

LET**PURPOSE**

The LET command is DATAPLOT's most versatile command. The individual subcommands available under LET are documented in Volume II of the DATAPLOT Reference Manual. The LET command has a variety of uses:

1. evaluating functions;
2. transforming variables;
3. specifying elements of variables;
4. calculating statistics;
5. creating a sequence;
6. creating a pattern;
7. generating random numbers;
8. manipulating/sorting data;
9. defining functions (discussed separately under the LET FUNCTION command);
10. carrying out math operations.

SYNTAX

The syntax varies depending on the type of operation performed.

EXAMPLES

```
LET A = SIN(2*PI*0.025)
LET Y = (X**LAMBDA-1)/LAMBDA
LET Y(3)=LOG(4.5)-2**3.8
LET M = MEAN Y
LET X = SEQUENCE 1 .1 10
LET X=PATTERN 1 1 2 2 3 3 FOR I = 1 1 30
LET X=NORMAL RANDOM NUMBERS FOR I=1 1 80
LET Y2 = SORT Y
LET A = INTEGRAL F WRT X FOR X 0 TO 1
```

DEFAULT

None

SYNONYMS

None

RELATED COMMANDS

LET FUNCTION	=	Defines functions.
STATUS	=	Displays dimension, variables, parameters, and functions.
WRITE	=	Writes variables, parameters, and functions to the screen or to a file.

APPLICATIONS

Data transformations

IMPLEMENTATION DATE

Pre-1987

PROGRAM

```
LET Y = NORMAL RANDOM NUMBERS FOR I = 1 1 1000
HISTOGRAM Y
```