

Bevezetés Introduction

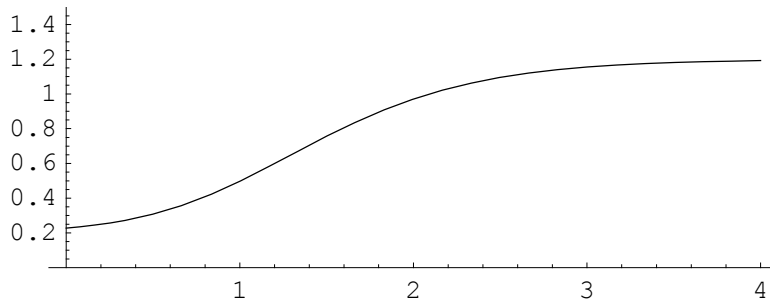
Egy példa Example

■ Mi lehet ez? What can it be?

```
<< glload.m
```

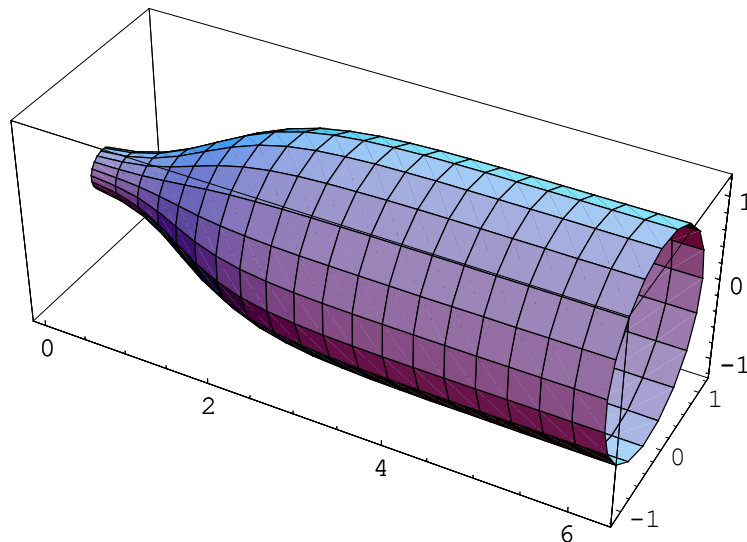
$$f[x_] = \left(\frac{6^x}{6^x + 5} \right)^2 + 0.2;$$

```
plfv = Plot[f[x], {x, 0, 4},  
PlotRange -> {0, 1.5}, AspectRatio -> Automatic];
```



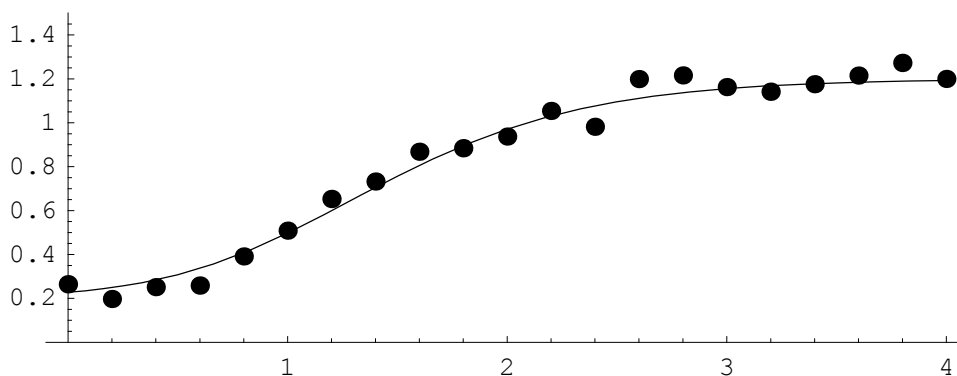
■ Egy ötlet An idea

```
GLS[uveg = ParametricPlot3D[{x, f[x] Cos[t], f[x] Sin[t]},
  {x, 0, 2 π}, {t, 0, 2 π}, Boxed → True];
```



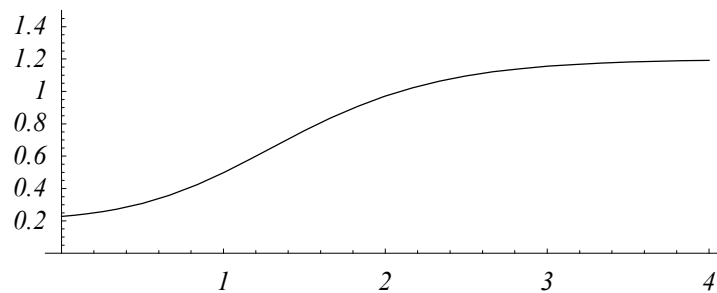
■ Egy másik lehetőség: telítődési folyamat Another possibility: bounded growth of concentration

```
adat = Table[{x, f[x] + Random[Real, {-0.1, 0.1}]}, {x, 0, 4, 0.2}];
pladat = ListPlot[adat, AspectRatio → Automatic,
  PlotRange → {0, 1.5}, PlotStyle → {PointSize[0.02]}];
Show[plfv, pladat];
```



