## Psych 6136: Assignment 2

## **Readings**

- DDAR, Ch 2 (read again)
- DDAR, Ch 3

## **Supplements**

Discrete distributions are described in more detail in J. K. Lindsey (1995), *Modelling Frequency and Count Data*, Oxford, ISBN 0-19-852331-9, Ch. 1 & Ch. 6.

Wikipedia pages on the <u>Binomial distribution</u>, the <u>Poisson distribution</u> and other discrete distributions contain fairly comprehensive summaries with graphs and properties.

## **Exercises**

For these problems in R, try to follow the instructions on Assignment 1 for working with an R script as an "R Notebook" that you can compile (File -> Compile report). An alternative method is to use "R Markdown" <a href="http://rmarkdown.rstudio.com/">http://rmarkdown.rstudio.com/</a>. This is more like writing (using simple markdown formatting), and including R code in "code chunks".

- 1. DDAR: Ex 2.3
- 2. DDAR, Ex 3.1
- 3. DDAR, Ex 3.3; part (c) should be: make a reasonable plot showing departure from the binomial distribution. Add part (d): Suggest some reasons why the number of women in queues of length 10 might depart from a binomial distribution, Bin(n=10, p=1/2).
- 4. DDAR: Ex 3.4