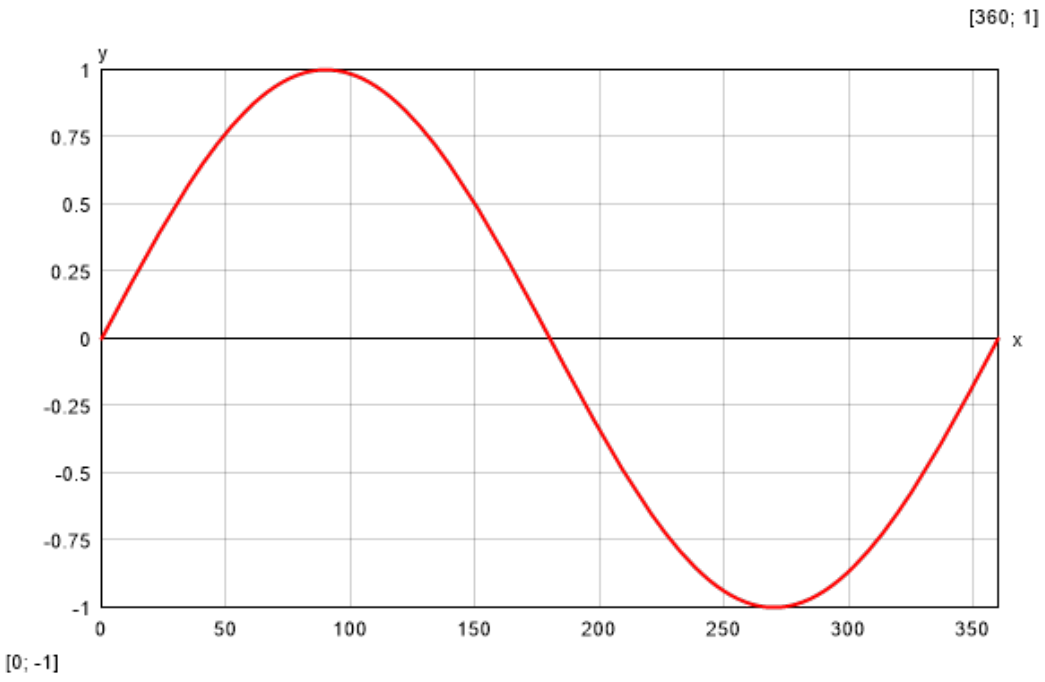
Graphing and plotting in Calcpad



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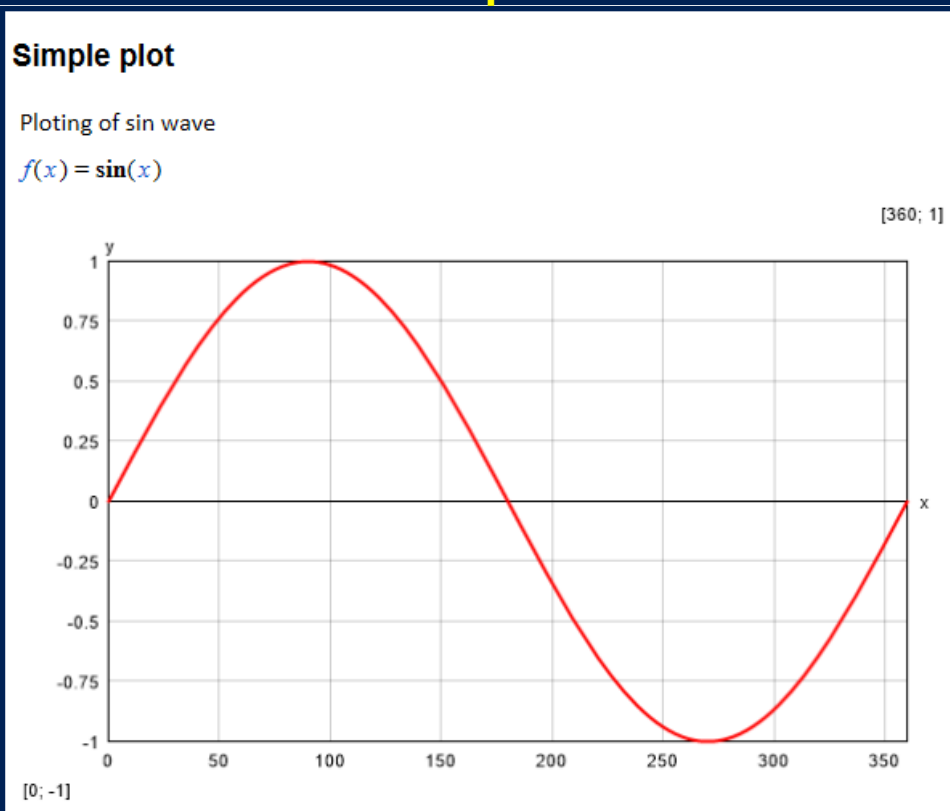
1 Simple plot