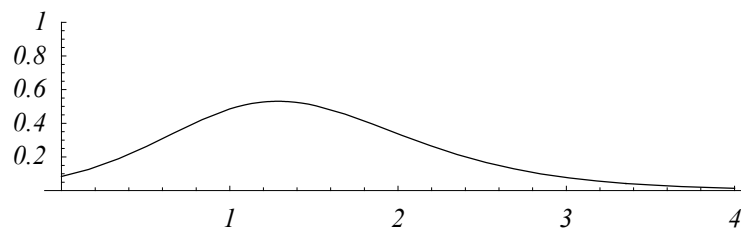
Megoldandó problémák Problems to solve

- **Grafikus, formális elemzés, a változás sebességének a vizsgálata**
Graphical, formal investigation, examination of the speed

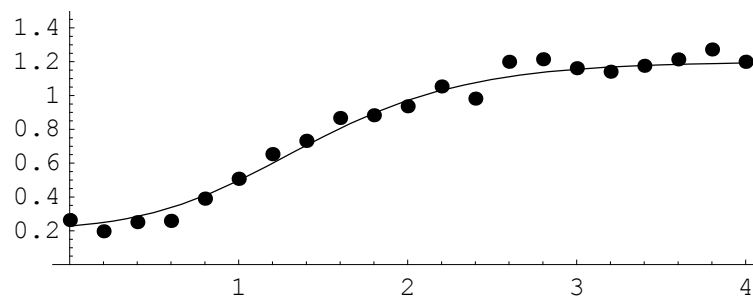


- **A sebesség ismeretében a görbe megtalálása**
Find the process by knowing the speed

```
Plot[f'[x], {x, 0, 4}, AspectRatio -> Automatic,  
PlotRange -> {0, 1}];
```

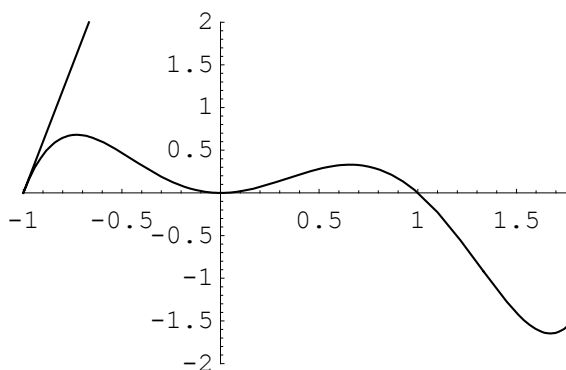


- **A mérési adatok ismeretében a megfelelő görbealak keresése**
Find the process by measured data



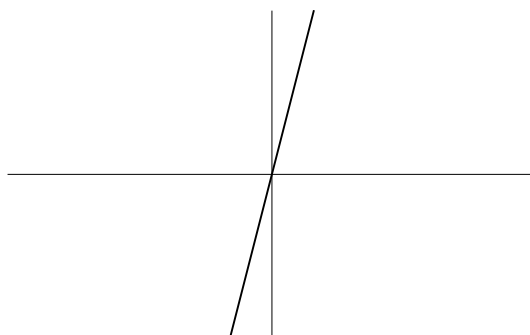
Absztrakt problémák Abstract problems

- Grafikus, formális elemzés, a változás sebességének a vizsgálata
Graphical, formal investigation, examination of the speed

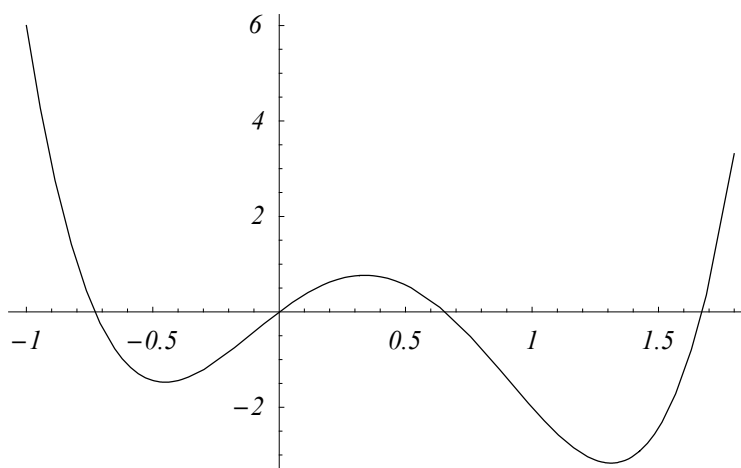


- A sebesség ismeretében a görbe megtalálása
Find the process by knowing the speed

