LyX: The WYSIWYM Document Processor

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July 9, 2010

Outline

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What Is LyX?

LyX is document processor that works as a front end to LaTeX. It allows for instant previewing of the document from the input side of the process, creating a near WYSIWYG version of LaTeX, coined by LyX users as WYSIWYM.
We'll overview three of the common document classes:

1. Article
2. Letter
3. Beamer

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1. Article
2. Letter
3. Beamer

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Article

Article is the default document class when LyX is first opened. The structure of sections, titles, and lists within the document works the same as in LaTeX, but are entered differently. This will be explained in the next slide. These "paragraph styles" are refered to, in LyX, as environments. Article allows for other typical scientific document environments such as tables, figures, math expressions, etc.

Sections are very straightforward.

- Click the cursor to the desired line in the document
- Click the Environment dropbox (the leftmost element on the buttonbar)
- Select Section, Subsection, Subsubsection, Paragraph, or Subparagraph

This automatically makes the selected line into the desired environment. Using this same method, a selected line can be made into an unnumbered section (Section*), Title, Author, Enumerate list, Itemize list, etc. All these environments are selectable in the dropbox.

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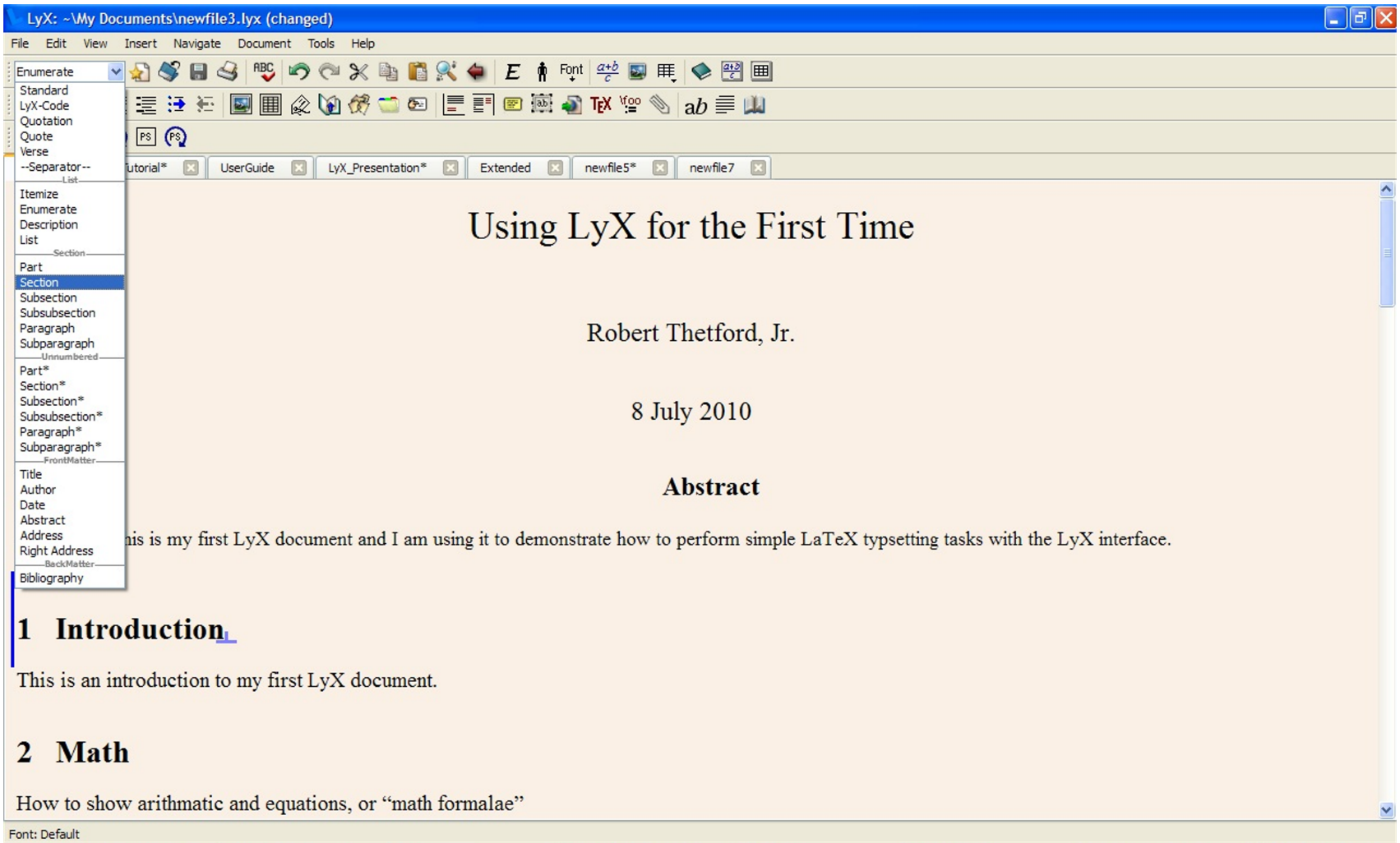
Article

