

Statistics Summer Work for 2020-21 School Year

Hello Soon-to-be-Stats Students,

The first two sections of The Practice of Statistics introduce statistic vocabulary and some math that you may have seen in your science classes. I believe that you can do much of the work from these sections on your own during the summer. This allows us more time during the year to work on the difficult material.

In many ways Statistics is more like a science class than a math class. Learning definitions and concepts is important. Don't just skim through the reading. Make sure you understand it. Your assignments for this summer will include reading as well as problems.

This work is due first week of school. This gives us a couple of days to review problems you may not understand. Feel free to email me during the summer if you have questions. I will be "out of the office" July 18-23. But, otherwise, I usually check my email every day.

The math department homework policy applies to this work: Students may, and are encouraged to, work together. Obviously, physical distancing applies. But, please feel free to communicate with other students in the class about the work. It is absolutely fine for another student to explain an answer to you. However, remember, it is important that you are also learning and understanding the material.

I know that most of you will not have access to your stats book yet, so let me know if you would like copies of the pages you will need to complete the exercises. I can email them to you.

Summer work counts as a 50-point quiz.

Have a good summer. I look forward to seeing you in August.

Ms. Bank

Statistics Summer Work

1. Read: *What is Statistics?* (pgs: xx – xiv)

2. DESMOS ACTIVITY

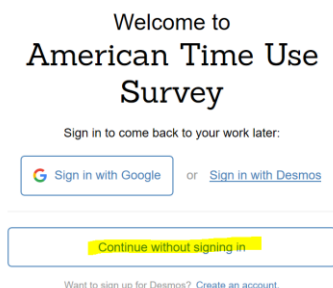
Most people gather information anecdotally. Their experiences inform how they view the world and what they believe to be true. Because statistics allows you to organize and analyze information from large and diverse groups of people, it gives you a view beyond your own experiences. Often, the data show us something different than what we expected.

This activity gives you a chance to compare your guesses with actual data. (This activity asks about the amount of time you spend with people. Use pre-pandemic/social-distancing times to answer the questions.)

Desmos Activity: American Time Use Survey

USE THIS LINK TO ACCESS THE DESMOS ACTIVITY: <https://student.desmos.com/join/jcasxr>

The code should already be entered for you. Continue without signing in:



IF THE LINK DOES NOT WORK, GO TO student.desmos.com AND TYPE IN THE CODE: JCA SXR

3. CHAPTER 1: EXPLORING DATA

- Read Case Study: *Do Rewards Promote Creativity?* and Introduction: *Data Analysis: Making Sense of Data* (pgs: 1 – 6)
- Complete problems: pg. 7: 3, 5, 7, and 8

4. 1.1 ANALYZING CATEGORICAL DATA

- Read *Bar Graphs and Pie Charts* (pgs: 8 – 14)

- Complete problems pg. 22: 9, 10(parts *a* and *c*), 11, 13, and 18

5. 1.2 DISPLAYING QUANTITATIVE DATA WITH GRAPHS

- Read *Dotplots, Describing Shape, and Stemplots* (pgs: 27 – 35)
- Complete problems
 - pg. 31: 1 – 4 (Check Your Understanding)
 - pg. 35: 2 – 4 (Check Your Understanding)
 - pg. 42: 37, 39, 41, 45

AS WITH ALL MATH BOOKS, ANSWERS FOR ODD-NUMBERED PROBLEMS CAN BE FOUND IN THE BACK OF THE BOOK. CHECK YOUR ANSWERS AND CORRECT MISTAKES.

** Much of statistics is defending or explaining your process. You should be prepared to do some writing in this class. Answers to all questions (homework, quizzes, tests, etc..) should be written in complete sentences!*