

See Also**PrimeFactors, RatioFromNumber**

GeometricMean

GeometricMean(a,b)

The GeometricMean function returns the arithmetic-geometric mean of two positive real numbers a and b . The mean is computed by creating two sequences $\{a_i\}$ and $\{b_i\}$ initialized to the input values: $a_0=a$ and $b_0=b$ with

$$a_{n+1} = \frac{1}{2}(a_n + b_n),$$

$$b_{n+1} = \sqrt{a_n b_n}.$$

The two sequences converge in a few iterations to a single value which is the arithmetic-geometric mean.

See Also**EllipticK, EllipticE**

GetAxis

GetAxis [/W=winName /Q] axisName

The GetAxis operation determines the axis range and sets the variables V_min and V_max to the minimum and maximum values of the named axis.

Parameters

axisName is usually "left", "right", "top" or "bottom", though it may also be the name of a free axis such as "VertCrossing".

Flags

/Q Prevents values of V_flag, V_min, and V_max from being printed in the history area. The results are still stored in the variables.

/W=*winName* Retrieves axis info from the named graph window or subwindow. When omitted, action will affect the active window or subwindow. This must be the first flag specified when used in a Proc or Macro or on the command line.

When identifying a subwindow with *winName*, see **Subwindow Syntax** on page III-92 for details on forming the window hierarchy.

Details

GetAxis sets V_min according to the bottom of vertical axes or left of horizontal axes and V_max according to the top of vertical axes or right of horizontal axes. It also sets the variable V_flag to 0 if the specified axis is actually used in the graph, or to 1 if it is not.

Axis ranges and other graph properties are computed when the graph is redrawn. Since automatic screen updates are suppressed while a user-defined function is running, if the graph was recently created or modified, you must call DoUpdate to redraw the graph so you get accurate axis information.

See AlsoThe **AxisInfo** function.

GetBrowserLine

GetBrowserLine(fullPathStr [, mode])

The GetBrowserLine function returns the zero-based line number of the data folder referenced by *fullPathStr*.