## OAS Required Skill Module 1 due by UGTA meeting time the week of 9/22 Slacker or Obsessive--Statistics and Your Innate Confidence Level

Determine, using a statistics test, your innate confidence level in the way you assess information. Don't think too hard—just provide a gut response:

**Q test data set 1:** Given the following sequence of scores on exams in a course: **84, 81, 80, 83** What is the closest, lower numerical score that you think is significantly different from the four exam scores. Closest lower number \_\_\_\_\_

Now apply a Q test to determine your gut confidence level.

**Q test data set 2:** Given the following sequence of scores on exams in a course: **79, 76, 75, 78** What is the closest, lower numerical score that you think is significantly different from the four exam scores. Closest lower number \_\_\_\_\_

Now apply a Q test to determine your gut confidence level.

A thoughtful question. Are your Q test results similar for the two data sets. If not, what does this say about your number prejudice?

**t-Test data set 3.** Here is some data for  $C^{14}$  update in plant metabolism. Place a check mark next to the data set for which your gut first tells you the uptake data are different from the background counts.

Background counts:		12, 15, 17, 15
Plant 1:	15, 22, 17, 14	same or different
Plant 2:	19, 17, 23, 21	same or different
Plant 3:	19, 21, 25, 23	same or different
Plant 4:	24, 27, 22, 25	same or different
Plant 5:	31, 26, 24, 17	same or different
Plant 6:	31, 27, 25, 25	same or different

Now perform a t-test for the data where you placed your check mark. What is your confidence level?

So what are you, slacker or obsessive? Do the statistical test results confirm this?