code

```
"Simple plot"

'Plotting of sin wave'

f(x) = sin(x)

#hide

a = 0

b = 360

#show

$Plot{f(x) @ x = a : b}
```

Output



2 Parameteric plot

code

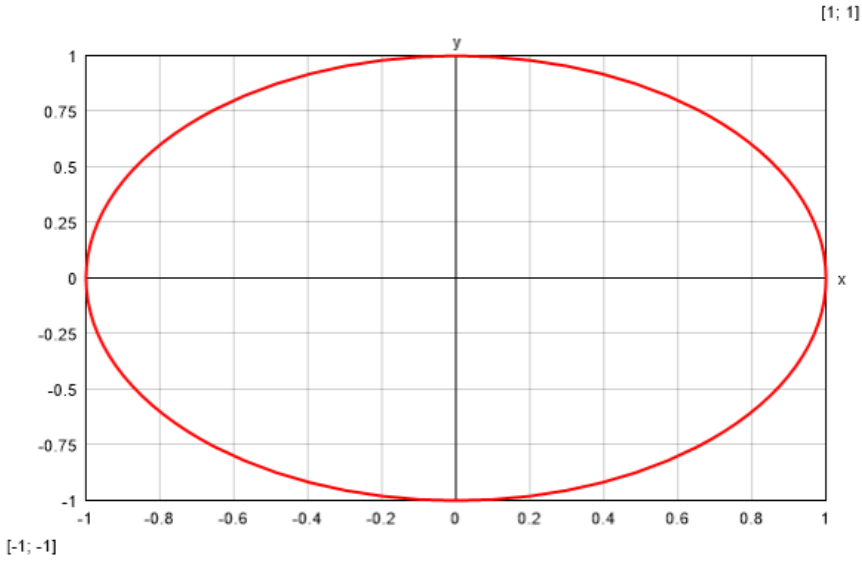
```
"Parametric plot"

x(t) = sin(t)

y(t) = cos(t)

#hide

a = -360

b = 360

#show

$Plot{x(t)|y(t) @ t = a : b}
```

Output

Parametric plot

$x(t) = \sin(t)$

$y(t) = \cos(t)$



3 Multiple plot

Plot two functions in the same graph

code

```
"Multiple plot"

'sin wave and cos wave in same curve'

f_1(x) = sin(x)

f_2(x) = cos(x)

#hide

a = 0

b = 360

#show

$Plot{f_1(x) & f_2(x) @ x = a : b}
```

