... LIMITS

PURPOSE
Specifies the limits (minimum and maximum) to appear on the plot axes of subsequent plots.

DESCRIPTION
For most data analysis applications, the analyst need not bother with the LIMITS 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>LIMITS <n1> <n2>
where <prefix> is one of the following:

no prefix	refers to all 4 sides;
the prefix X	refers to both horizontal sides;
the prefix Y	refers to both vertical sides;
the prefix X1	refers to the lower horizontal side;
the prefix X2	refers to the upper horizontal side;
the prefix Y1	refers to the left vertical side;
the prefix Y2	refers to the right vertical side;

<n1> is a number or parameter that specifies the desired lower limit;
and <n2> is a number or parameter that specifies the desired upper limit;

EXAMPLES
LIMITS 0.5 4.5
XLIMITS 0 100
YLIMITS 0 100
XLIMITS A B

NOTE 1
The command LIMITS FREEZE will use the limits from the most recent plot for all subsequent plots until a new LIMITS command is entered. This option is useful for overlaying plots.

NOTE 2
The ...LIMITS command with no argument reverts the limits to the default. A ...LIMITS command with no prefix refers to both axes. Thus LIMITS 3 7 sets the limits for both axes to 3 and 7.

DEFAULT
Neat limits are automatically computed based on the data.

SYNONYMS
None

RELATED COMMANDS
PLOT	=	Generates a data or function plot.
MINIMUM	=	Sets the frame minima for all plots.
MAXIMUM	=	Sets the frame maxima for all plots.
CLASS UPPER	=	Sets the upper class maximum for histograms, frequency plots, and pie charts.
CLASS LOWER	=	Sets the lower class minimum for histograms, frequency plots, and pie charts.
CLASS LOWER	=	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 LIMITS COMMAND

        TITLE SIZE 5

        X1LABEL LEAD

        Y1LABEL POTASSIUM

        CHARACTER CIRCLE

        CHARACTER SIZE 1.5

        LINE BLANK ALL

        .

        XLIMITS 50 600

        XTIC OFFSET 10 15

        YLIMITS 50 450

        .

        PLOT POT VS LEAD