

April 30, 2007

Question: The thesis office wants the numbers in columns of my thesis lined up on the decimal point and I can't figure out how to do this? Is there a way to do this with L^AT_EX or am I just out of luck? Thanks.

Hi,

There is no official way in L^AT_EX to line up numbers as a whole unit on a decimal point. The fact that your dealing with proportional pitched characters is probably why you can't easily do this as all the numbers do not all necessarily have the same character width.

Unofficially, there are a couple of ways around this. The easiest is to insert `\blank` or `\` (required blanks) or maybe even use a `~` to pad out your numbers and make them line up a little better. This works best with numbers that have only a little variation in them which is most thesis work that is usually required to have all numbers accurate to a particular number of digits beyond the decimal point.

If this won't work for you then there is another way. You can split the number up into two parts (before and after the decimal point), use a decimal point as a column/text separator and right justify the first half of the number and left justify the second half of the number. This is a lot more work but almost always gives you near perfect results. For example:

```
\begin{tabular}{r@{.}l}  
97 & 34314 \\  
1025 & 34 \\  
\end{tabular}
```

would get you a result that looked like:

```
 97.34314  
1025.34
```

Using this method you normally also have to use `\multicolumn` in the header so you don't get a decimal point there. There is a full example of this (using an en-dash instead of a decimal point but still very similiar) in Leslie Lam-

port's "LaTeX: User's Guide and Reference Manual" and another example of this using a colon rather than a decimal point in Kopka and Daly's "A Guide to L^AT_EX".

Here's my own example from the isuthesis manual:

```
\begin{tabular}{lr@{.}lr@{.}lr@{.}l}  
Group & \multicolumn{2}{c}{Reading} & \multicolumn{2}{c}{Writing} \\ 5th Grade & 3&32 & 76&52 \\ 6th Grade & 219&927 & 114&9542 \\ \end{tabular}
```

which produces:

	Group	Reading	Writing
5th Grade	3.32	76.52	
6th Grade	219.927	114.9542	

If neither of these methods meet your needs, you might also look at some of the extensions to the tabular environment like the array package and the supertab package as described in the "LaTeX Companion".

Sincerely yours,

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