# TRIANGLE

## PURPOSE
Draws a triangle.

## DESCRIPTION
The 3 pairs of coordinates define the (x,y) values for each of the 3 vertices (respectively) of the triangle.

## SYNTAX
TRIANGLE <x1> <y1> <x2> <y2> <x3> <y3>

where <x1> is a number or parameter in the range 0 to 100 that specifies the x coordinate of the first vertex;

<y1> is a number or parameter in the range 0 to 100 that specifies the y coordinate of the first vertex;

<x2> is a number or parameter in the range 0 to 100 that specifies the x coordinate of the second vertex;

<y2> is a number or parameter in the range 0 to 100 that specifies the y coordinate of the second vertex;

<x3> is a number or parameter in the range 0 to 100 that specifies the x coordinate of the third vertex;

and <y3> is a number or parameter in the range 0 to 100 that specifies the y coordinate of the third vertex.

## EXAMPLES
TRIANGLE 50 50 60 50 55 55
TRIANGLE 20 50 50 50 35 80
TRIANGLE X1 40 X2 60 X3 30
TRIANGLE X1 Y1 X2 Y2 X3 Y3

## NOTE 1
The line style (i.e., solid, dash), color, and thickness of the triangle are controlled by the LINE, LINE COLOR, and LINE THICKNESS commands. The REGION FILL command can be used to generate solid filled triangles while the REGION PATTERN command can be used to generate hatch filled patterns.

## NOTE 2
If you use a software font, triangles can be embedded in text (e.g., the LEGEND or TEXT command) by entering the string TRIA(). To get filled triangles, enter LEGEND FILL SOLID (for legends) or FILL ON (for TEXT). Triangles can also be used as plot characters (e.g., CHARACTERS TRIANGLE), in which case the attributes are set with the various CHARACTER commands.

## DEFAULT
None

## SYNONYMS
None

## RELATED COMMANDS
| | | |
|---|---|---|
| CIRCLE | = | Draws a circle. |
| ARROW | = | Draws an arrow. |
| BOX | = | Draws a box. |
| HEXAGON | = | Draws a hexagon. |
| SEMI-CIRCLE | = | Draws a semi-circle. |
| ARC | = | Draws an arc. |
| ELLIPSE | = | Draws an ellipse. |
| OVAL | = | Draws an oval. |
| DIAMOND | = | Draws a diamond. |
| DRAW | = | Draws a line. |
| MOVE | = | Moves to a point. |
| LINE | = | Sets the line type for figures and plot lines. |
| LINE THICKNESS | = | Sets the line thickness for figures and plot lines. |
| LINE COLOR | = | Sets the line colors for figures and plot lines. |
| REGION | = | Sets the region fill switch on or off. |
| CROSS-HAIR | = | Activates and reads the cross-hair. |
| TEXT | = | Writes a text string. |

## APPLICATIONS
Presentation graphics

## IMPLEMENTATION DATE
Pre-1987

## PROGRAM
TRIANGLE 10 10 20 10 15 20
TRIANGLE 60 10 80 3 65 30
THICKNESS 0.5
TRIANGLE 10 30 20 21 13 43
THICKNESS 0.2
LINE DASH
TRIANGLE 10 50 20 50 15 60
LINE SOLID
LINE COLOR G50
THICKNESS 0.5
TRIANGLE 10 80 20 75 12 93
THICKNESS 0.2; LINE COLOR BLACK; REGION FILL ON
TRIANGLE 30 30 40 25 33 44
REGION FILL COLOR G50
TRIANGLE 50 50 70 45 55 63
REGION FILL COLOR BLACK; REGION FILL ONTS
TRIANGLE 40 70 55 62 48 84
REGION FILL ONF; REGION PATTERN D1D2
TRIANGLE 85 10 95 3 88 19
REGION PATTERN BLANK
FONT SIMPLEX; THICKNESS 0.2; HEIGHT 3
MOVE 40 85; FILL ON
TEXT TRIA() DRAW A TRIANGLE WITH THE TEXT COMMAND