

2018 AP Statistics Summer Assignment

Mrs. Jennifer Kim

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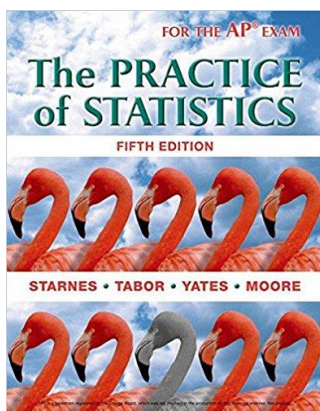
Book: The Practice of Statistics, Fifth Edition

By Starnes, Tabor, Yates, Moore

Hello students,

Welcome to AP Statistics! I am glad you have decided to join the class. AP Statistics is a very interesting course, but it is also taught at a college level. To prepare for the class, you will need to complete the summer assignment, which is due at the beginning of class on the first day (except for your email introduction, which is due at the end of June or as soon as possible). The summer assignment consists of work that will cover the first chapter of the textbook. **If you do not fully complete the assignment, you will be dropped from the class.** If you enroll in this class late (after the school year starts, up until two weeks), I will give you one week to complete this summer assignment. **Your first test will be on Friday of the first week of class.** It will cover the material from the summer assignment, so work on the summer assignment carefully to make sure you are ready for the test. I look forward to meeting you all!

Blessings,
Mrs. Kim ☺



Textbook: The Practice of Statistics, Fifth Edition.
Authors: Daren Starnes, Josh Tabor, Daniel Yates and David Moore.

ISBN-13: 978-1-4641-0873-0

ISBN-10: 1-4641-0873-0

You may purchase the hardcover textbook or the digital version. However, I HIGHLY recommend the digital version. The instructions for purchasing the digital textbook are on the next page.

If you are going to be out of the country during the whole summer, I will make a paper copy of the first chapter of the book for you.

Dear Students,

My online course is open for student registration. Follow these steps to get started. If you need additional guidance, consult the [support site](#), especially the system requirements which list recommended browsers.

Go to <http://www.highschool.bfwpub.com/launchpad/tps5e/8091917>

Bookmark the page to make it easy to return to (although note that the URL will look different due to security measures).

Enroll in this course using one of the following options:

If you have an access code, select "I have a student access code", enter the code exactly as it appears on the card, and click Submit.

If you don't have an access code, either purchase a text package that includes one OR click "I want to purchase access" and follow the instructions.

If you need to start working but can't purchase right away, select "I want temporary access" and follow the instructions. Please note: Your grades are linked to your Launchpad account username (email address). If you use temporary access, make sure you purchase or register your code using the same email address for your paid access.

If you have problems registering, purchasing, or logging in, please [contact Customer Support](#).

You can reach a representative 7 days a week:

- through the online form
- by chat
- by phone at (800) 936-6899

Looking forward to seeing you in class!

Jennifer Kim

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Summer Assignment (Due on the first day of class):

1. Due by the end of June (or as soon as possible).

Write me an email introducing yourself. Please mention the following:

- a. Your name
- b. Grade level
- c. Interests/activities/hobbies
- d. Future goals, if any
- e. Reason why you are taking this class (you can be honest ☺)
- f. Tell me that you have read through this summer assignment and understand what you are supposed to do. You may ask me any questions if there is something you do not understand.

2. Read Chapter 1, including the introduction.

Make sure to pay extra attention to highlighted words, definitions and example problems.

3. Create a study sheet with the definitions and/or examples of the following words (hand-written only). DO NOT use the internet definitions. USE YOUR TEXTBOOK.

- Individual
- Variable
 - Categorical Variable/Data
 - Quantitative Variable/Data
- Distribution
- Inference
- Frequency
- Relative Frequency
- Pie Chart – When should you use this?
- Bar Graph – When should you use this?
 - Including:
 - Side-by-side bar graph
 - Segmented bar graph
- Pictograph – Why is this potentially misleading?
- Two-way table
- Marginal Distribution
- Conditional Distribution
- Association
- SOCS
 - Shape
 - Symmetric
 - Skewed to the right or left

- Unimodal, bimodal, multimodal
 - Outlier ($1.5 \times IQR$ rule for outliers, found later in the list)
 - Center
 - Spread
- DotPlot
- Stemplot (stem-and-leaf plot)
 - Splitting stems
 - Back-to-back stemplot
 - Key
- Histogram (How is it different from a bar graph?)
- Mean (include the symbol)
- Median
- Mode
- Range
- Quartile (Q_1, Q_3)
- Interquartile Range (IQR)
- $1.5 \times IQR$ Rule for outliers
- Five-number summary (What are the 5 numbers? Purpose?)
- Boxplot
- Variance
- Standard deviation (include the symbol)
- Resistance (Think: What makes measurements resistant?
Which measurements are resistant?)

4. Learn how to use the one-variable statistics option on your graphing calculator.

Look at pp. 63-64 in your textbook and do the practice example. This will be very helpful throughout the year, so make sure you memorize how to do this. **I will check to see if you can do this on your calculator on the first day of class.**

5. Complete the following problems from Chapter 1 of your textbook (hand-written only):


Introduction p. 6-7 #1-8

Lesson 1.1 pp. 20-24 #10-26(even), 27-34

Lesson 1.2 pp. 41-47 #37-38, 40, 44, 46, 49, 51, 56, 59, 64, 66, 67, 69-74

Lesson 1.3 pp. 69-72 #80, 82, 84, 87, 90, 92, 94, 95, 98, 99, 104, 105, 107-110

Important tips regarding textbook problems:

- Every calculation may be done with a graphing calculator, but show appropriate work (write down what you are putting in your calculator).
- When asked to describe something, write in complete sentences.
- You may check odd problem answers in the back of the book, but please remember, copying the exact answer from the textbook or another person without properly citing is considered plagiarism and will not be tolerated. If you are using an answer from the back of the book, use a different color pen to show that this is not your own answer.
- Most of the even numbered problems have similar odd problems you can refer to for assistance. For example, #10 is very similar to #9, so if you are not sure how to do #10, you can look at the answer for #9 for guidance.
- With the digital version of the textbook, problems with the “play” symbol next to them  mean there is a video that goes over how to do the problem. This is a resource I highly recommend.
- If you are caught copying the homework of another student or allowing someone to copy from you, you will be dropped from the class immediately.

Lastly, if you do not understand something from the reading or homework, you are welcome to email me and ask me questions throughout the summer. If I am available, I will answer your questions, but I may not be available.