Sections, Titles, and Lists



Tables are very straightforward.

- Click the cursor to the desired line in the document
- Create a new table with Insert ▷ Table
- Specify how many columns and rows
- Click each and edit each individual cell
- Use the Table Toolbar (shows at bottom of screen when inserted table is left-clicked) to toggle borderlines and designate multicolumns (multirows not supported by LyX)

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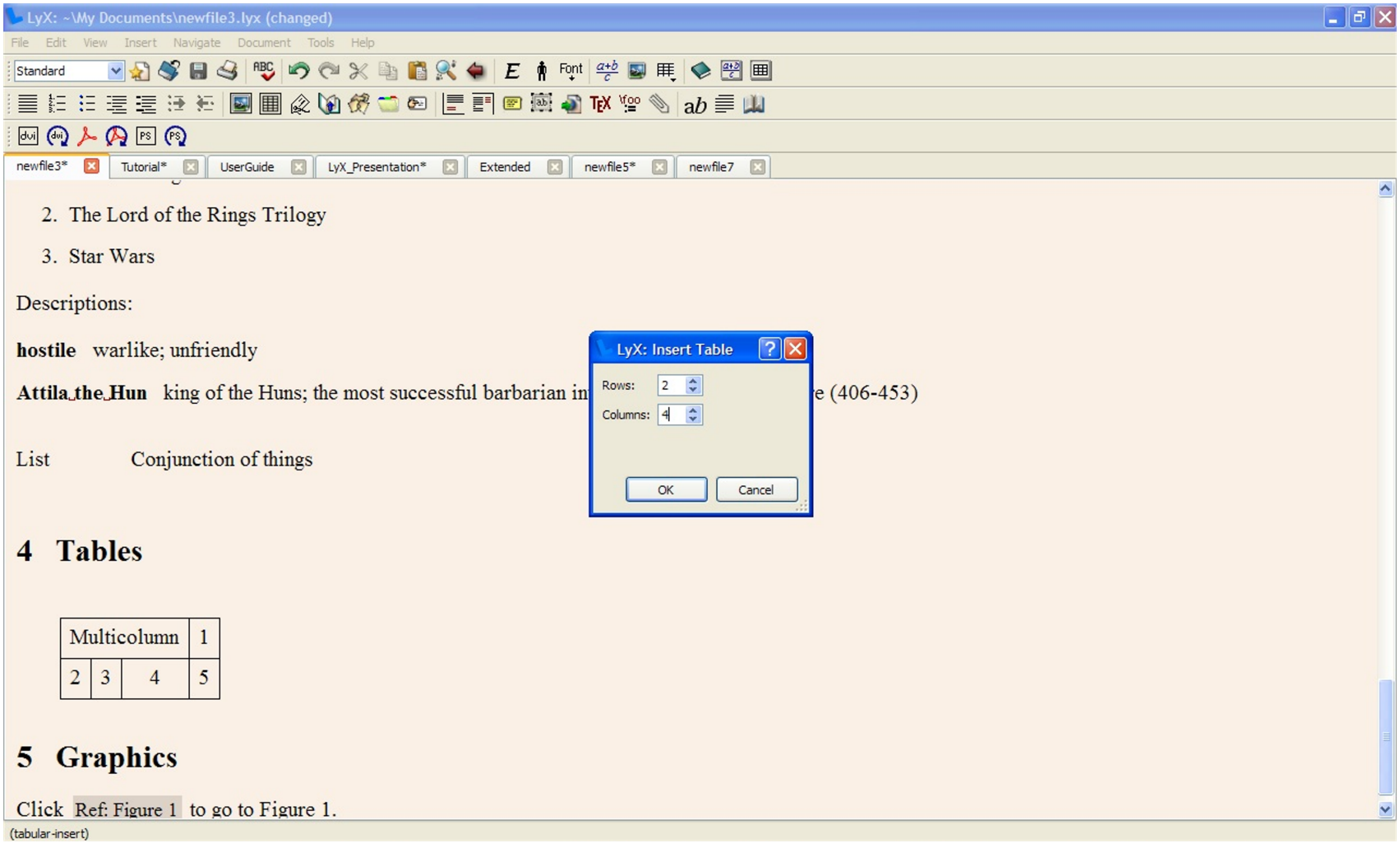
Article

Tables



Figures are very straightforward. In LyX, they are refered to as graphics.

