

Attendance Quiz 18

Name: _____ Date: _____

1. (*Testing a claim about a Mean: σ not known.*) Assume that a simple random sample has been selected from a normally distributed population and test the given claim. Test the given claim. Identify the null hypotheses, alternative hypothesis, test statistic, P-value, critical value(s), conclusion about the null hypothesis, and final conclusion that addresses the original claim. Try both ways the P-valued method and traditional method.

Data Set 14 in Appendix B lists measured reading levels for 12 pages randomly selected from *J. K. Rowling's Harry Potter and the Sorcerer's Stone*. The Flesch-Kincaid Grade Level measurements are summarized with these statistics: $n = 12$, $\bar{x} = 5.075$, $s = 1.168$. Teachers at the West Park School District will not use the book unless the reading level for a typical page can be shown to be above grade 4. Use a 0.05 significance level to test the claim that the mean is greater than 4. Will the teachers use the book?