

DISCUSSION FOR SEVENTH THROUGH ELEVENTH TUTORIAL

DATE: STARTING JANUARY 16, 2012 ::: THIS VERSION: JAN 23, 2012

For tutorials through the end of the year we are going to ask you (students in the class) to present the tutorial questions. You will be given a tutorial problem in advance and you will be asked to read it and understand it well enough to present it back to the rest of the students in the tutorial. This does not mean that you have to solve the problem before you present it, but it does mean that you have to have a good idea of how start to arrive at a solution. Francisco and David will be there to help guide the discussion, but essentially during these meetings you will be exchanging roles with them and leading the presentation.

In the winter term there will be 5 tutorials where we will present problems and so if we assume that in each tutorial there are between 10 to 15 people, that means that these discussions will be lead in groups of two or three.

In order to complete this exercise you will need to answer the following questions about your tutorial problem (and this will roughly guide the discussion that will take place the week that you present).

- (1) Describe how you will present this problem to other people. How will you explain to them what makes the problem difficult or easy to answer?
- (2) Assuming that you are asked to show a solution to a general problem for which there are special cases, do at least one example of the special cases (usually an example which is small enough to be done by hand, but large enough to demonstrate the difficulty of the problem).
- (3) Are there special cases that are easy to solve or for which the answer is known?
- (4) Explain ways which the problem can be extended or generalized.
- (5) Describe in your own words what is required to create a solution which meets the standards... of 'level 1.' ... of 'level 2.' ... of 'level 3.' ... of 'level 4.' (by the criteria which are described on the web page for the course).

You should hand in the answers to these questions (as a group) the week after present your problem.