

Homework 1A

This is a voluntary homework. Solving it, you can gain extra points to the exam. Hand in before the next lecture i.e. 27 Sep 16:15 (either on my desk in the classroom or send to my e-mail). You are eligible for getting points only if you hand in on time and only if it is solved (more or less) correctly.

Recall what is a set and how the basic operations with sets are defined.

Problem. Write down a formal definition of *intersection* \cap , *union* \cup , *inclusion* \subset , and *equality* $=$ of sets.

Tip. A formal definition should be absolutely clear. Everybody without a prior knowledge should be able to understand what you mean by the definition. It should contain not only the defining property itself, but also some assumptions to clarify the context. Do not forget to write down the notion itself. It might also be useful to introduce the notation.