

data1-2009 homework 7
least squares with constraints
assigned monday, 30 november
due thursday 10 december (turn in to mr. jeong, room 4108)

fit two lines simultaneously to the two data sets
(x constant, y observed) using equal weighting.
constrain the two fitted lines to be perpendicular.

do it by

- (a) substitution, and by
- (b) format LS / constraint method

1. x y

0 3.0
1 5.2
2 8.3
3 10.5
4 13.6
5 15.9
6 18.4

2. x y

4 15.0
6 14.4
8 13.4
10 12.7
12 12.2
14 11.3
16 10.3
18 9.7
20 8.8

homework 8
historical context of survey measurement and adjustment
assigned wednesday, 2 december,
due friday, 18 december

read "the great arc" by john keay

write a (~2 page) review of the book. include in your review
some aspect of the triangulation in 19th century india that
relates to the topics covered in this course in data adjustment.