



Spring 2017

Week 3

Reading and Practice

Required Reading

- Course Notes Chapters 7 and 8. Pay attention to Sec 7.2 and also Fisher's Exact Test at the end of Sec 8.4. Those are straightforward and weren't covered in lecture for different reasons.
- Pitman Sections 3.5 (pages 222, 226-227; the rest of the text uses the Poisson distribution in the context of random scatters), 1.5, 2.5.

Practice Problems

Pitman x.y.z means Exercise z of Section x.y and x.rev.z means Exercise z of the Review Exercises at the end of Chapter x.

- **Poissonization**
 - In the problems from Pitman 3.5, use the Poisson distribution throughout. If it's being used as an approximation to the binomial, you know how to find the parameter. If it's being used as the distribution of the number of points in a region, set the parameter to be "size of region times rate of points per unit size". You'll see that this is not complicated. Do 3.5.1, 3.5.3, 3.5.9, 3.5.11a,c, 3.5.12, 3.5.14 (ignore means and SDs for now), 3.5.18
- **Sampling Without Replacement**
 - (Use Python for the numerical ones) Pitman Sec 2.5: do all the odd numbered ones except 11.