

Chapter 1 Introduction

This shell uses booklet35.cst. This short text paragraph introduces the topic of your booklet.

In-line and Displayed Mathematics

The expression $\sum_{i=1}^{\infty} a_i$ is in-line mathematics, while the equation

$$\sum_{i=1}^{\infty} a_i \tag{1}$$

is displayed and numbered as equation (1).

Let H be a Hilbert space, C be a closed bounded convex subset of H , T a nonexpansive self map of C . Suppose that as $n \rightarrow \infty$, $a_{n,k} \rightarrow 0$ for each k , and

$\gamma_n = \sum_{k=0}^{\infty} (a_{n,k+1} - a_{n,k})^+ \rightarrow 0$. Then for each x in C , $A_n x = \sum_{k=0}^{\infty} a_{n,k} T^k x$ converges weakly to a fixed point of T .

Two sets of LaTeX parameters govern mathematical displays. The spacing above and below a display depends on whether the lines above or below are short or long, as shown in the following examples.

A short line above:

$$x^2 + y^2 = z^2$$

and a short line below.

A long line above may depend on your margins

$$\sin^2\theta + \cos^2\theta = 1$$

as will a long line below. This line is long enough to illustrate the spacing for mathematical displays, regardless of the margins.

Mathematics in Section Heads $\int_{\alpha}^{\beta} \ln t dt$

Mathematics can appear in section heads. Note that mathematics in section heads may cause difficulties in typesetting styles with running headers or table of contents entries.

Section Heading 2

Use the Section tag for major sections, such as the one just above. Four additional heading levels are available, as described below.

Subsection Heading 3

This is some text.

Subsubsection Heading 4

This is some text.

Subsubsubsection Heading 5

This is some text.

Tags

You can apply the logical markup tag Emphasized and ***Strongly Emphasized***.

You can apply the visual markup tags **Bold**, *Italics*, **keyboard input**, **sample text**, and `typed code`.

You can apply the size tags `smaller` and `bigger`.

Following is a group of paragraphs marked as Short Quote. This environment is appropriate for a short quotation or a sequence of short quotations.

The only thing we have to fear is fear itself. Franklin D. Roosevelt, ***Mar. 4, 1933***

Ask not what your country can do for you; ask what you can do for your country.
John F. Kennedy, ***Jan. 20, 1961***

There is nothing wrong with America that cannot be cured by what is right with America. William J. "Bill" Clinton, ***Jan. 21, 1993***

Lists

Bullet and numbered list environments are available. Lists, which can extend four levels deep, look like this:

You can create numbered, bulleted, and description lists using the tag popup at the bottom left of the screen.

1. Numbered list item 1
2. Numbered list item 2
 - a. A numbered list item under a list item.
The typeset style for this level is often different from the screen style.
The typeset appearance often uses parentheses around the level indicator.
 - b. Another numbered list item under a list item.
 - i. Third level list item under a list item.
 - a. Fourth and final level of numbered list items allowed.
- Bullet item 1
- Bullet item 2
 - Second level bullet item.
 - Third level bullet item.
 - Fourth and final level bullet item.

Description List Each description list item has a term followed by the description of that term. Double click the term box to enter the term, or to change it.

Bunyip Mythical beast of Australian Aboriginal legends.