

<code>_</code> <i>⟨argument⟩</i>	<code>^</code> <i>⟨argument⟩</i>
<code>\sb</code> <i>⟨argument⟩</i>	<code>\sp</code> <i>⟨argument⟩</i>

The commands in each column are equivalent. The commands in the first column typeset $\langle argument \rangle$ as a subscript, and those in the second column typeset $\langle argument \rangle$ as a superscript. The `\sb` and `\sp` commands are mainly useful if you're working on a terminal that lacks an underscore or caret, or if you've redefined `'_'` or `'^'` and need access to the original definition. These commands are also used for setting lower and upper limits on summations and integrals.

If a subscript or superscript is not a single token, you need to enclose it in a group. TeX does not prioritize subscripts or superscripts, so it will reject formulas such as a_{i_j} , a^{i_j} , or a^{i_j} .

Subscripts and superscripts are normally typeset in script style, or in scriptscript style if they are second-order, e.g., a subscript on a subscript or a superscript on a a subscript. You can set *any* text in a math formula in a script or scriptscript style with the `\scriptstyle` and `\scriptscriptstyle` commands (p. ‘`scriptscriptstyle`’).

You can apply a subscript or superscript to any of the commands that produce named mathematical functions in roman type (see p. ‘`namedfns`’). In certain cases (again, see p. ‘`namedfns`’) the subscript or superscript appears directly above or under the function name as shown in the examples of `\lim` and `\det` below.

Example:

$$\begin{aligned} & x_3 \quad \quad t_{\max} \quad \quad a_{i_k} \quad \quad \sum_{i=1}^n q_i \\ & \quad \quad \quad x^3 \quad \quad e^{-t \cos \theta} \quad \quad r^{x^2} \quad \quad \\ & \quad \quad \quad \int_0^\infty f(x) dx \\ & \quad \quad \quad \lim_{x \rightarrow 0} f(x) \quad \quad \det_{z \in A} \quad \quad \sin 2t \end{aligned}$$

produces:

$$x_3 \quad t_{\max} \quad a_{i_k} \quad \sum_{i=1}^n q_i \quad x^3 \quad e^{t \cos \theta} \quad r^{x^2} \quad \int_0^\infty f(x) \, dx$$

$$\lim_{x \rightarrow 0} f(x) \quad \det \quad \sin^2 t \quad z \in A$$