Name_____
AP Statistics Homework: Chapter 11 Day 10

Learning AP Statistics Question Stems

In addition to learning the Statistics required for the AP exam, it is very useful to learn what the AP graders expect for your responses to various prompts. On the reverse of this sheet, there is a chart of different ways that the AP exam uses the words "indentify" or "state." The column on the left has many examples of directions taken straight from AP exams from 2003 to 2010. You will be analyzing the direction using the prompts below.

1. Please fill in the rest of the chart. Using the first two rows as an example, fill in what the question is asking you to *identify* or *state.* Put a check mark in the third column if you remember learning this. Then use the last column to write down what you don't yet know in this prompt. Note: There might be some words in the prompt that are specific to the context of that problem. You should ignore those.

2. Analyze your filled-in chart. What are some overall things you can say about how the AP exam uses the word *identify* or *state*? That is, what types of topics are in identify/state that were not in describe or interpret?

3. What are characteristics of an "E" answer (remember that a E is a perfect score on a FRQ)? Be general here. What would make a good answer for any of these prompts? Is it math, sentences, complete sentences, etc.?

4. For a given question, will all correct answers be exactly the same? (To do this, look at a prompt that you've learned about. Do you think all right answers are the same for this prompt.) You will not get credit unless you are very, very specific here.

5. Any other comments, observations, or questions you have?

AP STATS DIRECTION #3: IDENTIFY/STATE

What the AP Says	**What I have to describe (2-4 words)**	**Check here if you've learned this**	**Questions or words you don't know**
For the experiment, identify i. the treatments ii. the experimental units iii. the response that will be measured	*Treatments, units, response*	✓	*Confidence level*
State the null and alternative hypotheses for the test, but do not perform the test.	*Null and alternative hypotheses*	✓	*Null and alternative hypotheses*
Define the parameter of interest and state the null and alternative hypotheses the consumer organization is interested in testing.			
State the conditions and indicate how they are satisfied.			
State the equation of the regression line for the magnet school and interpret its slope in the context of the question.			
Using the regression output, state the p-value and conclusion for this test at the magnet school.			
Interpret, in everyday language, what this p-value measures in the context of this study and state what conclusions should be made based on this p-value.			
State the null and alternative hypotheses of interest to the researchers.			
State the conditions required for this test to be appropriate.			
State what conclusion should be made based on this p-value.			
Identify and interpret the standard error of the slope.			
State the null and alternative hypotheses that the manufacturer is interested in testing.			
Identify the treatments.			
Identify a sampling method that will achieve this additional goal and briefly describe a way to select the survey sample using this method.			
For this survey, state one potential source of bias and describe how it might affect the estimate of the proportion of adult heads of households in the U.S. who do not have a high school diploma.			
Describe a randomization process and identify and inference procedure for the study.			
Identify the volunteers that would be included in each of the six blocks and give the criteria you used to form the blocks.			
Define the parameter of interest and state the null and alternative hypotheses that the law firm should test.			
State the name of a test and the null and alternative hypotheses that the health expert could have used to support this claim.			