

REGION PATTERN COLOR

PURPOSE

Specifies the color used for cross-hatch fill regions on subsequent plots or for certain types of diagrammatic graphics. See the Color 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 or cross-hatch fill of this region. The REGION FILL COLOR command specifies the color for solid fill regions while the REGION PATTERN COLOR command specifies the color for cross-hatch lines. Other 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.

SYNTAX

REGION PATTERN COLOR <color> <color> <color> etc.  
where <color> is a character string or an integer number or parameter that specifies the desired color. Up to 100 region pattern colors can be specified.

EXAMPLES

REGION PATTERN COLOR RED BLUE GREEN  
REGION PATTERN COLOR 2 3 4 5  
REGION PATTERN COLOR BLACK ALL  
REGION PATTERN COLOR ALL BLACK  
REGION PATTERN COLOR

NOTE 1

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

NOTE 2

The REGION PATTERN COLOR command with no arguments sets the region pattern color to default for all regions. The REGION PATTERN COLOR command with the word ALL before or after the specified color assigns that region pattern color to all regions; thus REGION PATTERN COLOR BLACK ALL or REGION PATTERN COLOR ALL BLACK plots all region fills in black.

DEFAULT

All region pattern colors are black.

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 LINE	=	Sets the line types for region fill patterns.
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 capability to do cross-hatch fills for 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
.
REGION FILL ON ALL
REGION BASE 0 10 10 0
REGION PATTERN D1 HORI D2 VERT
REGION PATTERN SPACING 5 ALL
REGION PATTERN THICKNESS 0.5 0.5 0.5 0.5
REGION PATTERN COLOR G10 G30 G50 G80
.
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

```