- Click the cursor to the desired line in the document
- Create a new graphic with Insert ▷ Graphics
- Specify an image to insert (all known image formats will work)
- Optional: Specify a scale percentage, scale by width, or scale by height value

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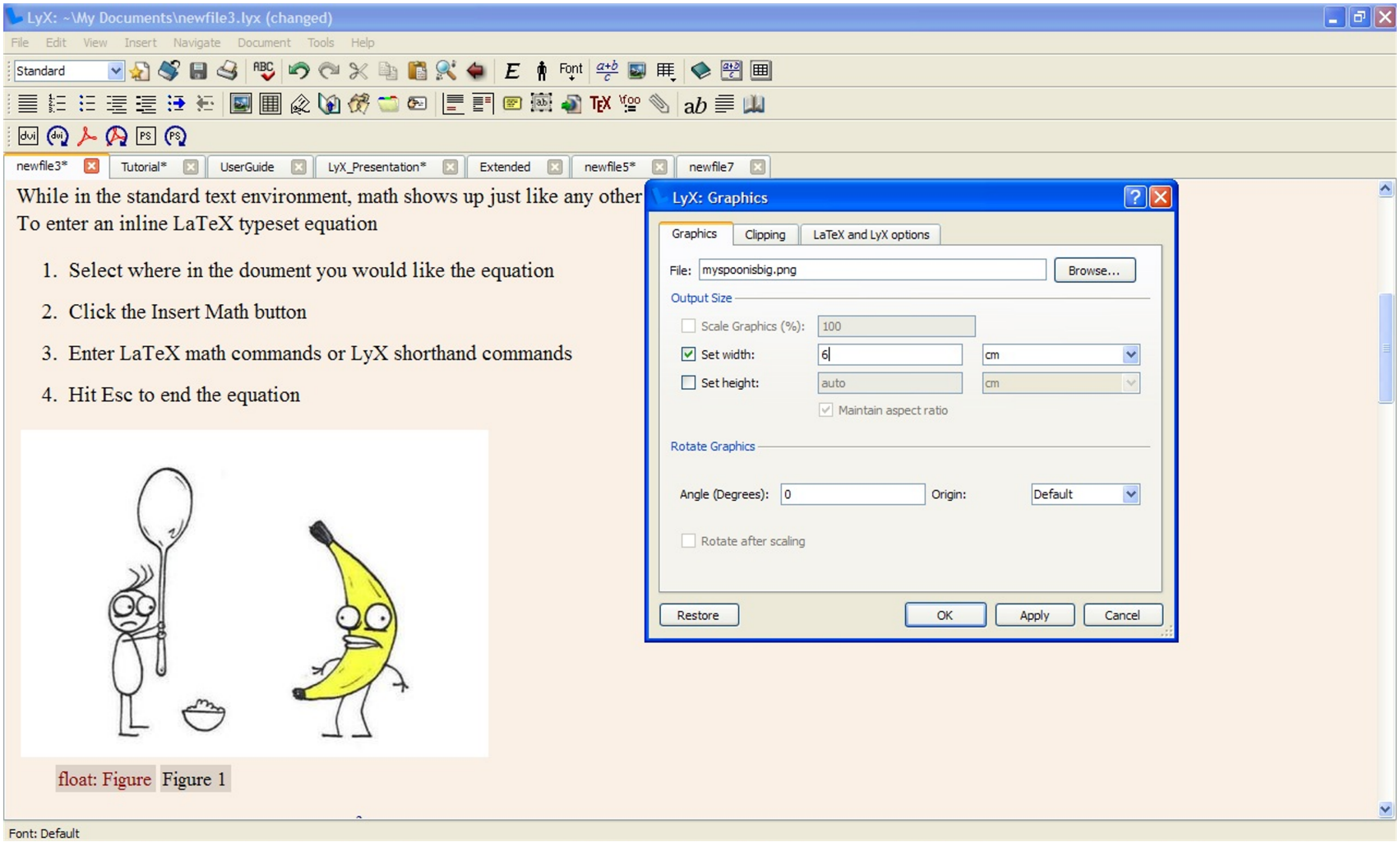
Article

Figures



Math is very straightforward.

