

ROTATE EYE

PURPOSE

Specifies a direction and angle to rotate the current eye coordinates for 3-d plots.

DESCRIPTION

Changing the viewing position allows you to view a 3-d plot from a different perspective. This can sometimes allow you to see more clearly certain structures that are hidden in the default viewing position. The ROTATE EYE command can be used to do this automatically. It is often used in conjunction with the LOOP command.

The rotation has both a direction and an angle. The direction can be one of the following:

- LEFT - rotate left (in the XY plane);
- RIGHT - rotate right (in the XY plane);
- UP - rotate up (this case not implemented yet);
- DOWN - rotate down (this case not implemented yet);
- XY - rotate in the XY plane (equivalent to RIGHT);
- XZ - rotate in the XZ plane;
- YZ - rotate in the YZ plane.

The angle is specified in degrees.

SYNTAX

```
ROTATE EYE <dir> <angle>
```

where <dir> is one of the character strings listed above that specifies the desired direction;

and <angle> is a number or parameter that specifies the number of degrees to rotate the eye coordinates.

EXAMPLES

```
ROTATE  
ROTATE EYE  
ROTATE EYE 20  
ROTATE EYE RIGHT  
ROTATE EYE RIGHT 40
```

DEFAULT

If the <dir> argument is omitted, LEFT is used. If the <angle> argument is omitted, 10 degrees is used.

SYNONYMS

ROTATE is a synonym for ROTATE EYE.

RELATED COMMANDS

| | | |
|-----------------|---|---|
| EYE COORDINATES | = | Specifies the eye coordinates for a 3-d plot. |
| 3D-PLOT | = | Generates a 3-d data or function plot. |
| 3D-FRAME | = | Specifies what type of 3-d frame is drawn. |

APPLICATIONS

3-d plotting

IMPLEMENTATION DATE

93/10

PROGRAM

```

LET FUNCTION F = SIN(X+COS(Y))
3DFRAME 3PLANE
FEEDBACK OFF
TITLE AUTOMATIC
TITLE SIZE 5
.
MULTIPLY 4 4; MULTIPLY CORNER COORDINATES 0 0 100 100
LOOP FOR K = 1 1 16
    ROTATE
    3DPLOT F FOR X = -2 .2 2 FOR Y = -2 .2 2
END LOOP
END OF MULTIPLY
    
```

