

WELCOME TO AP STATISTICS!

In this course, we learn how to analyze data, set up studies, and try to use our data to make inferences about a larger population.

The political polls that we are constantly hearing about are an example of such a phenomenon. Information is collected from about 2000 voters, and a prediction is made about the whole population of voters! There is a statistical (mathematically driven) basis for the correctness of this generalization (assuming the data has been collected randomly.)

There are so many fields that require a knowledge of statistics - in biology, psychology, economics, political science...virtually every field has the need for studies to be done.

With that said, let's get down to business.

You will need to:

- Get the Barron's AP Statistics book- 9th edition- you should have it when we start school (and you can even start reading it!)
- Have a binder that is dedicated to Statistics (there will be a lot of notes, homework, and handouts)
- Always bring your calculator (TI83-84 series).

On the following pages, there are some questions/tasks for you to get started .

Please hand this in on the first day of class.

Name: _____

Please take time to write your responses so that they are thorough.

1) What is your motivation for taking statistics? If there is more than one reason, let me know. Please be thorough and complete.

2) Find out the difference between a categorical variable and a quantitative variable. State 5 variables of each type.

Quantitative Variable:

5 examples:

Categorical Variable:

5 examples:

3) a) There are measures of spread (variability of data) and measures of center of data. Find three measures of center and describe what each tells us. Find 2 measures of spread and describe what each tells us.

b) What kind of data are we referring to when we use the above measures- quantitative, categorical or both?

4) When political polls are done, we often hear that there is a margin of error of $\pm 3\%$. What type of error(s) are being accounted for in the margin of error? Do a little research on this one.

5) Find a statistical study. It can be short. (For example, " a study determined that drinking coffee can make you live longer". I'm sure you can Google and find something. Read about the study. Describe how it was performed and what the conclusions were. Comment on your thoughts about this study.

THE END