REGION PATTERN LINE

PURPOSE

Specifies the line patterns used to do region fills on subsequent plots and certain types of diagrammatic graphics. See the Graphics Attributes chapter for a list of available colors.

DESCRIPTION

On a plot, a region is defined as the figure formed by the line connecting points belonging to a common trace and a region base (typically zero). The REGION FILL and REGION PATTERN commands can be used to generate a solid fill or a cross-hatch fill of this region. The REGION PATTERN LINE command is used to specify the line type (i.e., solid, dashed) when generating cross-hatch fills. The attributes of the fill are set with additional REGION commands (see the RELATED COMMANDS section below). The attributes of the region border are set with LINE, LINE COLOR, and LINE THICKNESS commands.

The diagrammatic graphics commands CIRCLE, CUBE, DIAMOND, ELLIPSE, HEXAGON, PYRAMID, SEMI-CIRCLE, and TRIANGLE can be filled using the REGION FILL command. The BOX command has its own attribute setting commands.

The line type (e.g., solid or dashed) is distinct from the pattern type (e.g., solid or horizontal).

SYNTAX

REGION PATTERN LINE <type> <type> <type> etc.
where <type> is a character string that specifies the desired line type. Up to 100 region pattern line types can be specified.

EXAMPLES

REGION PATTERN LINE SOLID DASH DOT
REGION PATTERN LINES SOLID ALL
REGION PATTERN LINES ALL SOLID
REGION PATTERN LINES

NOTE 1

The diagrammatic graphics commands use the first setting of the REGION PATTERN LINE command only.

NOTE

The REGION PATTERN LINE command with no arguments sets the region type to default for all regions. The REGION PATTERN LINE command with the word ALL before or after the specified type assigns that pattern line type to all regions; thus REGION PATTERN LINE SOLID ALL or REGION PATTERN LINE ALL SOLID plots region patterns with solid lines for all regions.

DEFAULT

All region pattern line types are solid.

SYNONYMS

None

RELATED COMMANDS

PLOT	=	Generates a data or function plot.
REGION BASE	=	Sets the base locations for plot regions.
REGION FILL	=	Sets the on/off switches for region fills.
REGION FILL COLOR	=	Sets the color for region solid fills.
REGION PATTERN	=	Sets the types for region fill patterns.
REGION PATTERN COLOR	=	Sets the color for region hatched fills.
REGION PATTERN SPACING	=	Sets the line spacing for region fill patterns.
REGION PATTERN THICKNESS	=	Sets the line thickness for region fill patterns.
LINE COLOR	=	Sets the color for region border lines.
LINE	=	Sets the types for region border lines.
LINE THICKNESS	=	Sets the line thickness for region border lines.

APPLICATIONS

Statistical maps, area charts, filled 2d polygons

IMPLEMENTATION DATE

    Pre-1987 (the ability to generate cross-hatch fills of non-rectangular regions was added 93/10)

PROGRAM

```
LET C = 1
LET FUNCTION F1 = C
LET FUNCTION F2 = -1.5*X + 9
LET FUNCTION F3 = 6
LET FUNCTION F4 = 1+0.3*X**2
.
XMINIMUM 0
YLIMITS 0 10
TITLE PLOT INEQUALITY REGIONS
TITLE SIZE 5
.
REGION FILL ON ALL
REGION BASE 0 10 10 0
REGION PATTERN D1 HORI D2 VERT
REGION PATTERN SPACING 5 ALL
LINE SOLID DASH SOLID DASH
REGION PATTERN LINE SOLID DASH SOLID DASH
.
X1LABEL SOLID = EQUALITY
X2LABEL DASH = INEQUALITY
.
PLOT F1 FOR X = 0 5 5 AND
PLOT F2 FOR X = 0 5 5 AND
PLOT F3 FOR X = 0 5 5 AND
PLOT F4 FOR X = 0 0.01 5
```