

AP Statistics Summer Assignment

NAME: _____

One of the hardest decisions that faces high school upperclassmen is the decision of what college to attend. Because it is a difficult decision, for your summer assignment, I am asking that you do a statistical analysis of a group of schools and try to use this analysis to help inform this decision while also beginning to explore some important topics that we will cover in AP Statistics. You should note that you are likely to have to do some research to help answer some portions of this assignment.

While there are a number of places to get information about colleges, I would like you to use www.collegeresults.org. Start by creating a list of 20 colleges that you are interested in exploring. List these schools below.

SCHOOL LIST:

- | | |
|-----------|-----------|
| 1. _____ | 11. _____ |
| 2. _____ | 12. _____ |
| 3. _____ | 13. _____ |
| 4. _____ | 14. _____ |
| 5. _____ | 15. _____ |
| 6. _____ | 16. _____ |
| 7. _____ | 17. _____ |
| 8. _____ | 18. _____ |
| 9. _____ | 19. _____ |
| 10. _____ | 20. _____ |

At www.collegeresults.org, select the “Compare Colleges” tab and enter these colleges. Keep the default graduation year and grad rate timeframe. Next, you need to come up with a 4 variables to compare for these colleges. There are many to choose from. List the 4 you will be exploring below. One of these variables must be categorical.

- 1. Categorical: _____
- 2. Quantitative: _____
- 3. Quantitative: _____
- 4. Quantitative: _____

Let’s start with the categorical variable. Summarize the results of this variable in a table below. The individual schools do not need to be listed; just list the values of the variable and the frequency of each value.

State the 5-number summary for this data and use it to make a well-labeled boxplot.

Using the graphs you made, describe the shape of the distribution.

Are there any outliers? Use math to support your answer.

State an appropriate measure of center for this distribution.

State an appropriate measure of variability for this distribution.

Quantitative Variables #2: _____ and #3: _____

Put these values in a table below. For this situation, you should include the school name to make sure the values of the two variables match up.

School Name	Variable 2	Variable 3
1		
2		
3		
4		
5		
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17		
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19		
20		

Create a well-labeled scatterplot of the data.

Describe the relationship between these two variables.

On the scatterplot, use a ruler to draw an approximate line of best fit between the two variables.

Find and interpret the slope of this relationship.