ARCCOT

PURPOSE
Compute the arccotangent for a variable or parameter.

DESCRIPTION
The arccotangent is the angle whose cotangent is equal to the given value. The function is defined for all real numbers. The returned angle is restricted to values between $-\pi/2$ and $\pi/2$. By default, the angle is returned in radian units. To use degree values, enter the command ANGLE UNITS DEGREES (ANGLE UNITS RADIANS resets it).

SYNTAX
LET <y2> = ARCCOT(<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 arccotangent value is stored;

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

EXAMPLES
LET A = ARCCOT(-2)
LET A = ARCCOT(A1)
LET X2 = ARCCOT(X1-4)

DEFAULT
None

SYNONYMS
None

RELATED COMMANDS

ARCCOS	=	Compute arccosine.
ARCCOSH	=	Compute hyperbolic arccosine.
ARCCOTH	=	Compute hyperbolic arccotangent.
ARCCSC	=	Compute arccosecant.
ARCCSCH	=	Compute hyperbolic arccosecant.
ARCSEC	=	Compute secant.
ARCSECH	=	Compute hyperbolic arcsecant.
ARCSIN	=	Compute arcsine.
ARCSINH	=	Compute hyperbolic arcsine.
ARCTAN	=	Compute arctangent.
ARCTANH	=	Compute hyperbolic arctangent.

APPLICATIONS
Trigonometry

IMPLEMENTATION DATE
Pre-1987

PROGRAM
        X1LABEL COT(Y)
        Y1LABEL ANGLE (RADIANS)
        TITLE ARCCOT(X) FOR X = -10 TO 10
        PLOT ARCCOT(X) FOR X = -10 -0.01 -0.01 AND
        PLOT ARCCOT(X) FOR X = 0 0.01 10
        LINE DOT
        MOVEDATA -10 0
        DRAWDATA 10 0
        MOVEDATA 0 2
        DRAWDATA 0 -2