

# LatexBuilder

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## 1 Introduction

This is an introduction.

## 2 Sections

Document levels are maintained internally by the *LatexDocument*. So there is no need to remember which section/subsection/paragraph level you are at.

Document scopes are implemented using readonly ref structs so they should quite performant to use which can be a concern when writing large documents.

### 2.1 A subsection

This is now a subsection as we were already inside a Section.

### 2.2 Another subsection

#### 2.2.1 A subsubsection

A paragraph

A subparagraph

Nesting maxes out at subparagraph That wasnt so bad.

## 3 Some math

The string interpolation features in newer versions of C# is very well suited to mixing code variables and latex markup.

We seek to calculate the value for  $\gamma$ :

$$\begin{aligned}\gamma &= \alpha + \beta && \text{(a tag)} \\ \alpha &= 1 \\ \beta &= 2 \\ \gamma &= 1 + 2 \\ &= 3\end{aligned}$$

## 4 Other things

### 4.1 Lists

- First item
  - Nested item 1
  - Nested item 2
- Second item

### 4.2 Tables

n	variable	value
1	$\alpha$	1
2	$\beta$	2
3	$\gamma$	3

Table 1: \*  
A table caption

### 4.3 Manual section

You can also manage sections explicitly using *BeginSection* and *EndSection*