## STAT 200B: Homework 1

## due Tuesday February 3rd 2009 in class

Homeworks will be assigned Tuesdays and due the following Tuesday. They will also be posted at http://cwick.co.nz/200b/

- 1. From the book problems 2.6.1 and 2.6.5.
- 2. The R variable iris contains measurements on 3 species of iris. Produce a histogram of the sepal length for the species *Iris setosa*. Use the normal approximation to find an approximate two-sided 80 % confidence interval for the population mean of the sepal length of *Iris setosa*.
- 3. A scientist has a device that measures counts of gamma rays. The scientist is studying a rock that may or may not be radioactive. When the rock is not present, the device counts 0.217 gamma rays per minute. Assuming that the rock is not radioactive, what is the probability that the device counts more than 18 gamma rays over a 30 minute period when the rock is present?