

Enumerations, Itemizations, and Descriptions in L^AT_EX using the Enumitem Package

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L^AT_EX by itself supports enumerated, itemized, and description lists, but with some formatting limitations. Variations are possible through parameterization of standard lists, defining new ones, or using packages that allow more flexibility. This short set of examples uses the package *enumitem* to show a number of possibilities. Note that a new named environment can be created for each style of list — see the first two non-standard description examples.

In each list, any non-zero lengths are shown. These lengths include: `labelwidth`, `labelindent`, `labelsep`, `leftmargin`, `itemindent`, and `topsep`.

Descriptions

Here is a standard description environment:

`topsep` is 1 mm

`leftmargin` is 9 mm, which is the distance to the text for the item.

`labelindent` is 0 mm

`labelsep` is 2 mm

`labelwidth` is 0 mm

`itemindent` is -8 mm

This description list uses the *enumitem* package to make italicized labels that are indented. The following options are used: `[font=\itshape, labelindent=3mm, leftmargin=*, topsep=0mm]`.

leftmargin is 9 mm, which is the distance to the text for the item.

labelindent is 3 mm

labelsep is 2 mm

labelwidth is 0 mm

itemindent is -5 mm

Here the style is set so that if the label word would stick into the description text, the text will be put on the next line. Also, space is removed between items. The following options are used: `[style=nextline, leftmargin=17mm, topsep=0mm, noitemsep]`.

`leftmargin`

is 17 mm, which is the distance to the text for the item.

`labelindent`

is 0 mm

`labelsep` is 2 mm

`labelwidth`

is 0 mm

`itemindent`

is -16 mm

Here, the start of the item text is adjusted so that all of the labels fit. Note that this uses a defined list separate from *enumitem*, and the widest item has to be included as a separate argument:

10:00: Read about igneous rocks.

12:00: Find a metamorphic rock.

1:00: Throw a sedimentary rock.

Enumerations

Here is the standard enumeration. Labels are aligned right with no indentation, although space is allowed for large label numbers:

1. `topsep` is 1 mm

2. `leftmargin` is 9 mm, which is the distance to the text for the item.

3. `labelsep` is 2 mm

4. `labelwidth` is 7 mm

Here is an enumeration with explicitly set lengths. Options: `[noitemsep, topsep=0mm, labelindent=3mm, leftmargin=*, widest=3., align=right]`.

1. `leftmargin` is 8 mm, which is the distance to the text for the item.

2. `labelindent` is 3 mm

3. `labelsep` is 2 mm

4. `labelwidth` is 3 mm

5. `itemindent` is 0 mm

Here is an enumeration with italicised lower case letters. Options: `[topsep=0mm, label=\emph{\alph*}]`.

a) `leftmargin` is 9 mm, which is the distance to the text for the item.

b) `labelindent` is 0 mm

c) `labelsep` is 2 mm

d) `labelwidth` is 7 mm

Here is an enumeration indented 15mm. Note that the labels are aligned to the right. Options: `[topsep=0mm, leftmargin=15mm]`:

1. `leftmargin` is 15 mm, which is the distance to the text for the item.

2. `labelindent` is 0 mm

3. `labelsep` is 2 mm

4. `labelwidth` is 7 mm

Here is an enumeration with no `topsep` and flushed to the left. Options: `[topsep=0mm, leftmargin=*]`:

1. `leftmargin` is 4 mm, which is the distance to the text for the item.

2. `labelsep` is 2 mm

3. `labelwidth` is 3 mm

4. `itemindent` is 0 mm

Itemizations

Here is the standard itemization list:

• `topsep` is 1 mm

• `leftmargin` is 9 mm, which is the distance to the text for the item.

• `labelindent` is 0 mm

• `labelsep` is 2 mm

• `labelwidth` is 7 mm

• `itemindent` is 0 mm

Here is an itemization list with `topsep` set to 0 and a different label. Options: `[topsep=0mm, label=\textrm{--}]`:

— `leftmargin` is 9 mm, which is the distance to the text for the item.

— `labelindent` is 0 mm

— `labelsep` is 2 mm

— `labelwidth` is 7 mm

Here is an itemization list with the labels, which are long dashes, flushed to the left. Options: `[topsep=0mm, label=\textrm{---}, leftmargin=*]`:

— `leftmargin` is 5 mm, which is the distance to the text for the item.

— `labelindent` is 0 mm

— `labelsep` is 2 mm

— `labelwidth` is 3 mm

Here is the standard itemization list indented by 15mm. Options: `[topsep=0mm, label=\textrm{---}, leftmargin=15mm]`:

— `leftmargin` is 15 mm, which is the distance to the text for the item.

— `labelindent` is 0 mm

— `labelsep` is 2 mm

— `labelwidth` is 7 mm

Here is an itemization list with empty box labels. Note that you need to include package *stmaryrd* to get the boxes. Options: `[topsep=0mm, label=\boxempty]`:

`topsep` is 0 mm

`leftmargin` is 9 mm, which is the distance to the text for the item.

`labelindent` is 0 mm

`labelsep` is 2 mm

`labelwidth` is 7 mm

`itemindent` is 0 mm