

SIN**PURPOSE**

Compute the sine for a variable or parameter.

DESCRIPTION

The sine is defined for all real numbers and the returned value will be between -1 and 1. By default, the angle is specified in radian units. To use degree values, enter the command ANGLE UNITS DEGREES (ANGLE UNITS RADIANS resets it).

SYNTAX

LET <y2> = SIN(<y1>) <SUBSET/EXCEPT/FOR qualification>
where <y1> is a number, parameter, or variable;
<y2> is a variable or a parameter (depending on what <y1> is) where the computed sine value is stored;
and where the <SUBSET/EXCEPT/FOR qualification> is optional.

EXAMPLES

```
LET A = SIN(-2)
LET A = SIN(A1)
LET X2 = SIN(PI/2)
```

DEFAULT

None

SYNONYMS

None

RELATED COMMANDS

COS	=	Compute cosine.
TAN	=	Compute tangent.
COT	=	Compute cotangent.
SEC	=	Compute secant.
CSC	=	Compute cosecant.
ARCCOS	=	Compute arccosine.
ARCSIN	=	Compute arcsine.
ARCTAN	=	Compute arctangent.
ARCCOT	=	Compute arccotangent.
ARCSEC	=	Compute arcsecant.
ARCCSC	=	Compute arcsecant.

APPLICATIONS

Trigonometry

IMPLEMENTATION DATE

Pre-1987

PROGRAM

```
X1LABEL ANGLE (RADIANS)
Y1LABEL SIN(X)
TITLE SIN(X) FOR X = -6.28 TO 6.28
YLIMITS -1 1
YTIC OFFSET 0.1 0.1
XLIMITS -6 6
XTIC OFFSET 0.3 0.3
PLOT SIN(X) FOR X = -6.28 0.01 6.28
```

