

Additional material for **Multiplot Plots in a Canvas**

1. Example script composed in this tutorial

```
#my first multiplot
```

```
set multiplot
```

```
#x-sin(x) plot
set origin 0,0
set size 0.5, 0.5
set xrange[-10:10]
set yrange[-2:2]
set title "x-sin(x) plot"
noborder
plot sin(x)
```

```
# x-cos (x) plot
set origin 0.5,0.0
set size 0.5, 0.5
set xrange[-10:10]
set yrange[-2:2]
set title "x-cos(x) graph"
plot cos(x) notitle
```

```
#straight line plot
set origin 0.5,0.5
set size 0.5, 0.5
set title "straight line"
set xrange[*:*]
set yrange[*:*]
plot 'data.txt' using 1:3 with linespoint notitle
```

```
#Exponential decay
set origin 0.0,0.5
set size 0.5, 0.5
set title "Exponential decay"
set autoscale
plot 'data.txt' using 1:2 with linespoint notitle
```

```
unset multiplot
```

2. An example script for plotting four parabolas in a 2x2 multiplot is given below.

```
# my first multiplot
set multiplot

set grid
set xzeroaxis lt 1
set yzeroaxis lt 1
set xtics axis
set ytics axis

#parabola 1
set origin 0,0
set size 0.5, 0.5
set xrange [-20:20]
set yrange [-140:140]
f(x) = x*x-4*x-20
set object 1 rectangle from graph 0,0 to graph 1,1 behind fillcolor rgb 'cyan' fillstyle solid
noborder
plot f(x) title "x*x-4x+2"
unset yrange
unset object 1

#parabola 2
set origin 0.5,0.0
set size 0.5, 0.5
set yrange [-500:500]
set xrange [-40:40]
f(x) = -x*x-6*x+40
set object 2 rectangle from graph 0,0 to graph 1,1 behind fillcolor rgb 'green' fillstyle solid
noborder
plot f(x) title "-x*x-6x+40"
unset yrange
unset object 2

#parabola 3
set origin 0.5,0.5
set size 0.5, 0.5
set parametric
set xrange [-30:30]
set object 3 rectangle from graph 0,0 to graph 1,1 behind fillcolor rgb 'pink' fillstyle solid
noborder
plot t*t,t/2 title "t*t,t/2"
unset parametric
unset object 3

#parabola 4
set origin 0.0,0.5
```

```
set size 0.5, 0.5
set parametric
set xrange [-80:80]
set object 4 rectangle from graph 0,0 to graph 1,1 behind fillcolor rgb 'yellow' fillstyle solid
noborder
plot -3*t*t,t/2 title "-3*t*t,t/2"
unset parametric
unset object 4

unset multiplot
unset output
set autoscale
```

3. An example script to generate an inset.

```
# my first multiplot
set multiplot
set title "Exponential decay with inset straight line"

#Exponential decay
set autoscale
set ytics 30000
plot 'data.txt' using 1:2 with linespoint pt 7 ps 1.5 notitle
unset yrange

#inset is x-y2
set origin 0.68,0.68
set size 0.3, 0.3
set xrange[*:*]
set title ''
set xtics rotate
plot 'data.txt' using 1:3 with linespoint title 'x-y2'

unset multiplot
```