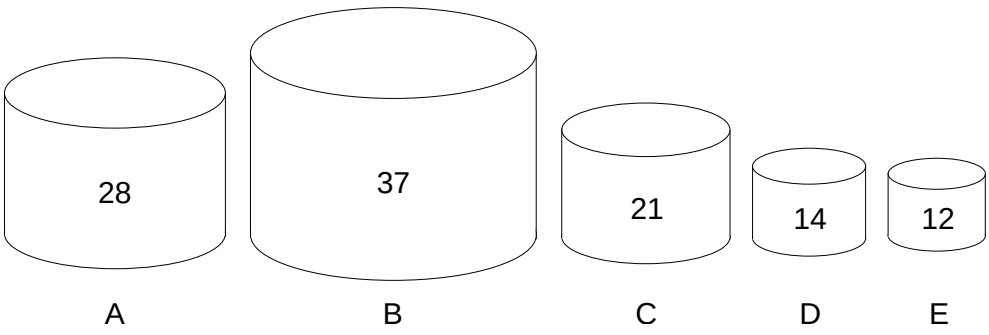
T-61.271 Information visualization

Exercise 1. Wed 13.10.2004:10-12 T3

- Tuftes theory on graphical excellence
- Basis of visual perception

1. Improve a standard graph from MS Excel, Matlab etc. according to Tuftes principles.

2. Calculate the lie factor of the following graph.



3. Explain the Hermann gird illusion and brightness contrast effects by the DOG (Difference Of Gaussians) model.

4. A good monitor should have the perceived brightness (as) linearly (as possible) proportional to the voltage of the electron gun. Taking this into account, what are the optimal values of monitor's brightness and γ in a lit room?

You should solve the exercises prior to the sessions, where the solutions will then be presented and discussed. There will be a list to which you can mark which problems you have solved. You should be prepared to present your solution for the class.