

The following L^AT_EX macros create commands for typesetting the multichoose symbol:

```
\newcommand{\multichoose}[2]{\left(\!\!\binom{#1}{#2}\!\!\right)}
\newcommand{\bigmultichoose}[2]{\left(\!\!\!\binom{#1}{#2}\!\!\!\right)}
```

Note that the `\left` and `\right` macros come from the `amsmath` package, so be sure to include `\usepackage{amsmath}` in your preamble. The macro `\!` is a “negative thin space” that closes up the gap between the outer set of parentheses and the binomial coefficient.

- Use the `\multichoose` command for inline mathematics, e.g., $\left(\!\!\binom{n}{k}\!\!\right) = \binom{n+k-1}{k}$.
- Use the `\bigmultichoose` command for displayed mathematics:

$$\sum_{k=0}^n \left(\!\!\binom{n}{k}\!\!\right).$$