Algebra 1 (2011)-Aalborg University
Lecture 19, November 23rd

19th Lecture: Wednesday November 23rd, 8:15-12:00 at room G5-112.

- 8:15-8:45 Repetition. Order of a group element. Cyclic groups. Groups and numbers (pages 72–78).

- 8:45-10:45 Work in groups. Exercises from [Lau], 2.11 (page 104): 29, 32, 35, A, B, 16, 17.

  Exercise A: Let G be a cyclic group of order 12. Draw the lattice diagram with al the subgroups of G (a line can be drawn up from K to H whenever $K \subset H$).

  Exercise B: Let m and n be relatively prime positive integers. If G is a cyclic group of order mn, show that G is isomorphic to $H \times K$, where H and K are cyclic groups of orders m and n, respectively.

- 10:45-12:00 Lecture: Symmetric group and bubble sort (pages 78–83).

Best regards,

Diego