## MA40238 NUMBER THEORY 2013/14 SEMESTER 1 WEEK 10 OVERVIEW

## Recap

Last week, we discussed

(1) Ideal classes, the ideal class group and the class number.

(2) Minkowski's Theorem.

## Monday Lecture

Topic. Minkowski bound and finiteness of class number (for quadratic fields).

(1) We will define the Minkowski bound, which is a positive real number.

(2) We will explain why every ideal class contains an ideal whose norm is not larger than the Minkowski bound, and prove that the class number of any quadratic field is finite.

## TUESDAY LECTURE

Topic. Computation of class numbers.

(1) We will see a general recipe for computing class numbers.

(2) We will see how to compute class numbers in three examples.

Date: November 22, 2014.