



## Week 2

# Reading and Practice

Spring 2017

### Required Reading

- Course Notes Sections 4.4 through the end
- Pitman Sections 1.4 (pages 40-45), 1.6 (all of it this week), 3.1 (pages 150-155), 2.1 (pages 80-83, 87-89), 2.4

### Recommended Reading

- *Theory Meets Data* Chapter 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.

- **Induction, Counting, and Bounds**
  - The Questions section in Chapter 5 of *Theory Meets Data*: Questions 1, 2, 6, 7, 8
  - Pitman 1.3.14, 1.3.15 (also do 1.3.16 if you are intrepid), 1.4.1, 1.4.4, 1.4.11, 1.6.1, 1.6.3, 1.6.7, 1.rev.3, 1.rev.4, 1.rev.9, 1.rev.12
- **Binomial, Multinomial, and Poisson**
  - (Use stats.binom.pmf and stats.poisson.pmf for the numerical ones)  
Pitman 2.1.2, 2.1.3, 2.1.7, 2.4.1, 2.4.3, 2.4.5, 2.4.6, 2.4.9, 2.4.10 (for the intrepid). Notice that because you have a computing system, you can find binomial probabilities as well as their Poisson approximations in many cases. 2.rev.8, 2.rev.10, 2.rev.18, 3.1.7, 3.1.10, 3.1.12