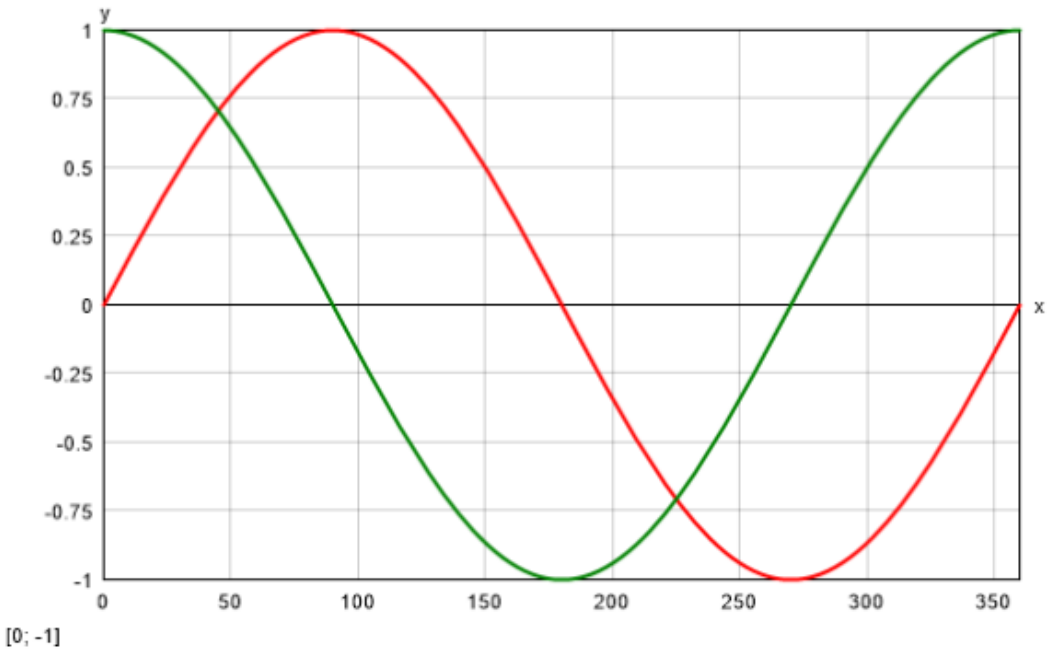
Output

Multiple plot

sin wave and cos wave in same curve

$f_1(x) = \sin(x)$

$f_2(x) = \cos(x)$



4 Multiple parametric

plot two parametric functions in same graph

code

```
"Multiple parameteric"

x_1(t) = t

y_1(t) = sin(t)



x_2(t) = 2*t

y_2(t) = sin(t)

#hide

a = 0

b = 360

#show

$Plot{x_1(t)|y_1(t) & x_2(t)|y_2(t) @ t = a : b}
```

output

Multiple parameteric

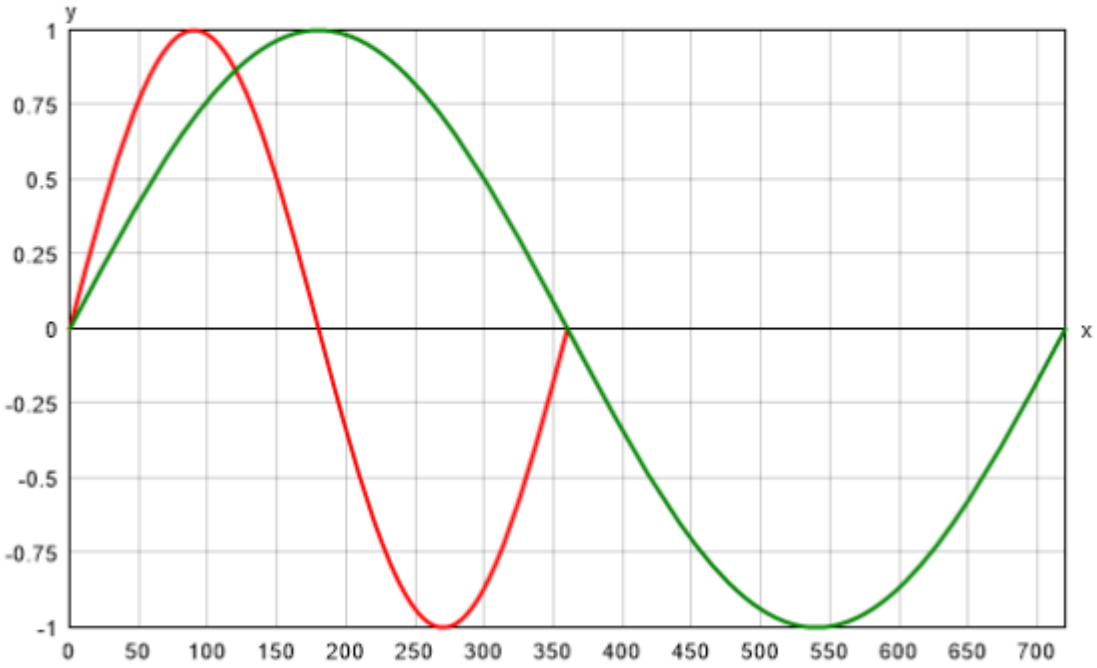
$x_1(t) = t$

$y_1(t) = \sin(t)$

$x_2(t) = 2 \cdot t$

$y_2(t) = \sin(t)$

[720; 1]



