

L^AT_EX Math Mode

Recall:

Environment syntax: `\begin{envname}text\end{envname}`

The Basic Stuff

Text Mathmode:	<code>\$math\$</code>	or	<code>\(math\)</code>	or	<code>\begin{math}</code> <i>math</i> <code>\end{math}</code>
Display Mathmode:	<code>\$\$math\$\$</code>	or	<code>\[math\]</code>	or	<code>\begin{displaymath}</code> <i>math</i> <code>\end{displaymath}</code>
Equation mode:	<code>\begin{equation}</code> <i>equations</i> <code>\end{equation}</code>				

To write an equation

For example, to write this:

$$\int_1^5 2x \, dx = 24$$

Type this:

```
\begin{equation}
\int_{1}^{5} 2x \, dx = 24
\end{equation}
```

Figures and Tables

Figures:

```
\begin{figure}[htbp]
\begin{center}
\includegraphics{fileName}
\end{center}
\end{figure}
```

Tables:

```
\begin{table}[htbp]
\begin{tabular}{lrc}
data1 & data2 & data3
\end{tabular}
\end{table}
```

General form for figures/tables

`{lrc}` tag denotes justification

for each column

`{|1|1|1|}` means 3 cols w/lines, left justified

`{rrrrr}` means 5 cols, right justified

put pipes between/around l,r,c for table lines

Graphics - Make your paper spiffier today!

General Command: `\includegraphics{fileName}`

Scaling: `\includegraphics[scale=0.7]{fileName}`

`\includegraphics[height=2in]{fileName}`

`\includegraphics[width=6cm]{fileName}`

`\includegraphics[width=\textwidth]{fileName}`

Angle: `\includegraphics[angle=90]{fileName}`

Combine arguments: `\includegraphics[angle=90, scale=0.7]{fileName}`

Scales the original
by the factor indicated.

Modify w/h
(in, cm, mm, pt)

Scale to page width.

Rotate by angle

Captions

```
\caption{insert witty caption here}
```

```
\label{labelName}
```

Put this inside your `{figure}` or `{table}` tags.

This puts a label on your table; cite it later with

```
\ref{labelName}
```