

RE: 15.075 Review for Final Exam

In reviewing for the final, you can take a random sample of any of the odd-numbered problems in the text which you can do without the aid of a computer. You might want to try doing stem and leaf plots, simple scatter plots, and simple empirical cdf's without a computer. Try doing simple linear regression without a computer also. It is easiest to center the predictor (x) so that it is orthogonal to the intercept, so that the $X'X$ matrix is 0 off the diagonal. I will not ask you to invert a matrix larger than 2×2 unless it's diagonal.

Please be sure that you understand the problems on the mid-term.

Suggested review problems:

Chapter 3: 1,5,9,17,23

Chapter 4: 7,23,33,39, 41 (regression by hand)

Chapter 5: 1,5,11,23,33

Chapter 6: 11,13,17,27,33

Chapter 7: 1,5,9,17b&c,21

Chapter 8: 1,7,9,13,17

Chapter 9: 9,13,17,21,27,31

Chapter 10: 13 (try reproducing the output by hand as well as answering the questions), 15,19 (find a relationship between a transformation of speed and distance, rounding off the response if you want and centering the predictor so that it is orthogonal to the intercept).

Chapter 11: 1,5,7,8,9,11,13,21,29,30,47 (weighted least squares)

Chapter 12: 1,15,27,29

Chapter 13: 1,5,15,17,21,25

Chapter 14: 1,3,13,19,23,27