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 powerful.

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 Latené (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 _____

_____.