Tupel

Menge: $\{(bl,7), (r,7), (bl,4)\}$

Menge

$R = \{(1,2), (2,3)\}$

$S = \{(1,2)\}$

R

a	b
1	2
2	3

S

a	b
1	2

$R \cup S =$

$\{(1,2), (2,3)\}$

$R \cup S$

a	b
1	2
2	3
2	2
1	2

R

a	b
1	2
2	3

$R = \{(1,2), (2,3)\}$

$R = \{(2,3), (1,2)\}$

$R(a,b)$ ← Relation-schema

b	a
2	1
3	2

$R(a,b) = \{(1,2), (2,3)\}$

$R(a,b) = \{(2,3), (1,2)\}$

$R(b,a) = \{(2,1), (3,2)\}$

$R(b,a) = \{(3,2), (2,1)\}$

R

a	b
1	3
2	4

S

b	a
1	3
4	1
	2

T

b	c

R ∪ S

a	b
1	3
2	4
3	1
1	4
2	

R ∩ S

a	b
2	4

a	b
3	1
1	1
2	4

R − S

a	b
1	3

R

a	b
1	1
1	1
1	1
3	4

3-2

-3

min(3,2)

S

a	b
1	1
1	1
2	4

2 { -1, -2

R ∩ S

a	b
1	1
1	1

R − S

a	b
1	1
3	4

S − R

a	b
2	4

R

a	b	c
1	1	2
2	3	4

$\Pi_{a,b,c}(R)$

a	b	c
1	1	2
2	3	4

$\Pi_{c,b}(R)$

c	b
2	1
4	3

$\Pi_a(\Pi_{a,b}(R))$

a	b
1	1
2	3

$\rightarrow$

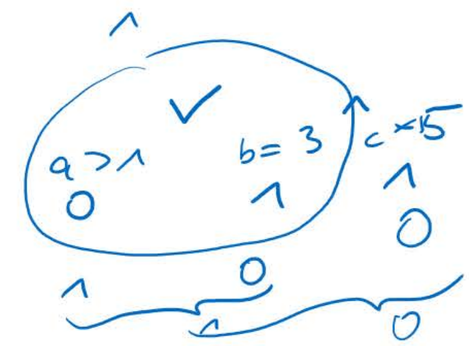
a
1
2

~~$\Pi_c(\Pi_{a,b}(R))$~~

$\emptyset$

R

a	b	c
1	3	4
6	7	9



$\sigma_{(a>1 \vee b=3) \wedge c<5}(R)$

a	b	c
1	3	4

$= \frac{b}{3}$

$\pi_b(\sigma_{b>2}(R)) \cap \pi_b(\sigma_{c=4}(R))$

a	b	c
1	3	4
6	7	9

$\frac{b}{3\ 7}$

a	b	c
1	3	4

$\frac{b}{3}$

R

a	b
1	3
4	5

S

b	a
1	3
3	1

T

a	c
1	3
1	4
1	6

$\pi_a(\sigma_{a!=3}(R)) \cup \pi_a(T) \Rightarrow \pi_a(\sigma_{a<>3}(R))$

$\pi_a(T)$ =>

a
1
1
1
1

$\pi_a(\sigma_{a<>3}(R))$

a
4
1

=

a
1
1
1
4
1

$\neg(\neg((b=3) \wedge (a>2)))$ (S)

$(b=3)$ = A = 0

$(a>2)$ = B = 1

$\neg A \wedge B$

$\neg 0 \wedge 1$

$1 \wedge 1$

$\neg(\neg A \wedge B)$

$\neg(\neg 0 \wedge 1)$

0

b	a
3	1

$\cup, \cap, -, \pi_c, \sigma_c$

Name	L-Sekr.	Essen

Name	L-Sekr	Essen

AI

ITS

Dekanat

→ Liste mit L-Sekr.

→ Liste mit Essen

$\pi_{L\text{-}Sekr.}(AI) \cup \pi_{L\text{-}Sekr.}(ITS)$

$\pi_{Essen}(AI) \cup \pi_{Essen}(ITS)$