1.1

r:

A	B	C	D
0	0	1	1
0	1	1	0
1	0	0	1
1	0	1	1

r':

C	D	E
1	1	0
1	1	1
0	0	0
0	1	1
0	1	0

a) $r[(B,C)]$:

B	C
0	1
1	1
0	0

b) $r'[(C,D)] \setminus r[(C,D)]$:

C	D
0	0

(tuplele din $r'[(C,D)]$ sunt $(1,1),(0,0),(0,1)$;
tuplele din $r[(C,D)]$ sunt $(1,1),(1,0),(0,1)$)

$\{(1,1),(0,0),(0,1)\} \setminus \{(1,1),(1,0),(0,1)\} = \{(0,0)\}$

c) $r[(A,C)] \times r'[(D,E)]$

$r[(A,C)] = \{(0,1),(1,0),(1,1)\}$
$r'[(D,E)] = \{(1,0),(1,1),(0,0)\}$

$\Rightarrow$ produsul cartezian conține:

$\{(0,1,1,0),(0,1,1,1),(0,1,0,0),(1,0,1,0),(1,0,1,1),(1,0,0,0),(1,1,1,0),(1,1,1,1),(1,1,0,0)\}$

se poate scrie și sub formă de tabel:

A	B	C	D
0	1	1	0
0	1	1	1
1	1	0	0

d) $r * r'$ (join natural) $\Rightarrow$ se poate face când $r[(C,D)] = \{(1,1),(0,1)\}$