May 28, 2019

To all students enrolled in AP Statistics and their parents/guardians:

Congratulations on your decision to join the thousands of other students across the country that will be enrolled in AP Statistics in the upcoming school year. You have joined the growing ranks of students who recognize the need to take an introductory statistics course. A course such as this is typically required of many college majors including the social sciences, health sciences, and business.

AP Statistics is not an easy class. No Advanced Placement class is easy. You can expect to spend time studying outside of class, as well as in class. However, AP Statistics is special. It is a course that combines both mathematical and verbal skills. On the AP exam, you will be asked to write descriptive paragraphs and concluding sentences. You will have to explain the reasoning behind the method you use and the conclusions you find.

Throughout the course of the year, AP Statistics will expose you to four themes: exploring data; sampling and experimentation; anticipating patterns; and statistical inference. Statistics describes the qualitative world around us in a quantitative manner. An AP Statistics class insists that you learn how to describe those quantities in a qualitative manner as well. Everything is connected!

How can you prepare for this class?

➔ Complete the summer packet by the due date of August 16th. This assignment will be graded.
➔ Get the recommended supplies that include a 3-ring binder, spiral notebook, pencil, and correcting pen.
➔ A TI-83/TI-84 graphing calculator (or a TI Nspire) is required for the AP exam and therefore required for this class.
➔ You may want to go to a bookstore this summer and pick up an AP preparation guide for the AP exam. I have a few in the classroom that you can borrow :)
➔ Be sure to have signed up for Google Classroom, Remind, and Khan Academy.

If you have any questions, please do not hesitate to email me.

Again, welcome to AP Statistics!

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AP STATISTICS SUMMER ASSIGNMENT 2019

Please be aware that statistics is a reading and writing course. Almost all problems are “word problems”—how could they be anything else? Statistics is context based—what you do depends on the facts. Answers must be complete, which means your analysis and choice of method explained in complete sentences, followed by your calculations.

“Do not put your faith in what statistics say until you have carefully considered what they do not say.”

—William W. Watt

✓ Your first task will be to join Google Classroom. www.classroom.google.com
  ● Please use code 3qbbrsk to join this class.

✓ Next join our class in Remind 101
  ● Please text @2249e7 to 81010

✓ Join our class in Khan Academy
  ● Please visit https://www.khanacademy.org/join/BBZY49SD

✓ Register for the online book
  ● Go to http://www.highschoolbfwpub.com/launchpad/tps5e/8172082
  ● The following LIST has codes for you to try. Six people can use one code. If you find a code that doesn’t work, that means 6 people have already signed up...try another code! Although there are many blanks, many codes have actually been used. If you try a code that does NOT work and the field is blank, please go ahead and delete the row. Unfortunately I haven’t kept this list up to date.

✓ Complete the summer assignment by the due date of August 16th. You may submit this work via email, share your google doc or submit a hard copy to the main office. This will be graded. There is nothing to turn in for the Khan Academy portion of the assignment. I will be able to check that you have done this part of the assignment online.

✓ Failure to complete this assignment will jeopardize your spot in class. This assignment isn’t optional.

✓ There will be Chapter 1 test on Friday, September 6th.

✓ Be sure to check all of your ODD answers in the back of the book. ALL CYU (Check Your Understanding) answers can also be checked.

✓ Please know that this isn’t ‘busy’ work. These problems were purposely selected to help you learn and prepare for the test on September 6th.

✓ Don’t procrastinate!! This is A LOT of work! Be sure you are working on chunks at a time.
2019 Summer Assignment

★ Go into Khan Academy and complete the unit: Analyzing Categorical Data. Be sure to also complete the quiz!

★ Please read the introduction on pages 2 - 6 and do problems 2, 4, 7 & 8.

★ Please read section 1.1 on pages 7 - 20 and do:
  ★ CVU (Check Your Understanding) on pg 14.
  ★ CYU pg 18.
  ★ Problems 10, 19, 21, & 26 - 34 (pgs 20 - 24).

★ Go to Khan Academy and complete the unit: Displaying and Describing Quantitative Data. Please be sure to complete ALL parts of the unit.

★ Please read section 1.2 on pages 25 - 41 and do:
  ★ CVU pg 29.
  ★ CVU pgs 32 & 33.
  ★ CVU pgs 39 & 40.
  ★ Problems 38, 40, 45, 67 - 74 (pgs 41 - 47).

★ Please go to Khan Academy and complete the unit: Summarizing Quantitative Data. Complete everything BUT the optional lesson on Standard Deviation. Please skip that one!!

★ Please read section 1.3 on pages 48 - 68 and do:
  ★ CVU pg 53.
  ★ CVU pg 59.
  ★ CVU pg 63.
  ★ Problems 80, 82b, 84, 86, 94, 107 - 110 (pg 69 - 73).
Some things to think about as you are read/taking notes/doing problems:

★ ASK QUESTIONS! If you don’t understand something or would like clarification, please send me a message on Remind. You could also send me an email. YouTube may also help with some of these topics. There are a ton of great videos out there!!! If you find a video that helps you, please also share it with the group on Google Classroom 😊

★ Always show and label your work! If you are asked to describe quantitative and categorical variables, for example make sure you label which is which!

★ When calculating percents (marginal & conditional distributions) show your work! I know you are using a calculator, but what are you plugging into that calculator??

★ When describing a distribution think SOCS (Shape, Outliers, Center, Spread). Be sure that your descriptions include labels! For example, the Gas Guzzler problem on page 27 states that the center is 28 miles per gallon. Not 28!!

★ Know the difference between unimodal and bimodal.

★ When making graphs students often forget titles, labels and keys (if necessary). This will cause you to lose credit on the AP Exam. Don’t do it!!

★ When comparing distributions don’t just describe the two distributions separately. The point is to COMPARE! Check out the example on page 30. The solution COMPARES the distributions.

★ You will never have to construct a histogram by hand, so don’t worry about that. You should be able to construct one on the calculator and interpret one given to you. If asked to draw it, be sure to include labels! A rough sketch doesn’t earn you any credit.

★ Follow the technology corner examples throughout the chapter. You will need to know how to do these (yes, a graphing calculator is required for this course).

★ The 1-Var Stats feature on your graphing calculator will become your BFF!

★ You will not be required to compute the sample standard deviation by hand on the AP Exam, but you should know where it comes from and how it is computed so don’t skip over that part.