Figure 1: Gompertz curves
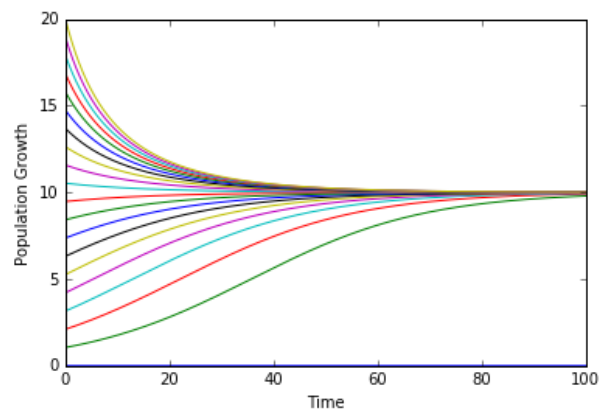

Figure 2: Logistic curves for K= 10

```python
from pylab import *

x = linspace(0,20, 20)
t= linspace(0,100,10000)

def plot_sys(v,x,t):
  for w in x:
    plot(t,v(w,t))
    xlabel('Time')
    ylabel('Population Growth')

def logistic(x,t, k=10,r=0.06):
  return k/(1+((k/x) -1)*exp(-r*t))

def gompertz(x,t,r=1,a=1):
  return x*exp((r/a)-(r/a)*exp(-a*t))

plot_sys(logistic,x,t)
```