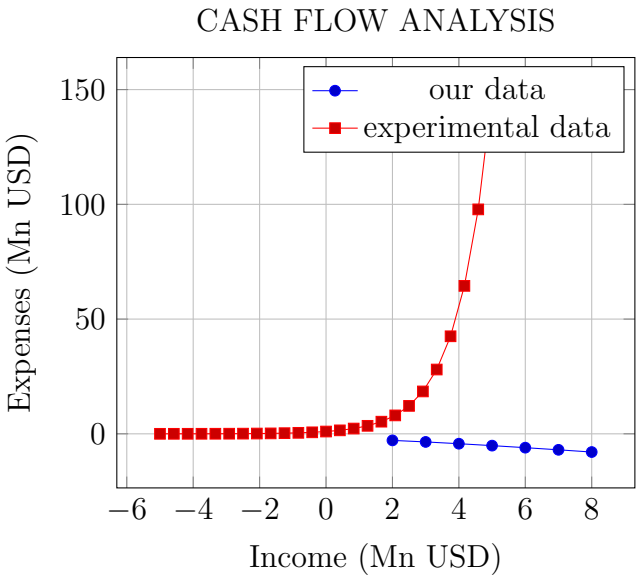
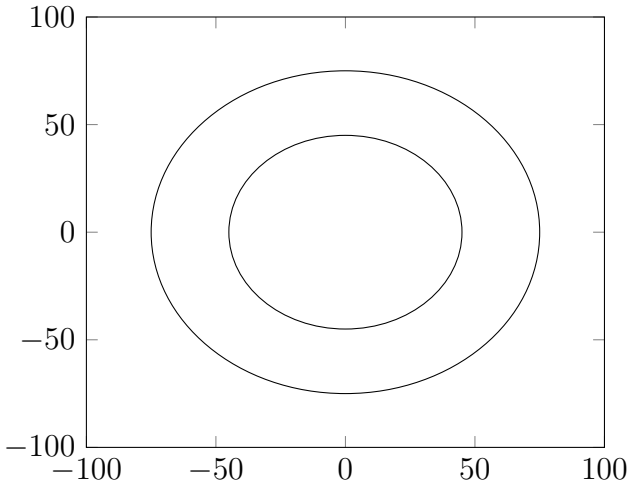
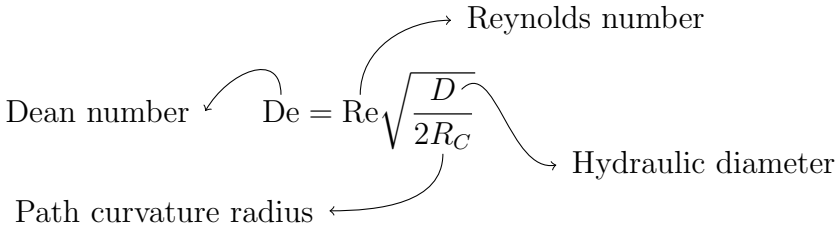
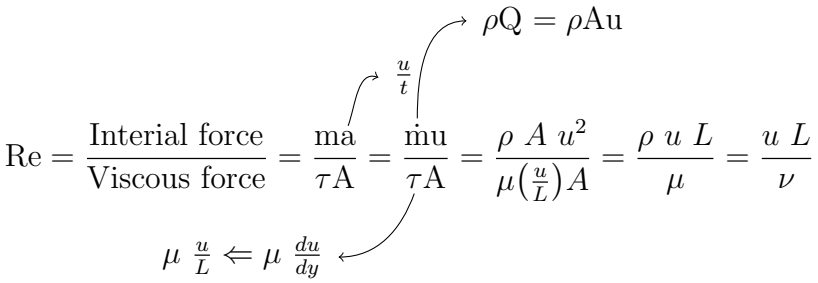

CASH FLOW ANALYSIS
our data
experimental data
Expenses (Mn USD)
Income (Mn USD)
150
100
50
0
−6
−4
−2
0
2
4
6
8

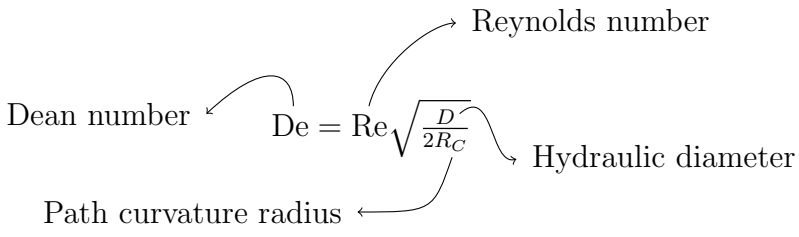

100
50
0
−50
−100
−100
−50
0
50
100


Reynolds number
Dean number
De = Re$\sqrt{\frac{D}{2R_C}}$
Hydraulic diameter
Path curvature radius


ρQ = ρAu
$\frac{u}{t}$
Re = $\frac{\text{Interial force}}{\text{Viscous force}} = \frac{\text{ma}}{\tau\text{A}} = \frac{\dot{\text{m}}\text{u}}{\tau\text{A}} = \frac{\rho\ A\ u^2}{\mu\left(\frac{u}{L}\right)A} = \frac{\rho\ u\ L}{\mu} = \frac{u\ L}{\nu}$
$\mu\ \frac{u}{L} \Leftarrow \mu\ \frac{du}{dy}$

$$\mathrm{Fr} = \sqrt{\frac{\text{Interial force}}{\text{Gravity force}}} = \sqrt{\frac{\rho\ A\ u^2}{m\ g}} = \sqrt{\frac{\rho\ A\ u^2}{\rho\ A\ L\ g}} = \frac{u}{\sqrt{Lg}}$$

$$\rho\ V\ \simeq \rho\ L^3 \simeq \rho\ AL$$


Reynolds number
Dean number
De = Re$\sqrt{\frac{D}{2R_C}}$
Hydraulic diameter
Path curvature radius

$y = sin(x)$