strut **1**

`strut.` A *strut* is an invisible box whose width is zero and whose height and depth are slightly more than those of a "normal" line of type in the context. Struts are useful for obtaining uniform vertical spacing when TEX's usual line spacing is disabled, e.g., within a math formula or within a horizontal alignment where you've specified `\offinterlineskip`. Because a strut is taller and deeper than everything else on its line, it determines the height and depth of the line. You can produce a strut with the `\strut` command (p. '`\strut`') or the `\mathstrut` command (p. '`\mathstrut`'). You can use `\strut` anywhere, but you can only use `\mathstrut` when TEX is in math mode. A strut in plain TEX has height 8.5 pt and depth 3.5 pt, while a math strut has the height and depth of a left parenthesis in the current style (so it's smaller for subscripts and superscripts).

Here's an example showing how you might use a strut:

```
\vbox{\hsize = 3in \raggedright
   \strut Here is the first of two paragraphs that we're
   setting in a much narrower line length.\strut}
\vbox{\hsize = 3in \raggedright
   \strut Here is the second of two paragraphs that we're
   setting in a much narrower line length.\strut}
```

This input yields:

Here is the first of two paragraphs that we're setting in a much narrower line length.

Here is the second of two paragraphs that we're setting in a much narrower line length.

Without the struts the vboxes would be too close together. Similarly, in the formula:

```
$\overline{x\mathstrut} \otimes \overline{t\mathstrut}$
```

the math struts cause both bars to be set at the same height even though the 'x' and the 't' have different heights:

$\overline{x} \otimes \overline{t}$