Problem Set 1: Due Thursday, 2/13/2014 Tuesday, 2/25/2014 by the beginning of class

PUBHLTH 690NR: Statistical Modeling and Data Visualization (UMass-Amherst)
Instructor: Nicholas G Reich

Please note: this assignment has been modified as of 2/11/2014. Additions to the assignment are in boldface.

You must hand in a digital source file that the instructors can compile (using knitr) to create a PDF or HTML file with your problem set. The entire problem set must be handed in as a digitial file. Equations must be typeset in the document itself. The TA will provide instructions about how to hand in assignments.

- 1. Read KNN chapter 1-3, OpenIntro Chapter 7
- 2. Read KNN chapters 1, 6.1-6.5, 6.8-6.9, 7.5-7.6, OpenIntro Chapters 7 and 8
- 3. Derive the SLR estimators $\hat{\beta}_0$ and $\hat{\beta}_1$.
- 4. Problems from KNN Chapter 1: 5, 6, 7, 10, 11, 27, 28, 36, 42
- 5. Problems from KNN Chapter 2: 1, 10, 13, 28, 30, 50, 68
- 6. Problems from KNN Chapter 3: 8, 19, 24
- 7. Problems from KNN Chapter 6: 2, 3, 5(a-d), 9, 10(a,b,d), 15(a-d), 22, 31