

Assignment #10 — Due Friday, November 19, 2010, by 4:00 P.M.

Turn in homework to your TA's mailbox using this sheet as the cover page.

Fill in your name and also circle the *lecture section in which you are registered* and circle the *discussion section you expect to attend* to pick up this assignment.

Name:

Lecture 1 (Larget). **311:** Tu 1:00 - 2:15pm **312:** Th 8:00 - 9:15am **313:** We 1:00 - 2:15pm

Lecture 2 (Hanlon). **321:** Tu 1:00 - 2:15pm **322:** We 2:30 - 3:45pm **323:** We 1:00 - 2:15pm

Please answer the following questions.

1. In order to assess the effectiveness of a new fertilizer, researchers applied the fertilizer to the tomato plants on the west side of a garden, but did not fertilize the plants on the east side of the garden. They later measured the weights of the tomatoes produced by each plant and found that the fertilized plants grew larger tomatoes than did the nonfertilized plants. They concluded that the fertilizer works.
 - (a) Is this an experimental or observational study? Why?
 - (b) What are the explanatory and response variables in this study?
 - (c) Discuss the issue of confounding in this study.
 - (d) Could this study have used blinding? If so, how? Could it have been double-blind? If so, how?
 2. p. 387, Problem 18 in the textbook.
 3. p. 387, Problem 20 in the textbook.
 4. p. 387, Problem 22 in the textbook.
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