

Elliptic curves, SAGE

Mastermath, 22 November, 2011
WN-S329

We will use the computer package SAGE to do some computations on elliptic curves. SAGE is free and designed by mathematicians.

You will work in pairs and also the homework may be handed in in pairs.

You can already get acquainted with SAGE before 22 November by downloading and installing it from www.sagemath.org or doing the following.

- (1) Go to `sage.math.leidenuniv.nl` with a browser.
- (2) Sign up for a new Sage Notebook account, if you do not already have one.
- (3) Sign in.
- (4) Click on 'Published' to see some published worksheets.
- (5) Select the worksheet 'basic Sage'.
- (6) Go through this worksheet.

On 22 November, you do the following.

- (1) Find a partner.
- (2) Log in to a computer in room WN-S329 with a username and a password that will be given to you.
- (3) Follow the steps above, if you haven't already.
- (4) After going through the worksheet 'basic Sage', select the worksheet 'elliptic curves, exercises, mastermath 2011' from the list of published worksheets and solve all the exercises in that worksheet, adding the solutions to the worksheet.
- (5) Hand in your solutions.

If you have SAGE on your own computer, then you can download the worksheets 'basic Sage' and 'elliptic curves, exercises, mastermath 2011' from the sage server; they are also available from our course website.

Enjoy!