COS

PURPOSE

Compute the cosine of an angle for a variable or parameter.

DESCRIPTION

The cosine 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> = COS(<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 cosine value is stored;

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

EXAMPLES

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

DEFAULT

None

SYNONYMS

None

RELATED COMMANDS

SIN	=	Compute sine.
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 COS(X)
TITLE COS(X) FOR X = -6 TO 6
YLIMITS -1 1
YTIC OFFSET 0.05 0.05
XLIMITS -6 6
XTIC OFFSET 0.3 0.3
PLOT COS(X) FOR X = -6.28 .01 6.28
```