Algebra 1 (2011)-Aalborg University
Lecture 10, October 12th

10th Lecture: Wednesday October 12th, 8:15-12:00 at room G5-112.

I will not be present during this lecture. The group G3-112 will be responsible for the lecture.

- 8:15-8:30 Repetition from last lecture. Group G3-112 will give this lecture. The topics are: Subgroups and cosets (pages 60-64).

- 8:45-10:45 Work in groups. Exercises from [Lau], 2.11 (page 104): A, B, C, 10, 11, 12 (only the first question).

  Exercise A: Watch this video: http://www.youtube.com/watch?v=CPRnUPH8sME and discuss Wiles' "experience of doing mathematics". Do you agree with him?, What is your experience?

  Exercise B: Prove that the two definitions in Definition 2.2.1 (page 61) are equivalent.

  Exercise C: Let $H \subset G$ be a subgroup of G. Can the neutral element of H be different from the neutral element of G?

  Each group can write their solution for exercises C, 10, 11, 12 and leave it in my mailbox (just one set of exercises per group).

- 10:45-12:00 Lecture: This part will consist of self-study in the group rooms or in the lecture room G5-112 followed by a common discussion in the lecture room directed by group G3-112. The topic is "Relations" (section A.1 and A.2, pages 223–227). Compare the contents of this lecture with the previous concepts studied in this course (see the slides). At the end of the lecture, group G3-112 will orientate the teacher, by e-mail, about the successes and difficulties during the lecture.

Best regards,

Diego

PS: The previous video is part of the film Fermat's Last Theorem: The Documentary, directed by Simon Singh.