

Algebra 1 (2012)-Aalborg University

Lecture 1, September 6th

Welcome to “Algebra 1” for Mat3. We will follow the book: [Lau] Niels Lauritzen, “Concrete abstract algebra”, Cambridge University Press, 2003. ISBN: 978-0-521-53410-9. We will only focus on the first two chapters.

You may find the information about the course, lecture sheets, exercises, etc, ... in Moodle and in the course’s webpage: <http://people.math.aau.dk/~diego/Algebra12012.html>

The schedule for today is:

1st Lecture: Thursday September 6th, 8:15-12:00 at room G5-109.

- 8:15-10:00 Lecture: The natural numbers and the integers. Well ordering and mathematical induction. Division with remainder. Congruences. Greatest common divisor (pages 1-9).
- 10:00-12:00 Work in groups. Exercises from [Lau], 1.12 (page 41): 1,2,3,4,6,7,8,9. You may also consider $[a + b] = [[a] + [b]]$ for exercise 3.

The usual schema for the lectures (after the second lecture) will be:

- Repetition (30 minutes): we will review some concepts from previous lectures.
- Work in groups (2 hours): you will solve exercises in groups.
- Lecture (75 minutes): we will introduce some new material.

The teacher will not be present in approximately half of the lectures.

Best regards,

Diego