

absolute values of its arguments e.g. $2.00002 - 2$ does not yield 0.00002 . This is due to the inaccuracy involved in representing decimal fractions as binary fractions. It does not occur when integers of moderate size are represented as reals e.g. $200002 - 200000 = 2$ exactly.

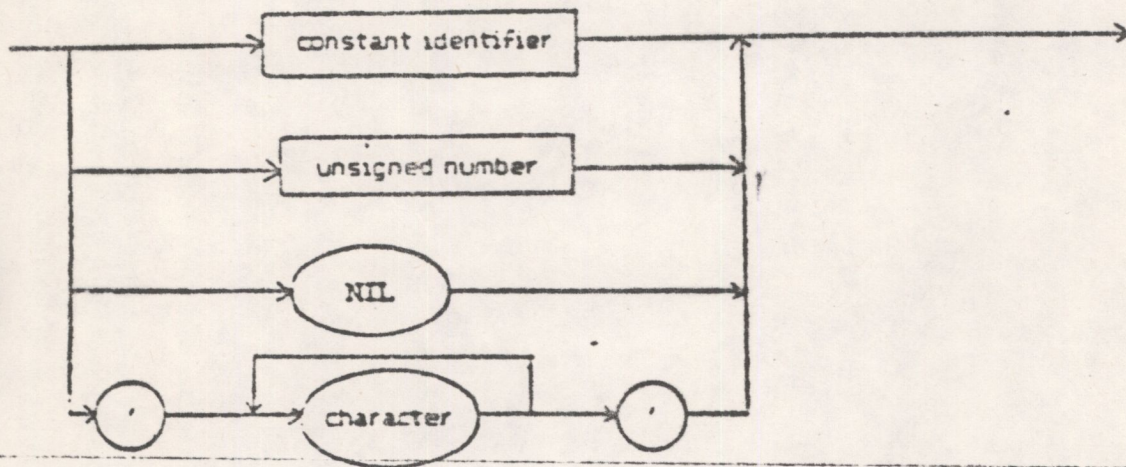
The largest real available is $3.4E38$ while the smallest is $5.9E-39$.

There is no point in using more than 7 digits in the mantissa when specifying reals since extra digits are ignored except for their place value.

When accuracy is important avoid leading zeroes since these count as one of the digits. Thus 0.000123456 is represented less accurately than $1.23456E-4$.

Hexadecimal numbers are available for programmers to specify memory addresses for assembly language linkage inter alia. Note that there must be at least one hexadecimal digit present after the 'x', otherwise an error (*ERROR* 51) will be generated.

1.4 UNSIGNED CONSTANT.



Note that strings may not contain more than 255 characters. String types are `ARRAY [1..N] OF CHAR` where `N` is an integer between 1 and 255 inclusive. Literal strings should not contain end-of-line characters (`CHR(13)`) - if they do then an *ERROR* 68 is generated.

The characters available are the full expanded set of ASCII values with 256 elements. To maintain compatibility with Standard Pascal the null character is not represented as `'`; instead `CHR(0)` should be used.