

`\over`
`\atop`
`\above` *<dimen>*
`\choose`
`\brace`
`\brack`

These commands stack one subformula on top of another one. We will explain how `\over` works, and then relate the other commands to it.

`\over` is the command that you'd normally use to produce a fraction. If you write something in one of the following forms:

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$$\begin{aligned}
& \text{\$}\langle formula_1 \rangle \over \langle formula_2 \rangle \text{\$} \\
& \text{\$}\langle formula_1 \rangle \over \langle formula_2 \rangle \text{\$} \\
& \text{\texttt{\textbackslash left}} \langle delim \rangle \langle formula_1 \rangle \over \langle formula_2 \rangle \text{\texttt{\textbackslash right}} \langle delim \rangle \\
& \{ \langle formula_1 \rangle \over \langle formula_2 \rangle \}
\end{aligned}$$


```

you'll get a fraction with numerator $\langle formula_1 \rangle$ and denominator $\langle formula_2 \rangle$, i.e., $\langle formula_1 \rangle$ over $\langle formula_2 \rangle$. In the first three of these forms the `\over` is not implicitly contained in a group; it absorbs everything to its left and to its right until it comes to a boundary, namely, the beginning or end of a group.

You can't use `\over` or any of the other commands in this group more than once in a formula. Thus a formula such as:

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$$\text{\$}\texttt{a} \over \texttt{n} \text{\texttt{\textbackslash choose}} \texttt{k} \text{\$}$$


```

isn't legal. This is not a severe restriction because you can always enclose one of the commands in braces. The reason for the restriction is that if you had two of these commands in a single formula, T_EX wouldn't know how to group them.

The other commands are similar to `\over`, with the following exceptions:

- `\atop` leaves out the fraction bar.
- `\above` provides a fraction bar of thickness *<dimen>*.
- `\choose` leaves out the fraction bar and encloses the construct in parentheses. (It's called "choose" because $\binom{n}{k}$ is the notation for the number of ways of choosing k things out of n things.)
- `\brace` leaves out the fraction bar and encloses the construct in braces.
- `\brack` leaves out the fraction bar and encloses the construct in brackets.

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Example:

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$$\begin{aligned}
& \frac{n+1}{n-1} && \frac{n+1}{n-1} && \frac{n+1}{n-1} && \frac{n+1}{n-1} \\
& \frac{n+1}{n-1} && \frac{n+1}{n-1} && \frac{n+1}{n-1} && \frac{n+1}{n-1} \\
& \frac{n+1}{n-1} && \frac{n+1}{n-1} && \frac{n+1}{n-1} && \frac{n+1}{n-1}
\end{aligned}$$

```

produces:

$$\frac{n+1}{n-1} \qquad \frac{n+1}{n-1} \qquad \frac{n+1}{n-1} \qquad \left(\frac{n+1}{n-1}\right) \qquad \left\{\frac{n+1}{n-1}\right\} \qquad \left[\frac{n+1}{n-1}\right]$$