## AP/Honors Statistics Summer Assignment 2019

These are the directions for your summer assignment for next year's course. This is designed to be an intro/review of displaying and describing data that will allow us to dive right into our work with AP Statistics in August.


## Your summer assignment:

1. THIS STEP SHOULD BE DONE BEFORE THE END OF SCHOOL! If you have not done so in a previous course already, create a Khan Academy account. Log into your account and go to your Dashboard by clicking on the Khan Academy logo at the top of the page, if you are not there already. Click on the Coaches tab and then in the Join a Class area enter our class code: 8HP3VMAY
2. Follow the assignment on the back of this page IN ORDER.
$>$ The Khan Academy assignments will be posted on the last day of school. I believe they should post to your dashboard in the intended order, but please follow the order on the assignment page so that the content makes sense, including reading from the book before doing Khan Academy assignments, as listed.
$>$ Some of the work is in the textbook. I expect you to read the pages and take good notes, including vocabulary definitions and examples to illustrate concepts. "Just Checking" problems can be completed within your notes. Problems assigned from the book should be done on a separate paper with the chapter number/pages labeled. Please give complete, well-worded answers, showing work where appropriate. Look at the examples of the problems done out in the book as guides for what your answers should look like.
$>$ To get credit for watching the Khan Academy videos, you must watch the entire video. Add notes from the lesson on the video to your notes from the related section in the book.
$>$ To get credit for the "Practice" tasks in Khan Academy, retake the practice until you get $100 \%$. You will have four attempts at each practice to get them all correct.
> You cannot retake the Khan Academy "Quizzes", so work carefully through these assignments.
Go Your summer assignment will count for 5 homework checks and will be collected the first day of class.

## For the first day of class:

[1] Have your summer assignment, notes and book problems, stapled and ready to turn in.

$1 \mathbb{1}$ Solely for AP/Honors Stats, have a binder ready with dividers, white lined paper and graph paper. It is recommended that you have at least a 1.5 " binder.
[1] Bring your graphing calculator. We recommend the $\mathrm{TI}-84, \mathrm{TI}-83$ Plus or $\mathrm{TI}-83$.
Bring your pencils (not pen!) and a ruler.

This will help us get off to a great start and lead us to an enjoyable and rewarding school year!

Complete the following tasks in order:

- Book: Read and take notes on Ch 3 p. 20-35
- Book: Do the Just Checking Questions on page 30 within your notes
- KA: Watch Video: Identifying individuals, variables and categorical variables in a data set (2:40)
- KA: Watch and take notes on video: Two-way frequency tables and Venn diagrams (6:23)
- KA: Complete Practice: Read two-way frequency tables
- KA: Complete Practice: Create two-way frequency tables
- KA: Watch and take notes on video: Two-way relative frequency tables (4:27)
- KA: Watch and take notes on video: Interpreting two-way tables (1:43)
- KA: Complete Practice: Interpreting two-way tables
- KA: Practice: Interpreting two-way tables
- KA: Take Two Way Tables Quiz 1
- KA: Watch and take notes on video: Marginal and conditional distributions (5:16)
- KA: Practice: Marginal distributions
- KA: Practice: Conditional distributions
- KA: Do Check: Conditional distributions and relationships
- KA: Take Distributions in Two-Way Tables Quiz 2
- Book: Chapter 3: Do p. 38 \#5-13 odd, 19, 21, 23
- Book: Read and take notes on Chapter 4 p. 44-60
- Book: Do Just Checking p. 52 within your notes
- KA: Practice: Creating dot plots [if you do not get $100 \%$ first or second time, watch the video "Frequency tables \& dot plots (7:18)]
- KA: Practice: Reading dot plots \& frequency tables
- KA: Watch and take notes on video: Creating a histogram (7:22)
- KA: Watch and take notes on video: Interpreting a histogram (4:22)
- KA: Practice: Create histograms
- KA: Practice: Read histograms
- KA: Watch and take notes on video: Stem-and-leaf plots (5:58)
- KA: Practice: Reading stem and leaf plots [if you do not get $100 \%$ first or second time, watch the video: Reading stem and leaf plots (3:08)]
- KA: Displaying and Describing Quantitative Data: Quiz 1
- KA: Practice: Shape of distributions [if you do not get $100 \%$ first or second time, watch the video: "Classifying shapes of distributions" (4:27)]
- Book: Chapter 4: Do p. 72 \#5-13 odd
- KA: Watch and take notes on video: Mean, median, \& mode example (3:55)
- KA: Watch and take notes on video: Median in a histogram (2:28)
- KA: Practice: Calculating the mean
- KA: Practice: Calculating the median
- KA: Practice: Calculating mean and median from data displays
- KA: ReadArticle/Practice: Mean as the balancing point
- KA: Watch and take notes on video: Missing value given the mean (5:02)
- KA: Practice: Missing value given the mean
- KA: Watch and take notes on video: Impact on median \& mean: increasing an outlier (4:15)
- KA: Watch and take notes on video: Impact on median \& mean: removing an outlier (5:37)
- KA: Practice: Effects of shifting, adding, \& removing a data point
- KA: Watch and take notes on video: Estimating mean and median in data displays (4:35)
- KA: Practice: Estimating mean and median in data displays
- KA: Watch and take notes on video: Interquartile range (IQR) (6:11)
- KA: Practice: Interquartile range (IQR)
- KA: Summarizing Quantitative Data: Quiz 1

