

Formal Concept Analysis

Exercise Sheet 5, Winter Semester 2015/16

Exercise 1 (drawing nested line diagrams)

Given the following formal context $\mathbb{K} = (G, M, I)$.

	< 60	≥ 60	one term	two terms	CDU	SPD	FDP
Heuss		×		×			×
Lübke		×		×	×		
Heinemann		×	×			×	
Scheel	×		×				×
Carstens	×		×		×		
Weizsäcker		×		×	×		
Herzog		×	×		×		
Rau		×	×			×	
Köhler		×		×	×		
Wulff	×		×		×		

- a) Draw a nested line diagram of the concept lattice for the attribute sets $M_1 := \{< 60, \geq 60, \text{one term}, \text{two terms}\}$ and $M_2 := \{\text{CDU}, \text{SPD}, \text{FDP}\}$.
- b) Draw a regular line diagram of the concept lattice $\mathfrak{B}(G, M, I)$.