**MAX**

**PURPOSE**

Return the maximum of 2 numbers. These 2 numbers can be numbers, parameters, the corresponding elements of 2 variables, or some combination of these.

**SYNTAX**

```plaintext
LET <y3> = MAX(<y1>,<y2>) <SUBSET/EXCEPT/FOR qualification>
```

where `<y1>` is a decimal number, parameter, or variable;

- `<y2>` is a decimal number, parameter, or variable;
- `<y3>` is a variable or a parameter (depending on what `<y1>` and `<y2>` are) where the computed maximum values are stored;

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

**EXAMPLES**

```
LET A = MAX(14,10)
LET X2 = MAX(X1,X4)
LET X2 = MAX(X1-4,X2+6)
```

**NOTE**

This function is distinct from the LET subcommand MAXIMUM. This command compares two parameters (or a pairwise comparison of the corresponding elements in two variables) while MAXIMUM returns the largest value in a single variable.

**DEFAULT**

None

**SYNONYMS**

None

**RELATED COMMANDS**

- MIN = Compute the minimum of two numbers.
- MAXIMUM = Compute the maximum value in a variable.
- MINIMUM = Compute the minimum value in a variable.
- ABS = Compute the absolute value of a number.

**APPLICATIONS**

Data transformation

**IMPLEMENTATION DATE**

Pre-1987

**PROGRAM**

```plaintext
LET X = SEQUENCE 0 .1 3
LET Y1 = X**2
LET Y2 = X**(1/2)
LET Y3 = MAX(Y1,Y2)
PRINT Y1 Y2 Y3
```