

[9.9] Display all 14 significant digits

The TI89/92+ perform floating point calculations with 14 significant digits of resolution. However, you cannot set the display mode format to show all these digits. The regression calculations, however, do display all 14 digits.

You can see all 14 digits for a number in the history area, though - just return it to the command line. For example, if the display mode is set to Float 12, then entering 'pi' will display

```
3.14159265359
```

but if you select it in the history area, it is shown in the command line as

```
3.1415926535898
```

Note that, in general, these 2 extra digits are probably not accurate or significant. Any computer or calculator that performs floating point arithmetic includes one or two 'guard digits'. These digits are used during calculations to eliminate or reduce round-off errors, especially during long calculation sequences. That is why the 89/92+ use them during calculations, but do not normally let you display them.