Course: Database management

Unit: Introduction to the relational model

Assignment: Relational algebra Teamwork: Groups of two

Compute the resulting relations.

Relation r

A	В	C	D
α	α	1	7
α	β	5	7
β	β	12	3
β	β	23	10

1.-

$$\square \sigma_{A=B^{\wedge}D>5}(r)$$

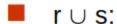
2.-

$$\blacksquare \ \prod_{A,C} (r)$$

Relations *r*, *s*:

A	В	
α	1	
α	2	
β	1	
7		

3.-



- 4.
 - r − s:
- 5.-
- $r \cap s$

Relations r, s:

A	В	
α	1	
β	2	
r		

C	D	Ε
α	10	a
β	10	a
β	20	b
γ	10	b
S		

- 6.
 - rxs:
 - \blacksquare Relations r

A	В
α	1
β	2
1	,

$$\blacksquare$$
 $r \times \rho_s (r)$

Relations
$$r$$
, s :

A	В
α	1
β	2
1	,

8.-

$$\bullet$$
 $\sigma_{A=C}(r \times s)$

Relations r, s:

\boldsymbol{A}	В	C	D
α	1	α	a
β	2	γ	a
γ	4	β	b
α	1	γ	a
δ	2	β	b
r			

В	D	Ε
1	a	α
3	a	β
1	a	γ
2	b	δ
3	b	3
	S	

9.-

$$\prod_{A,r.B,C,\,r.D,\,E} (\sigma_{c.B,E,s.B, \land r.D,=s.D} (r \times s)))$$