## Exercises solved at the recitation on 16. 10. 2007

- A poset with more than *rs* elements contains a chain of size greater than *r* or an antichain of size greater than *s*.
- A poset can be covered by at most k antichains if and only if each of its chains has length at most k.
- Find a poset that has no infinite antichain, but it cannot be covered by finitely many chains. Find a poset that has no infinite chain, but it cannot be covered by finitely many antichains.
- Show that every 2k-edge-connected graph has k disjoint spanning trees.