... MAXIMUM

PURPOSE

Specifies the maximum value to appear on the plot axes of subsequent plots.

DESCRIPTION

For most data analysis applications, the analyst need not bother with the MAXIMUM command since DATAPLOT generates neat limits based on the data. If the default limits are not acceptable, then the analyst can make use of the MINIMUM, MAXIMUM, or LIMITS commands to specify the minimum, maximum, or both, respectively.

SYNTAX

<prefix>MAXIMUM <n>

where <prefix> is one of the following:

- X refers to the horizontal axis;
- Y refers to the vertical axis;
- no prefix refers to both the vertical and horizontal axes;

and <n> is a number or parameter that specifies the desired upper limit.

EXAMPLES

MAXIMUM 4.5
XMAXIMUM 100
YMAXIMUM 100
XMAXIMUM A

NOTE

The ...MAXIMUM command with no argument reverts the maxima to the default. A ...MAXIMUM command with no prefix refers to both axes. Thus MAXIMUM 3 sets the maxima for both axes to 3.

DEFAULT

Automatically computed neat maxima based on the data.

SYNONYMS

MAX

RELATED COMMANDS

PLOT = Generates a data or function plot.
MINIMUM = Sets the frame minima for all plots.
LIMITS = Sets the frame limits for all plots.
CLASS UPPER = Sets the maximum of the highest class for histograms, frequency plots, and pie charts.
CLASS LOWER = Sets the minimum of the lowest class for histograms, frequency plots, and pie charts.
CLASS WIDTH = Sets the class width for histograms, frequency plots, and pie charts.

APPLICATIONS

Neat axes

IMPLEMENTATION DATE

Pre-1987
PROGRAM
LET LEAD = DATA ...
   164 426 59 98 312 263 607 497 213 54 160 262 547 325 419 94 70
LET POT = DATA ...
   106 175 61 79 94 121 424 328 107 218 140 179 246 231 245 339 99
.
TITLE DEMONSTRATE MAXIMUM COMMAND
TITLE SIZE 5
X1LABEL LEAD
Y1LABEL POTASSIUM
CHARACTER CIRCLE
CHARACTER SIZE 1.5
LINE BLANK ALL.
.
XMAXIMUM 600
XTIC OFFSET 0 15
YMAXIMUM 450
.
PLOT POT VS LEAD

DEMONSTRATE MAXIMUM COMMAND