

CHAPTER 9 SOLUTION SHEET - 20151101

Hypothesis Testing for Single Mean and Single Proportion

In words, describe what the population parameter μ or P represents:

In words, describe what the random variable \bar{X} or P' represents:

STEP 1: H_0 : _____ H_a : _____

Significance Level α = _____

STEP 2: DATA: Proportion: x = _____ n = _____ p' = _____

OR Mean: \bar{x} = _____ ; n = _____ ; σ = _____ *or* s = _____

Circle test to use on calculator: ZTest TTest 1 Prop Z Test

Distribution for the test: N (_____ , _____) *OR* t with df = _____

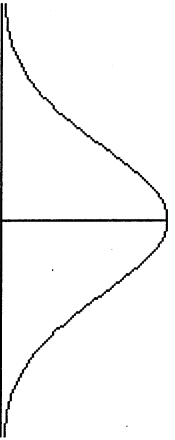
STEP 3: ANALYSIS OF THE DATA

Test Statistic: t *or* Z (circle one) = _____

p -value = _____

Use the previous information to draw the graph of this situation.

Label & scale both horizontal axes (for the random variable \bar{X} or P' and for the test statistic t or Z)



Shade and label the region(s) corresponding to the p -value.

STEP 3: ANALYSIS OF THE DATA Continued

In 1 – 2 complete sentences, explain what the p -value means for this problem.

Interpretation of p -value: _____

STEP 4:

Indicate the decision (“reject H_0 ” or “do not reject H_0 ”), and the reason
decision **reason for decision**

STEP 5: Write an appropriate conclusion in the context of the problem, using COMPLETE SENTENCES to state whether or not there is sufficient evidence in the sample data to support the alternative hypothesis

Conclusion:
