

*family*

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**family.** A *family* is a group of three related fonts used when T<sub>E</sub>X is in math mode. Outside of math mode, families have no effect. The three fonts in a family are used for normal symbols (text size), subscripts and superscripts (script size), and sub-subscripts, super-superscripts, etc. (scriptscript size). For example, the numeral ‘2’ set in these three fonts would give you ‘2’, ‘2’, and ‘2’ (in plain T<sub>E</sub>X). Ordinarily you would set up the three fonts in a family as different point sizes of the same typeface, but nothing prevents you from using different typefaces for the three fonts as well or using the same font twice in a family.

T<sub>E</sub>X provides for up to sixteen families, numbered 0–15. For example, family 0 in plain T<sub>E</sub>X consists of 10-point roman for text, 7-point roman for script, and 5-point roman for scriptscript. Plain T<sub>E</sub>X also defines family 1 to consist of math italic fonts and reserves families 2 and 3 for special symbols and math extensions respectively.<sup>1</sup> If you need to define a family for yourself, you should use the `\newfam` command (p. ‘`@newfam`’) to get the number of a family that isn’t in use, and the `\textfont`, `\scriptfont`, and `\scriptscriptfont` commands (p. ‘`scriptscriptfont`’) to assign fonts to that family.

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<sup>1</sup> Families 2 and 3 are special in that their font metric files must include parameters for math spacing.