1. Inline Equations
   - Click the cursor to the desired line in the document
   - Create a new math formula with Insert ▷ Math ▷ Inline Formula
   - Enter LaTeX math commands or LyX shorthand commands
   - Hit Esc to end the equation

   Displayed Equations are quite similar:
2. Displayed Equations
   - Create a new math formula with Insert ▷ Math ▷ Display Formula
   - Give the equation a number label with Edit ▷ Math ▷ Number Whole Formula (for a single line equation)

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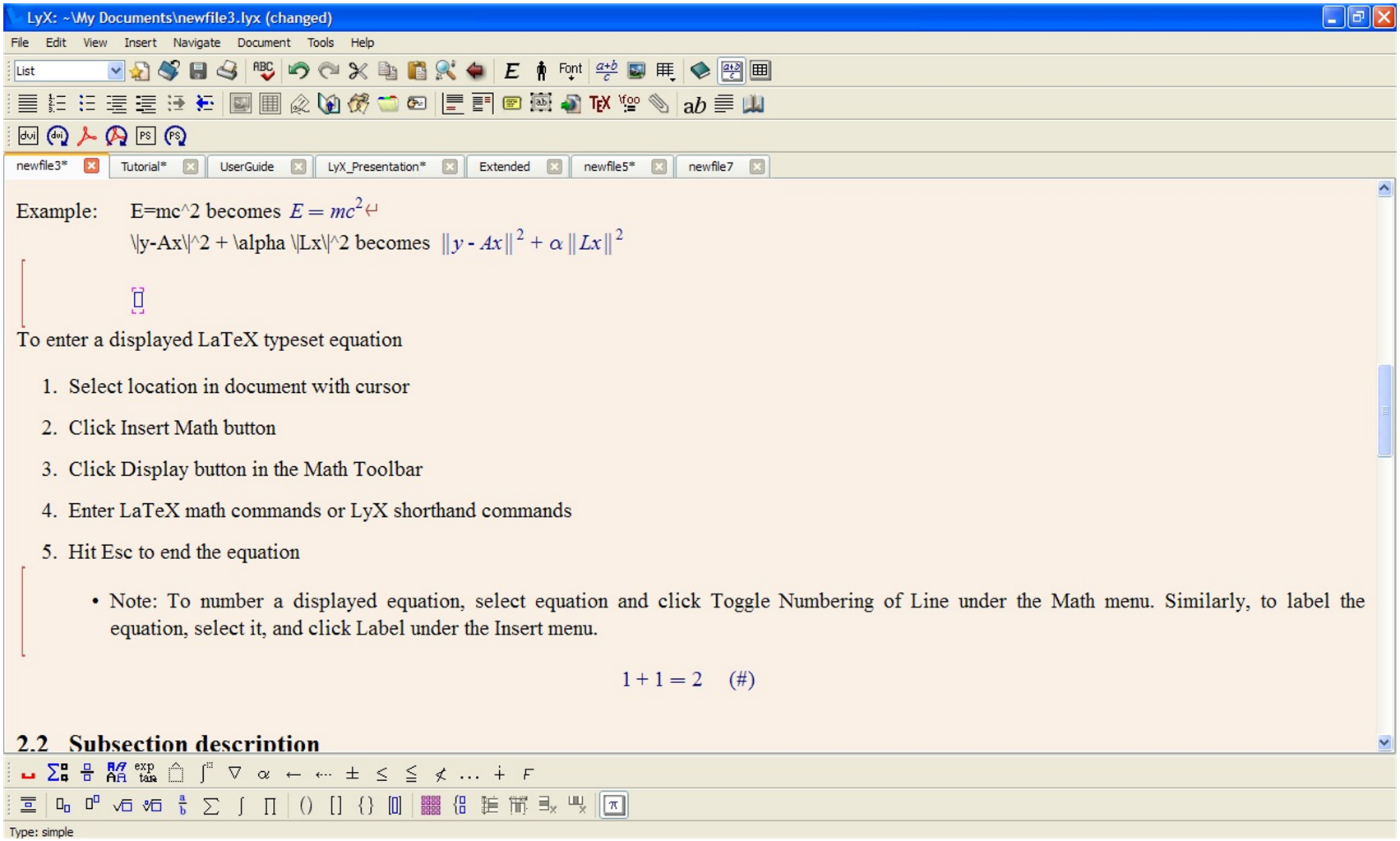
Article

Math



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Letter

LyX allows for a simple but professional looking Letter document. Letter can be written from scratch just like Article, except that there are different environments available. However, an advantage to using LyX is that there are some templates available to make creating documents even easier. One template included with LyX is a Letter template.

