=

PURPOSE

A mathematical symbol denoting equality which serves 4 separate functions:

1. In conjunction with the LET command, it links output (on the left) with input or operation (on the right). For example,

   ```
   LET Y = LOG(X)
   ```

2. In conjunction with the ROOTS sub-command under the LET command it allows functions to be written as the corresponding equations. For example,

   ```
   LET FUNCTION F1 = SIN(X)*EXP(-X)
   ```

3. In conjunction with SUBSET, EXCEPT and FOR, it is optionally included after the SUBSET, EXCEPT and FOR keywords. For example,

   ```
   PLOT Y X SUBSET MONTH = 7
   ```

4. It is used as a logical operator for the IF command to test for equality. For example,

   ```
   IF A = 2
     LET B = 100
   END OF IF
   ```

SYNTAX

None

EXAMPLES

```
LET Y = (X**LAMBDA-1)/LAMBDA
LET A = MEAN Y
LET Y2 = SORT Y1
LET FUNCTION F1 = C*EXP(-0.5*X*X)
LET R = ROOTS X=EXP(-X) WRT X FOR X=0 2
FIT A+EXP(-B*X) EXCEPT X = 0 TO 32
PLOT SIN(X) FOR X = 0 TO 6.28
3D-PLOT X*Y FOR X=0 TO 5 FOR Y=0 TO 5
LET A=INTEGRAL LOG(X) WRT X FOR X=1 2
PLOT Y1 Y2 Y3 VERSUS X FOR I = 1 TO 30
FIT (A+B*X)/(C+D*X) FOR I = 101 TO 200
HISTOGRAM Y FOR I = 20 TO 50
IF A = B
```

DEFAULT

None

SYNONYMS

None

RELATED COMMANDS

<>	=	A keyword denoting inequality.
<	=	A keyword denoting less than.
<=	=	A keyword denoting less than or equal to.
>	=	A keyword denoting greater than.
>=	=	A keyword denoting greater than or equal to.

APPLICATIONS

Mathematical computations, data subsetting

IMPLEMENTATION DATE

Pre-1987

PROGRAM

```
PRINT X Y SUBSET Y = -999
```