431 Homework 6 Grading Rubric

Thomas E. Love and 431 Staff

Assignment was due at noon 2018-11-09

Question 1 (25 points)

22 out of 25 points should be given if:

- the essay is clear,
- answers the questions posed,
- meets the word limit, and
- has generally good grammar and spelling.

We gave a bonus to 30 points for the best 6-7 essays.

Students should receive **22-23 points** if they meet all of the standards above, but were not in that top group.

Students should receive **19-21 points** if they meet all but one of the standards above

Students should receive **18 or fewer points** if they fail to meet at least two of the standards above, and a note about why they are receiving no more than 18 points should be available in the `HW5-Notes` section of the roster.

Question 2 (15 points)

- 15 points for doing everything right
  - Using power.prop.test
  - p1 of 0.1 and p2 of 0.05 or vice versa
  - Power of 0.8, and significance of 0.05 (3 points)
  - Arriving at 435 patients in *each* group or a total of 870 (3 points)

We gave 6/15 to people who tried to use `power.t.test` here.

Question 3 (15 points)

- Award 15 points for:
  - Setting up the table correctly
  - Interpreting the table correctly
- Award at most 11 points for doing only one of the above
- Award at least 8 points for any reasonable attempt.

Question 4 (15 points)

- Award 15 points for:
  - Setting up the table correctly
  - Interpreting the table correctly
- Award at most 11 points for doing only one of the above
- Award at least 8 points for any reasonable attempt.

Question 5 (10 points)

- 10 points for a correct 99% CI [about (-9.94,-0.69)] using a two-sample t-test, and clear sentences used to explain the answer.
- 5 points for a wrong answer, but good effort shown and a clear written description.
- 0 points for a wrong answer and no written description of the methods attempted.

Question 6 (10 points)

- 10 points for an power calculation showing delta=1.063, sd=1.5, power=.90, and sig.level=0.01 and 61 measurements in each arm, 122 total, correct estimate of cost ($18,300), and clear sentences used to explain the answer.
- 5 points for a wrong answer, but good effort shown and a clear written description.
- 0 points for a wrong answer and no written description of the methods attempted.

Question 7 (10 points)

- 10 points for an power calculation showing delta=1.063, sd=1.5, power=.90, and sig.level=0.05 and 43 measurements in each arm, 86 total, correct estimate of cost ($12,900), and clear sentences used to explain the answer.
- 10 points could also be awarded if the student starts with the budget and works backwards to determine that we could afford about 50 measurements in each group, and then provides an accompanying power calculation. Again, clear sentences must be used to explain the answer.
- 5 points for a wrong answer, but good effort shown and a clear written description.
- 0 points for a wrong answer and no written description of the methods attempted.

Bonus

We gave 5 points to everyone who got the thing in on time, although we reduced that a little for people using `eval = F` and some other formatting problems.

Class Roster Elements

The roster is available now in the usual place.

Column	Explanation
Name, ID, etc.	Student Identifying Information
`HW6`	Total Score on Assignment 6 (0-100 points)
`HW6-Q1`	Question 1 results (0-25 points)
`HW6-Q2`	Question 2 results (0-15 points)
`HW6-Q3`	Question 3 results (0-15 points)
`HW6-Q4`	Question 4 results (0-15 points)
`HW6-Q5`	Question 5 results (0-10 points)
`HW6-Q6`	Question 6 results (0-10 points)
`HW6-Q7`	Question 7 results (0-10 points)
`HW6-Bonus`	Bonus (usually 5 points)
`HW6-Notes`	Notes from TAs to Students