**STAT 101**

**CA#3**

**2.13.20 :: Due 2.18.20**

**CLASS ASSIGNMENT #3 [10 points]:**

* **COMPLETE YOUR ASSIGNED PROBLEMS ON THIS SHEET.**
* **THIS ASSIGNMENT IS DUE AT CLASS TIME TUESDAY.**
* **Please be thorough and neat in the presentation of your responses as they must fit within the space provided.**
* **Problem point values and point credit distributions are included in brackets [ ]. General Grading: -.5 for first error; -1 to -2 for multiple errors; 0 minimal effort/not attempted/incorrect.**



**ASSIGNED PROBLEM:**

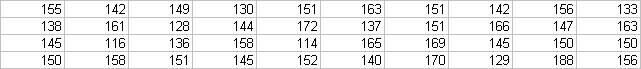
**ASSIGNMENT:** **Using the data provided for your problem complete the following:**

* [3] Create a grouped frequency table according to the instructions specific to your problem.
* [2] Create a frequency histogram of the data that displays class midpoints.
* [2] Create an ordered single stem-and-leaf of the data.
* [2] Create an ogive of the data.
* [1] Write a summary paragraph that contains an introductory sentence; a minimum of two sentences summarizing some aspect of the data (descriptive statements), and a concluding statement. [Remember: When discussing table contents table /chart remember to use the data rather than words such as “more” and “majority.”]

**PROBLEM Set #1: RADIATION IN BABY TEETH**

BD21298_Listed below are the amounts of **strontium-90 (in millibecquerels or mBq)** in a simple random sample of baby teeth obtained from Pennsylvania residents born after 1979 (based upon data from “An Unexpected Rise in Strontium-90 in U.S. Deciduous Teeth in the 1990’s” by Mangano, et al., *Science of the Total Environment*).

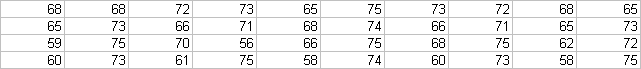
* **Frequency Table: class width = 10; midpoint of first class = 114.5**



**PROBLEM Set #2: SETTING SPEED LIMITS**

Listed below are recorded **speeds (in miles/hour: mph)** of randomly selected cars traveling on a section of Highway 405 in Los Angeles (based upon data from Sigalert). That section has a posted speed limit of 65mph. Traffic engineers often establish speed limits by using the “85th percentile rule,” whereby the speed limit is set so that 85% of drivers are at or below the speed limit.

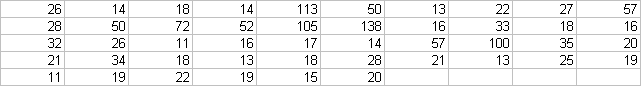
* BD21298_**Frequency Table: class width = 3; midpoint of first class = 56**



**PROBLEM Set #3: TRADE WINDS**

Trade winds are one of the beautiful features of island life in Hawaii. The following data represent total **air movement in miles** each day over a weather station in Hawaii as determined by a continuous anemometer recorder. The period of observation was January 1 to February 15, 1971.

* BD21298_**Frequency Table: class width = 20; midpoint of first class = 9.5**



**CLASS ASSIGNMENT #3 PROBLEM SET #: \_\_\_\_\_ Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Frequency Table [3]: Histogram [2]:**

**Stem-and-Leaf [2]: Ogive [2]:**

SUMMARY [1]: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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