 | 3 |
|---|---|---|
| 4 | 5 | 6 |
| 7 | 8 | 9 |

Another table...

Table 1: Simple Table with Caption

| 1 | 2 | 3 |
|---|---|---|
| 4 | 5 | 6 |