Algebraic Geometry and Commutative Algebra

Joseph Bernstein                                             Fall 2015.

In this course I will give weekly home assignments. This is a very important part of the course.

## A remark on problems in different areas.

In my assignments I will try to single out problems that are not directly related to algebraic geometry. For example sign
(CA) signifies a problem (or a definition) from Commutative Algebra,
(LA) stands for Linear Algebra,
(Top) for Topology.
(CT) for Category Theory

## A remark on different kinds of problems.

In all my home assignments I will use the following system.

The problems without marking are just exercises. You have to convince yourself that you can do them but it is not necessary to write them down (if you have difficulties with one of these problems ask me or discuss them with Eli or Be'ery).

The problems marked by [**P**] you should hand in for grading.

The sign ($*$) marks more difficult problems.

The sign ($\nabla$) marks more challenging and more interesting problems which are related to some interesting subjects. They are not always directly needed in the course, but I definitely advise you to think about these problems.