

1a)

```
select R.sid as sid, Q.uid as uid
  from R
  join Q on R.tid = Q.tid
;
```

b)

```
select S.A as A, U.C as C
  from S
  join R on S.sid = R.sid
  join Q on R.tid = Q.tid
  join U on Q.uid = U.uid
;
```

c) If some `sid` s recorded in `R` were not actually records of `S`, then the first query would return results from `sid` s which do not exist in `S`, but the second query would only return those which correspond to actual records in `S`. The same applies to those `uid` s recorded in `Q` which do not exist in `U`.

d) If some of the `A - C` pairs were the same for different `sid - uid` pairs, then the first query might return more, since the duplicated pairs would be ignored, but the distinct `sid - uid` pairs would still be returned.

e)

```
select Q.tid as tid, count(*) as total
  from (
    select R.sid as sid, R.tid as tid, Q.uid as uid
      from R
      join Q on R.tid = Q.tid
  )
;
```