

SIGN**PURPOSE**

Compute the sign of a number and assign a -1 to negative numbers and a +1 to positive numbers (zero is treated as a positive number).

SYNTAX

LET <y2> = SIGN(<y1>) <SUBSET/EXCEPT/FOR qualification>

where <y1> is a variable or a parameter containing decimal number(s);

<y2> is a variable or a parameter (depending on what <y1> is) where the computed sign values are stored;

and where the <SUBSET/EXCEPT/FOR qualification> is optional.

EXAMPLES

LET A = SIGN(14.2835)

LET A = SIGN(A1)

LET X2 = SIGN(X1-4)

DEFAULT

None

SYNONYMS

None

RELATED COMMANDS

INT	=	Compute the integer portion of number.
FRACT	=	Compute the fractional portion of number.
ROUND	=	Round a number to a specified number of decimal places.
MSD	=	Compute the most significant digit of a number.

APPLICATIONS

Data transformation

IMPLEMENTATION DATE

Pre-1987

PROGRAM

LET Y1 = NORMAL RANDOM NUMBERS FOR I = 1 1 100

LET Y2 = SIGN(Y1)

SET WRITE DECIMALS 0; PRINT Y1 Y2 FOR I = 1 1 15

The following output is generated.

```
-1.073    -1.
 0.573     1.
-0.873    -1.
 0.234     1.
-0.455    -1.
-0.525    -1.
-0.706    -1.
 0.032     1.
 1.191     1.
 0.270     1.
-0.149    -1.
-0.197    -1.
-0.243    -1.
-0.841    -1.
-0.104    -1.
```