- Az érintők

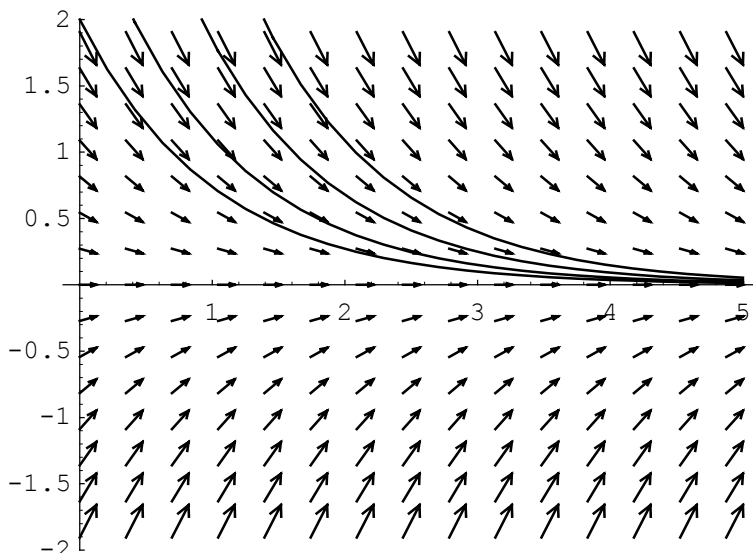


- A görbe



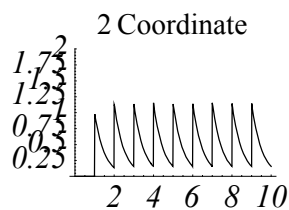
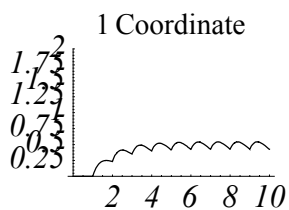
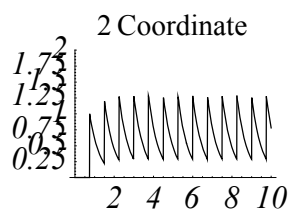
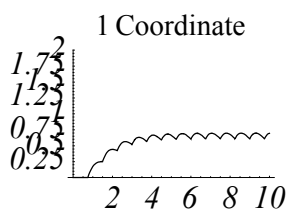
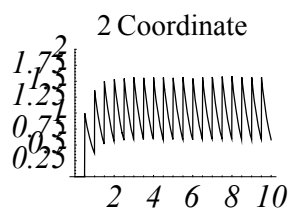
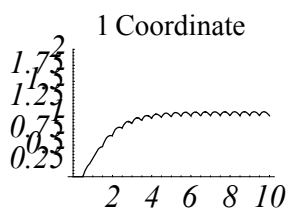
Néhány egyéb érdekesség Some more things of interest

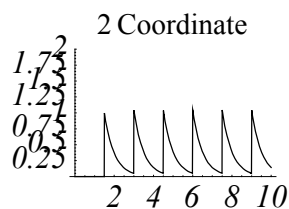
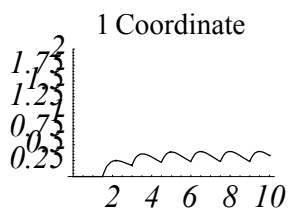
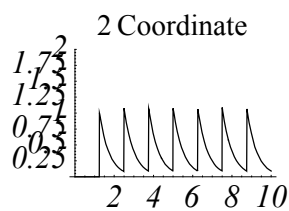
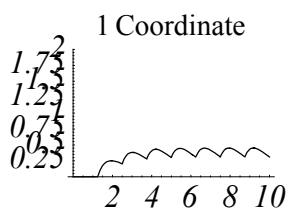
- Exponenciális változások vizsgálata, pl. egyszerű felszívódás
Exponential changes, simple dissimilation



- Ismételt gyógyszeradagolás
Repeated drug administration

- Az adagolási idő változik
Change the time of the doses





■ **A dózis változik**
Change the doses

