

Name:

Statistics

Date:

Practice Quiz 7-A

1. For each problem, consider two statistical tests that are exactly the same in all possible aspects except the one stated. Circle which one (if either) is more likely to reject the null, given it is false.

- a)  $\sigma = 1.9$                        $\sigma = 2.2$                       equal
- b)  $n = 160$                        $n = 250$                       equal
- c) one-tailed                      two-tailed                      equal
- d)  $\mu_1 - \mu_2 = 8.1$                        $\mu_1 - \mu_2 = 9.5$                       equal

2. Darley and Latané (1968) theorized the *bystander effect*: Individuals are less likely to help in an emergency situation if there are other bystanders. To test the theory, they had a confederate (a person participants believe to be another participant) fake a seizure during the study. 85% of participants got help if they believed no one else was around, and 51% of participants got help if they believed that other participants were also witnessing the seizure. Answer the following for a one-tailed test.

- a) What was their alternate hypothesis?
- b) What was their null hypothesis?

c) Fill in the blanks: If the two groups were significantly different, then their data were \_\_\_\_\_, so they \_\_\_\_\_ the \_\_\_\_\_ hypothesis and concluded that \_\_\_\_\_.

However, it is possible that they made a \_\_\_\_\_ error, which would mean that actually in the population \_\_\_\_\_ even though in their sample \_\_\_\_\_.

d) Fill in the blanks: If the two groups were not significantly different, then their data were \_\_\_\_\_, so they \_\_\_\_\_ the \_\_\_\_\_ hypothesis and concluded that \_\_\_\_\_.

However, it is possible that they made a \_\_\_\_\_ error, which would mean that actually in the population \_\_\_\_\_ even though in their sample \_\_\_\_\_.