MA3H6 Questions 4.

Questions asked by students on 2014-02-03.

## Background:

1. What is a Computer Algebra System?

## Day of:

- 1. Is there any way to think about building "skyscrapers" for 3 dimensional simiplicies and higher?
- 2. Would you repeat the explanation of roof line  $(\rho)$ , please?
- 3. Could you go over the intuition/picture behind  $\rho$  a little more slowly? And  $\rho$ 's connection to  $D_m$ ?
- 4. Why does  $\partial D + D\partial = \mathbb{1} i \circ \rho$  give  $i \circ \rho \sim \mathbb{1}$ ?

## **Connections:**

- 1. Apart from relative homology, will we get other methods of computing homologies of quotients (maybe not just reduced)?
- 2. Are there any results linking  $H_*(X,A)$  and  $H_*(X/A)$  if (X,A) isn't a good pair?

## Administration:

1. Are we allowed to drop subscripts (like in lecture) in assignments and exam?

2014-02-03