

# Homework 11

S320/520

**Upload your answers as a PDF file or Word document through the Assignments tab on Canvas by 4pm, Thursday 3rd December.**

Answers must be in your own words. Show working and include all graphs you are asked to draw (in R.)

1. Trosset chapter 13.4 exercise 1
2. Trosset chapter 13.4 exercise 3
3. Trosset chapter 13.4 exercise 10
4. Trosset chapter 13.4 exercise 11
5. Trosset chapter 14.6 exercise 3. You can get the data from Prof. Trosset's webpage:  
<http://mypage.iu.edu/~mtrosset/StatInfer.html>
6. (Compulsory for S520, optional for S320.) Trosset chapter 13.4 exercise 6. NOTE: From the book errata, the correct formula for the Poisson probability mass function is

$$P(X = x) = \frac{\lambda^x \exp(-\lambda)}{x!}$$

This can be calculated in R as `dpois(x, lambda)`.