

`\looseness` [*number*] parameter]

This parameter gives you a way to change the total number of lines in a paragraph from what they optimally would be. `\looseness` is so named because it's a measure of how loose the paragraph is, i.e., how much extra space there is in it.

Normally, `\looseness` is 0 and T<sub>E</sub>X chooses line breaks in its usual way. But if `\looseness` is, say, 3, T<sub>E</sub>X does the following:

- 1) It chooses line breaks normally, resulting in a paragraph of  $n$  lines.
- 2) It discards these line breaks and tries to find a new set of line breaks that gives the paragraph  $n + 3$  lines. (Without the previous step, T<sub>E</sub>X wouldn't know the value of  $n$ .)
- 3) If the previous attempt results in lines whose badness exceeds `\tolerance`, it tries to get  $n + 2$  lines—and if that also fails,  $n + 1$  lines, and finally  $n$  lines again.

Similarly, if `\looseness` is  $-n$ , T<sub>E</sub>X attempts to set the paragraph with  $n$  fewer lines than normal. The easiest way for T<sub>E</sub>X to make a paragraph one line longer is to put a single word on the excess line. You can prevent this by putting a tie (p. ‘@not’) between the last two words of the paragraph.

Setting `\looseness` is the best way to force a paragraph to occupy a given number of lines. Setting it to a negative value is useful when you're trying to increase the amount of text you can fit on a page. Similarly, setting it to a positive value is useful when you're trying to decrease the amount of text on a page.

T<sub>E</sub>X sets `\looseness` to 0 when it ends a paragraph, after breaking the paragraph into lines. If you want to change the looseness of several paragraphs, you must do it individually for each one or put the change into `\everypar` (p. ‘\everypar’).