



2026 SUMMER ASSIGNMENT

AP Statistics

Mr. Kean

Dear AP Statistics Students,

Welcome to AP Stats! I am thrilled that you have chosen to take this course this year. I think you will find this course to be a unique and exciting challenge! Whether you are interested in going into business, the sciences, or mathematics in college, this course will help you in a multitude of ways. What is fun about statistics is that it can be easily related to current events and the outside world. The goal of this assignment is to get you to “start thinking like a statistician,” and will count as your first quiz grade of the semester.

If you have any questions or concerns about this assignment, please do not hesitate to reach out to me over the summer. I can be reached by email: lkean@canterburyfortmyers.org. Best of luck and I will see you all in August!

- Mr. Kean

Summer Assignment Details:

- This assignment is worth 50 points and is due on Monday, August 17, 2026.
- You will need a copy of our textbook to complete at least Part II of this assignment. (*The Practice of Statistics for the AP Exam by Starnes and Tabor, 6th edition*) ISBN#: 978-1-319-11333-9
- The summer assignment includes two parts:
 - **PART I: Practice Problems**
 - Print and complete the packet of practice problems.
 - Though your textbook will be your best resource for this portion, you may also use other trusted digital resources such as Math Medic, Khan Academy, etc when completing definitions.
 - *Note: You will sign that you have completed this packet in accordance with the Honor Code. The use of AI to complete this assignment is prohibited, and any suspected AI use will result in referral to the Upper School Administration.*
 - **PART II: Chapter 1 Reading & Annotations**
 - Read and take notes on the Chapter 1 intro, 1.1, and 1.2 in our textbook, covering pages 2-46.
 - You must write down bold words and key terms.
 - You should also write down important concepts, graphs, AP Tips & Cautions
 - This must be done on lined paper, stapled to the back of this packet, and turned in on the first day of school. (**Handwritten only**)
 - These notes on Ch 1 can be used on your first test of the year, so you have an incentive to make the notes as good as possible!



FYI: This link will have helpful tips for entering data into your TI-84.
<https://mathmedic.com/blog/calculator-functions-for-the-ap-stats-exam/>



2026 SUMMER ASSIGNMENT

PART I: AP Statistics Practice Packet:

NAME: _____

SIGN: _____ I have abided by the Honor Code!

Choose a city (anywhere except Fort Myers/ Cape Coral) and collect data for 7 consecutive days regarding the **high temperature** for the day, in degrees F. Please note that you must record the high temperature from the same source each day for the city of your choosing.

Date range: _____

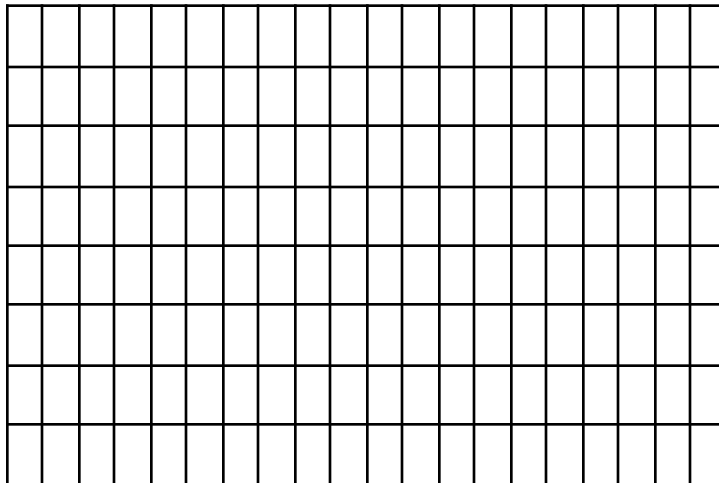
Location (City, State, Country) _____

Day	1	2	3	4	5	6	7
Temperature							

Data source (newspaper, TV, internet, etc) _____

- Using the data above, create a **scatterplot**. Be sure to label both axes and use an appropriate scale.

- Which variable is “explanatory” ? _____
- Which variable is “response” ? _____
- Based on the scatterplot, what is the “sign” of the relationship? _____





2026 SUMMER ASSIGNMENT

2. In general terms, using your textbook or a trusted source, identify the following definitions.

Mean:

Quartile 1:

Median:

Quartile 3:

Mode:

Range:

Variance:

IQR:

3. Now, fill in the values for your temperature data (do not forget units!)

Mean:

Quartile 1:

Median:

Quartile 3:

Mode:

Range:



2026 SUMMER ASSIGNMENT

4. Using your definition and value of your temperature data, please interpret, *in context*, the meaning of each of these values.