[0; -1]

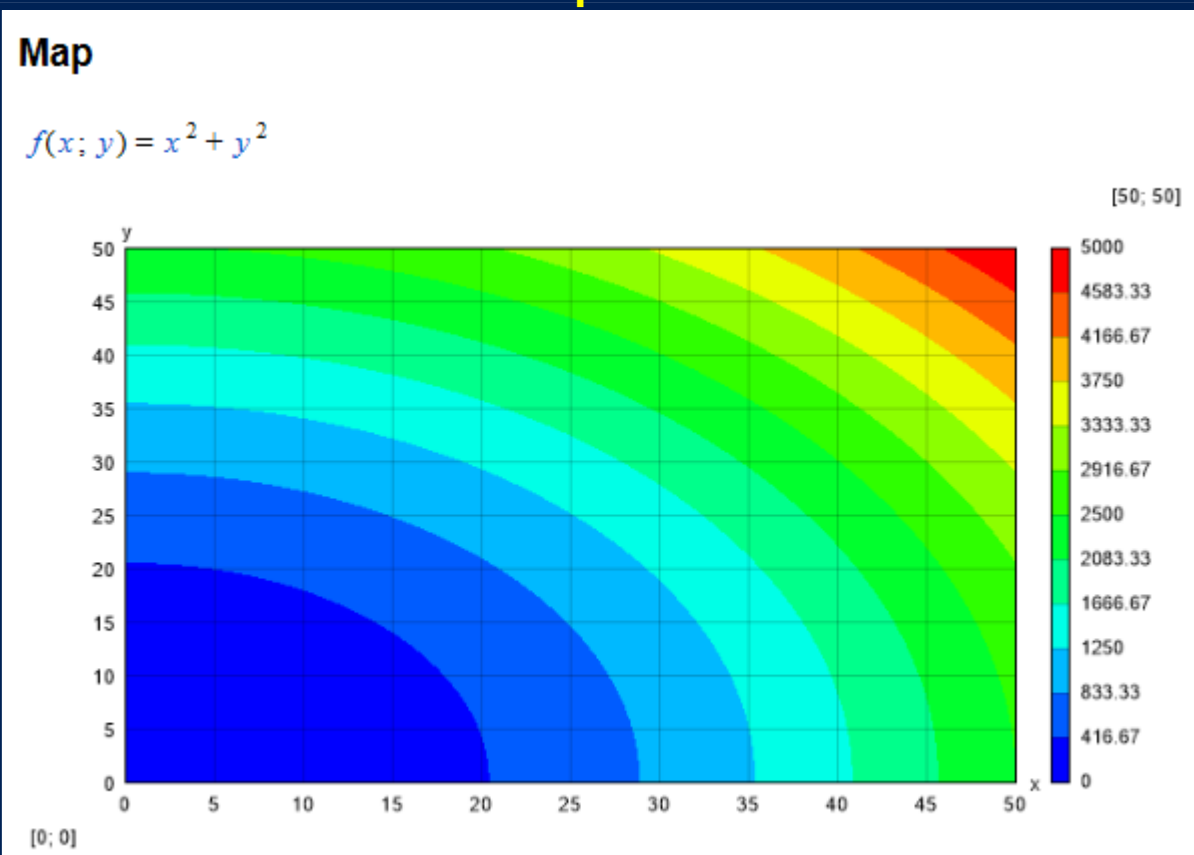
5 Map

2D color map of a 3D surface

code

```
"Map"

f(x; y) = x^2 + y^2

#hide

a = 0

b = 50

c = 0

d = 50

#show

$Map{f(x; y) @ x = a : b & y = c : d}
```

Output



Changing the dimensions of the plot area

for setting the height of plot area in pixels

PlotHeight = 400

for setting the width of plot area in pixels

Plotwidth = 400