**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.