

Lab Assignment 9.1, 9.4

Name: _____ Date: _____ Row: _____

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1. You are testing that the mean speed of your cable Internet connection is more than three Megabits per second. State the null and alternative hypothesis.
2. A sociologist claims the probability that a person picked at random in Times Square in New York City is visiting the area is 0.83. You want to test to see if the proportion is actually less. State the null and alternative hypotheses.
3. In a population of fish, approximately 42% are female. A test is conducted to see if, in fact, the proportion is less. State the null and alternative hypotheses.
4. Find the P-value for each test, assume the significant level $\alpha = 0.05$. State the conclusion about the null hypothesis.
 1. The test statistic of $z = -2.00$ is obtained when testing the claim that $p < 0.5$.
 2. The test statistic of $z = 1.50$ is obtained when testing the claim that $p \neq 0.25$.
5. It is believed that the mean height of high school students who play basketball on the school team is 73 inches.
 1. State the null and alternative hypothesis.
 2. Use a 0.05 significance level and the p -value of 0.005 to state the conclusion about the null hypothesis.
 3. State the conclusion that addresses the original claim.
6. Conduct a hypothesis test to determine if the population mean time on death row is 15 years.
 1. State the null and alternative hypothesis.
 2. Use a 0.01 significance level and the p -value of 0.02 to state the conclusion about the null hypothesis.
 3. State the conclusion that addresses the original claim.

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