style 1

style. Material in a math formula is set in one of eight styles, depending on the context. Knowing about styles can be useful if you want to set part of a formula in a different size of type than the one that TEX has chosen according to its usual rules.

 $\mathbf{2}$ 

The four primary styles are:

display style (for formulas displayed on a line by themselves)

text style (for formulas embedded in ordinary text)

script style (for superscripts and subscripts) scriptscript style (for superscripts on superscripts, etc.)

The other four styles are so-called cramped variants. In these variants superscripts aren't raised as high as usual, and so the formula needs less vertical space than it otherwise would. See pages 140-141 of The  $T_EXbook$  for the details of how  $T_EX$  selects the style.

T<sub>E</sub>X chooses a size of type according to the style:

- Display style and text style are set in text size, like 'this'.
- Script style is set in script size, like 'this'.
- Scriptscript style is set in scriptscript size, like 'this'.

See "family" (p. 'family') for more information about these three sizes.

TEX doesn't have a "scriptscripts ript" style because such a style would usually have to be set in a size of type too small to read. TEX therefore sets third-order subscripts, superscripts, etc., using the scriptscript style.

Once in a while you may find that TEX has set a formula in a different style than the one you'd prefer. You can override TEX's choice with the \textstyle, \displaystyle, \scriptstyle, and \scriptscriptstyle commands (p. '\textstyle').