1

`\delimiterfactor` [⟨*number*⟩ parameter]
`\delimitershortfall` [⟨*number*⟩ parameter]

These parameters together tell TEX how the height of a delimiter should be related to the vertical size of the subformula with which the delimiter is associated. `\delimiterfactor` gives the minimum ratio of the delimiter size to the vertical size of the subformula, and `\delimitershortfall` gives the maximum by which the height of the delimiter will be reduced from that of the vertical size of the subformula.

Suppose that the box containing the subformula has height h and depth d, and let $y = 2\max(h, d)$. Let the value of `\delimiterfactor` be f and the value of `\delimitershortfall` be δ. Then TEX takes the minimum delimiter size to be at least $y \cdot f/1000$ and at least $y - \delta$. In particular, if `\delimiterfactor` is exactly 1000 then TEX will try to make a delimiter at least as tall as the formula to which it is attached. See page 152 and page 446 (Rule 19) of *The TEXbook* for the exact details of how TEX uses these parameters. Plain TEX sets `\delimiterfactor` to 901 and `\delimitershortfall` to `5pt`.