## 203: Homework 4 Due: 22/September

From "Structure and Proof", do the following problems:

4.1,4.2,4.7,4.27.

- 5. Let [x] denote the greatest integer less than or equal to x. Evaluate: (i)  $\int_{-1}^2 [x] dx$ . (ii)  $\int_0^2 [x^2] dx$ .

- 6. Prove that  $\int_a^b [x]dx + \int_a^b [-x]dx = a b$ .