## Math-c Documentation

## Graph functions

graphnew()
opens a new window to graph.
return 0
graphset(x)
select the current window graph (with window title)
x -> string, select the current window graph
Note: the window title can be changed with the command "graphsetprop("WindowName",winName)"
return 0

## graphseprop(prop,...)

select the current window graph (with window title)
prop -> string, property no be changed
... -> depends of property.
property values accepted:
"WindowName" set the window title or name
"addData on" set the current plot (not the window) to append the next data to the graph
"addData off" set the current plot (not the window) to replace the data of graph (this is the mode by default)
"clear" clear the plot data.

## $\log \log (x, .$.

plot the data in a graph with logarithm scale in horizontal and vertical axis.
check plot function about the additional arguments.

## subplot(rows,cols,index)

divide the graph windows in plots in rows and columns, and index is the selection as current plot in a subplot of $2 \times 2$, the index 1 is the upper right plot of the window.

```
plot(x)
plot( \(x, y\) )
plot(x,y,opt)
plot(x1,y1,opt,...)
```

Plot the data, if the function is " $\operatorname{plot}(x)$ " and $x$ is complex, then the plot will be the same as "plot(real(x),imag(x))".

The plot can the append data like "plot( $x 1, y 1, x 2, y 2, y 3, o p t 3)$ " with or without options.
options values accepted:
"r" red color
"g" green color
"b" blue color
"k" black color
"y" yellow color
"m" magenta color
"k" black color
"c" cyan color
"o" circle bullet data
"s" square bullet data
"--" dash lines
" " (space) no line
"|" vertical lines
Check the examples below.
semilogx(x,..)
plot the data in a graph with logarithm scale in horizontal and linear scale in vertical axis. check plot function about the additional arguments.
semilogy ( $x, .$. )
plot the data in a graph with linear scale in horizontal axis and logarithm scale in vertical axis. check plot function about the additional arguments.

## Plot examples

```
x=0:2*}\pi/8:$2*\pi
```

$\mathrm{y} 1=\sin (\mathrm{x})$;
$\mathrm{y} 2=\cos (\mathrm{x})$;
$\operatorname{plot}(\mathrm{x}, \mathrm{y} 1, \mathrm{lr\mid o} \mid \mathrm{l}$ ) ///doesnt matter the options order can be "|or"「○○ Graph 1

plot(x,y1,"--",x,y2,"s");
$\square$


