LaTeX Exposition

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1 Commands

1.1 newcommand

`\newcommand` can have `\par` while `\newcommand*` cannot
`newcommand{\name}[num][default]{definition}` with `default` being the default value for the first argument. For example

```
\newcommand{\wbalTwo}[2][Wikimedia]{
  This is the Wikibook about LaTeX
  supported by {#1} and {#2}!}
% in the document body:
\begin{itemize}
\item \wbalTwo{John Doe}
\item \wbalTwo[lots of users]{John Doe}
\end{itemize}
```

Reads

- This is the Wikibook about LaTeX supported by Wikimedia and John Doe!

- This is the Wikibook about LaTeX supported by lots of users and John Doe!

1.2 xequal

`\mathbin` modifies the spacing around something so that it adheres to that of a binary operator, like $+$. `\mathrel` modifies the spacing to denote that of a binary relation, like $=$. For example

Binary relations

LaTeX	Typeset	width
$x=x$	$x = x$	24.76376pt
$x\mathbin{=}x$	$x = x$	23.65268pt
$x\mathrel{=}x$	$x = x$	24.76376pt

Binary operators

LaTeX	Typeset	width
$x+x$	$x + x$	23.65268pt
$x\mathbin{+}x$	$x + x$	23.65268pt
$x\mathrel{+}x$	$x + x$	24.76376pt

Binary relations

LaTeX	Typeset	width
$x=x$	$x = x$	24.76376pt
$x\stackbin[c]{a}{=}x$	$x \overset{a}{\underset{c}{=}} x$	23.65268pt
$x\stackrel[c]{a}{=}x$	$x \overset{a}{\underset{c}{=}} x$	24.76376pt

Binary operators

LaTeX	Typeset	width
$x+x$	$x + x$	23.65268pt
$x\stackbin[c]{a}{+}x$	$x \overset{a}{\underset{c}{+}} x$	23.65268pt
$x\stackrel[c]{a}{+}x$	$x \overset{a}{\underset{c}{+}} x$	24.76376pt

mkern gives horizontal space which must be measured by mu. For example

LaTeX	Typeset
ab	ab
$a\mkern10mu b$	$a\ \ b$