

Self-Check 9.1, 9.4

Name: _____ Date: _____ Row: _____

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1. We want to test whether the mean height of eighth graders is 66 inches. State the null and alternative hypotheses.
2. On a state driver's test, about 40% pass the test on the first try. We want to test if more than 40% pass on the first try.
3. We want to test the claim that the mean is greater than 12.
4. Find the **p-value** for each test, state the conclusion about the null hypothesis a. $\alpha = 0.05$, test statistic = 1.15
 $H_0: p = 0.4$
 $H_1: p \neq 0.4$
b. $\alpha = 0.01$, test statistic = 2.5
 $H_0: \mu = 12$ $H_1: \mu > 12$
5. It's a Boy Genetics Labs claim their procedures improve the chances of a boy being born. The results for a test of a single population proportion are as follows: $H_0: p = 0.50$, $H_1: p > 0.50$, $\alpha = 0.01$, $p\text{-value} = 0.025$
 1. State the conclusion about the null hypothesis
 2. State the conclusion that addresses the original claim.
6. Suppose a baker claims that his break height is more than 15cm.
 1. State the null and alternative hypothesis.
 2. Use a 0.01 significance level and the $p\text{-value}$ of 0.0013 to state the conclusion about the null hypothesis.
 3. State the conclusion that addresses the original claim.

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