Letter

Template

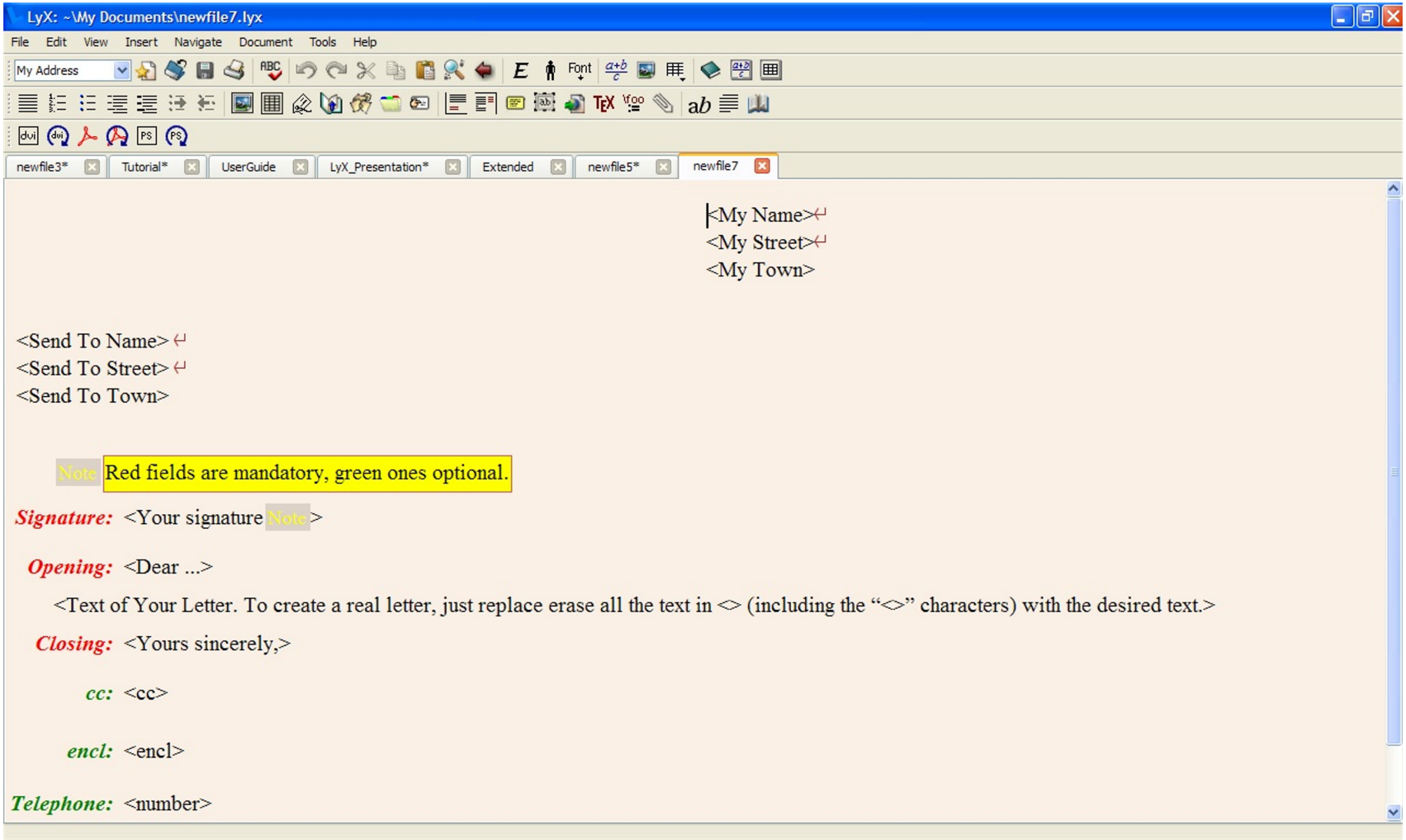


Figure: Letter Template

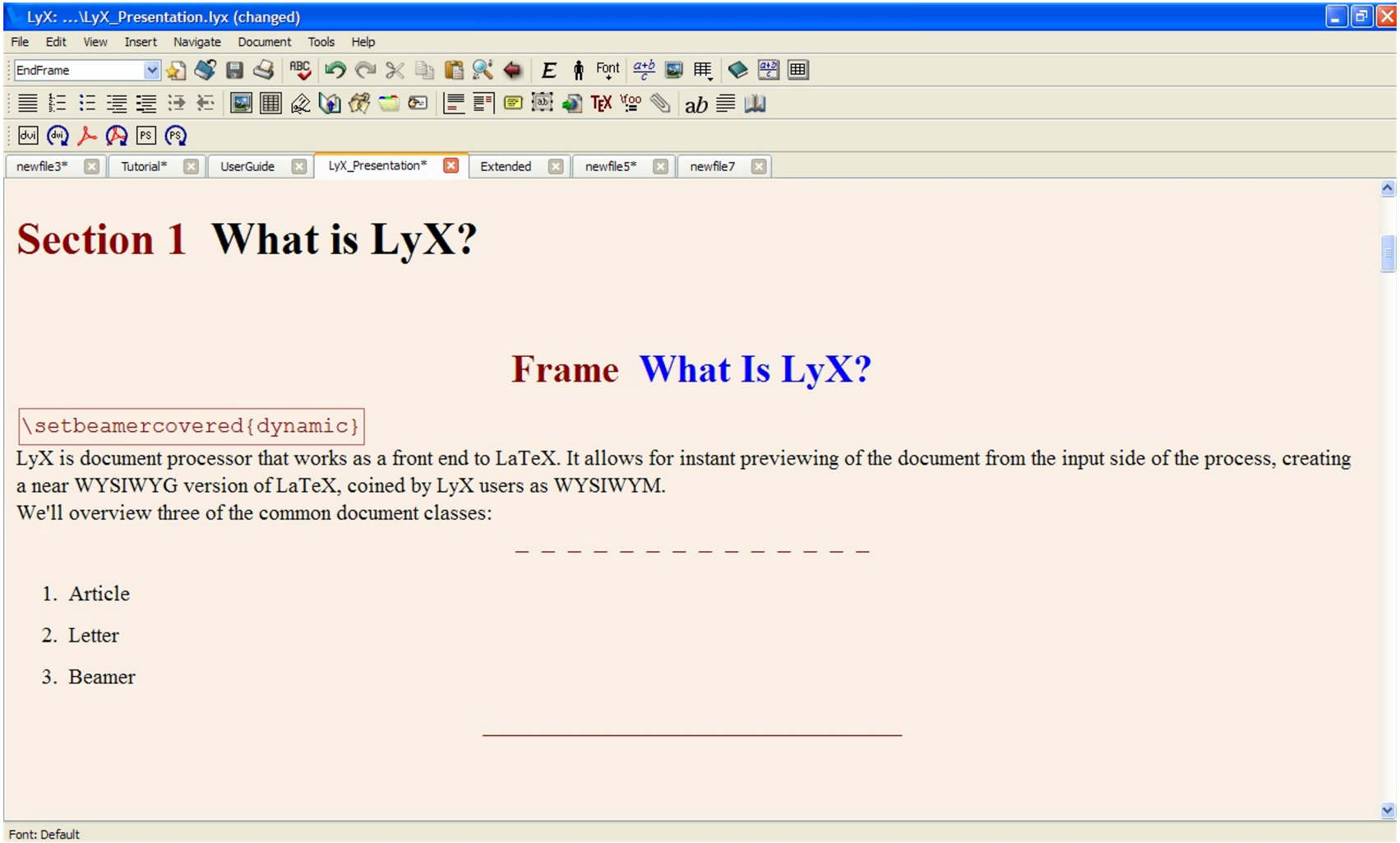
Outline

Beamer

Beamer is the slide presentation document class. From a LaTeX user standpoint, the input process in LyX for a Beamer document is a little odd at first, but simple after repeated use. Like Article and Letter, all the document class specific environments can be found in the Environment dropbox. The following screenshot is for the second frame of this presentation.

Beamer

Example



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Conclusion

In conclusion, LyX is simple and hard?

- Creating documents that work within the default parameters is *very* simple.
- Creating documents that require much fine tuning or more complex elements is difficult.

Questions?