Course: Database management
Unit: Introduction to the relational model
Assignment: Relational algebra
Teamwork: Groups of two
Compute the resulting relations.

- Relation r

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

1.-

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

2.-

- $\Pi_{A,C}(r)$

- Relations *r, s:*

A	B
α	1
α	2
β	1

r

A	B
α	2
β	3

s

3.-

- r ∪ s:

4.-

- $r - s$:

5.-

- $r \cap s$

- Relations r, s:

A	B
α	1
β	2

r

C	D	E
α	10	a
β	10	a
β	20	b
γ	10	b

s

6.-

- r x s:

- Relations r

A	B
α	1
β	2

r

7.-

- $r \times \rho_s (r)$

- Relations *r*, *s*:

A	*B*
α	1
β	2

r

C	*D*	*E*
α	10	a
β	10	a
β	20	b
γ	10	b

s

8.-

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

- Relations r, s:

A	*B*	*C*	*D*
α	1	α	a
β	2	γ	a
γ	4	β	b
α	1	γ	a
δ	2	β	b

r

B	*D*	*E*
1	a	α
3	a	β
1	a	γ
2	b	δ
3	b	ε

s

9.-

- $r \bowtie s$

10.-

$$\Pi_{A, r.B, C, r.D, E}(\sigma_{r.B = s.B \wedge r.D = s.D}(r \times s))$$