

Absurd Example

```
from visual.graph import *
graph1 = gdisplay(xtitle='Time', xmax=5, xmin=0, ymax=8, ymin=-5)
xdisplacement = gcurve(color=color.green)
ydisplacement = gcurve(color=color.red)
xvelocity = gcurve(color=color.blue)
yvelocity = gcurve(color=color.orange)

t=1.13/5 #The total time divided by 5 time constants.
vix = 7.07 #Initial velocity in the x direction
viy = 7.07 #Initial velocity in y direction
ay=-9.8 #Acceleration in the y direction due to gravity.

print "%-4s%-6s%-6s%-6s%-6s" % ('TC', 'dx', 'dy', 'vx', 'vy')

for dt in arange(1, 6): #dt allows a loop to change the time elapsed
    dx = vix*(dt*t)
    dy = (viy*(dt*t)+(0.5*ay*(dt*t)**2))
    vx = vix
    vy = viy+(ay*(dt*t))
    print "%-3d%-6.2f%-6.2f%-6.2f%-6.2f" % (dt, dx, dy, vx, vy)
    xdisplacement.plot(pos=(dt, dx))
    ydisplacement.plot(pos=(dt, dy))
    xvelocity.plot(pos=(dt, vx))
    yvelocity.plot(pos=(dt, vy))
```