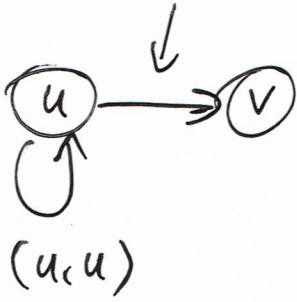
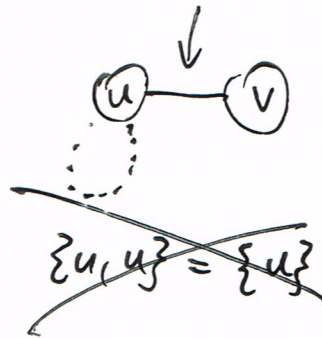


Graphen

$$(v, u) \neq (u, v)$$

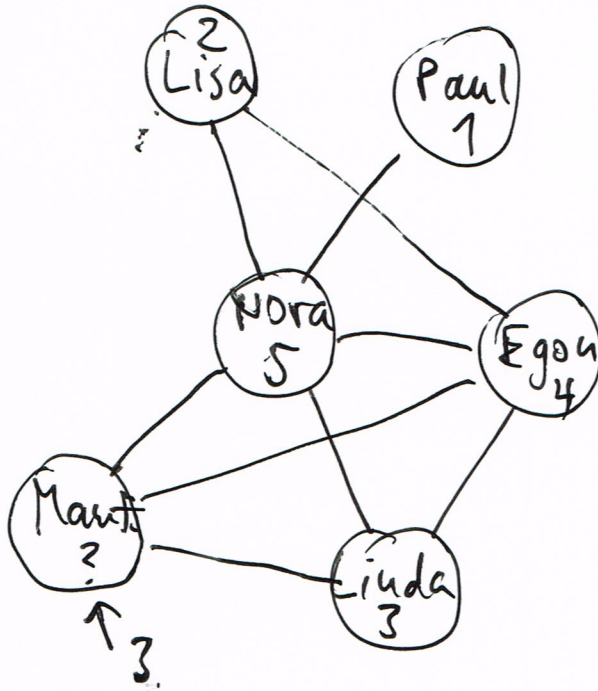


$$\{u, v\} = (u, v) = (v, u)$$



GD/3  
21.09.19  
1/3

Aufgabe 1.1



Aufgabe 1.2

$$\begin{aligned} a) \quad & 7 + 6 + 5 + \dots + 1 \\ & = \sum_{i=1}^7 i = 28 \end{aligned}$$

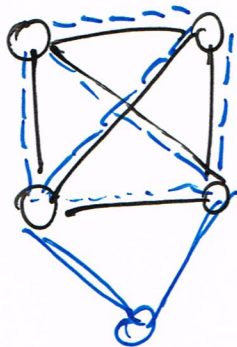
$$\underbrace{(6 + 5 + 4 + \dots + 0)}_{\text{asymm.}} + \underbrace{7}_1_{\text{symm.}}$$

$$= \sum_{i=0}^6 i + 7$$

$$= \frac{6 \cdot 7}{2} + 7 = \binom{7}{2} + 7$$

$$\begin{aligned} b) \quad \text{Gel. } n: \quad & \frac{n \cdot (n-1)}{2} + n = \frac{n \cdot (n-1) + 2n}{2} \\ & = \frac{n(n+1)}{2} = \binom{n+1}{2} \end{aligned}$$

c) Ergänze.



} "Haus vom Nikolaus"

$$\binom{n}{k} = \frac{n!}{k! (n-k)!}$$

GD13  
21.09.19  
2/3

# 1.8 Ergänzung

GDI/3  
21.09.19  
3/3