Mean:

Quartile 1:

Median:

Quartile 3:

Mode:

Range:

Variance:

IQR:



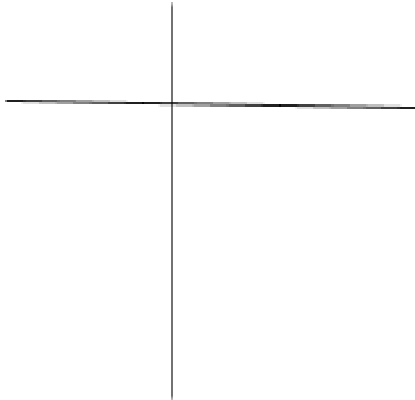
2026 SUMMER ASSIGNMENT

Twenty (20) high school students took an AP Economics test and received the following scores:

70, 60, 75, 68, 85, 86, 78, 72, 82, 88, 88, 73, 74, 79, 86, 82, 90, 92, 93, 73.

5. Determine the **mean** and **standard deviation** of your data, round to two decimal places.
[remember-stat-list-1var stats] - this is using your calculator commands, which we will learn to start the year. ALSO, please interpret the *standard deviation in context*.

6. Using the test score data, create a stem and leaf plot. [Do not forget a key!]

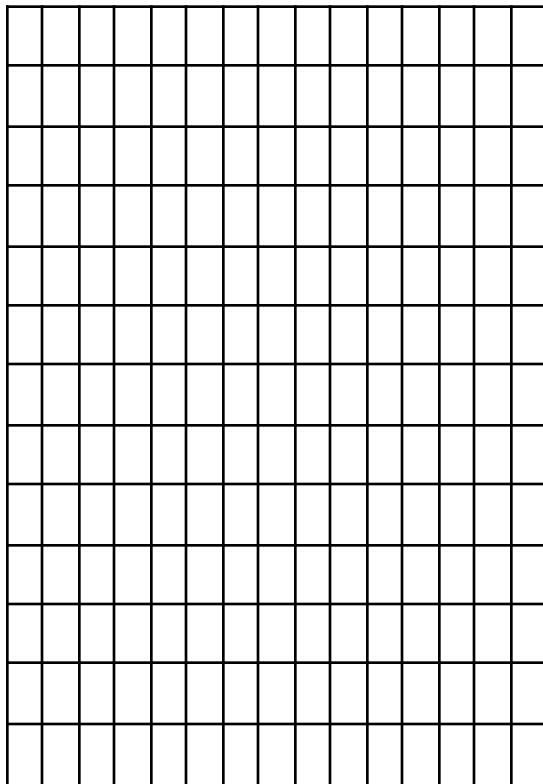




2026 SUMMER ASSIGNMENT

7. Using the same test score data, create a **histogram**.
Be sure to label your axes, use a proper scale, and choose a proper range for how best to organize your data set

Grade Range	Frequency





2026 SUMMER ASSIGNMENT

8. Using Chapter 4 in your textbook or another trusted digital resource (that is not AI), define the following terms.
- a. **Census:**
 - b. **Sample Survey:**
 - c. **Sample:**
 - d. **Convenience Sample:**
 - e. **Voluntary Response Sampling:**
 - f. **Random Sampling:**
 - g. **Simple Random Sample:**
 - h. **Stratified Random Sampling:**
 - i. **Cluster Sampling:**



2026 SUMMER ASSIGNMENT

k. Nonresponse:

l. Response Bias:

m. Confounding:

n. Treatments:

o. Experimental Units:

p. Levels/Factors:

q. Placebo:

r. Control Group:

s. Experimental Group:



2026 SUMMER ASSIGNMENT

- u. **Completely Randomized Design:**

- v. **Randomized Block Design:**

- w. **Matched Pairs Design:**

- 9. After defining above, please describe *an example* of each of the major types of sampling.
 - a. **Simple Random Sample:**

 - b. **Stratified Random Sampling:**

 - c. **Cluster Sampling:**

 - d. **Randomized Block Design:**