3.1 Mean, Median, Mode

With a big set of data it can be helpful to condense all of your information by using other describing words for your data set. By telling someone what the largest and smallest elements are, where there are clumps of data, and what the average value is, they can understand your data without giving them all of your information.

1 * Given this list of numbers answer the following questions.

7, 10, 12, 11, 9, 12, 8, 11, 12, 13

(a) What is the range? (What are the highest and lowest numbers?)

(b) What is the median? (What number is in the middle?)

(c) What is the mode? (Which numbers appear the most?)

(d) What is the mean? (What is the average of the numbers?)

2 Adam counts the number of minutes it takes him to drive to work for 10 days.

18, 20, 22, 20, 21, 15, 17, 18, 20, 23,

(a) What is the range?

(b) What is the mean?

(c) What is the mode?

(d) What is the median?

3 Professor Haunsperger has 25 students in her class. She asks each student how many pencils they have and records the information in a table.

# of Pencils	# of Students
3	6
4	4
5	8
6	5
7	2

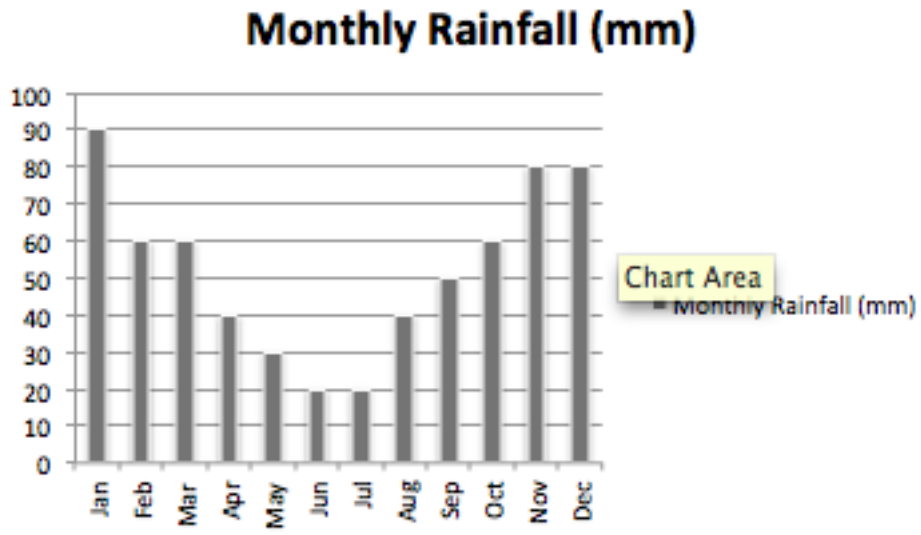
(a) What are the largest and smallest number of pencils a student has?

(b) How many pencils does the class have in total?

(c) What is the average number of pencils for a student to have?

(d) What is the most common number of pencils for a student to have?

4 Here is a bar chart of monthly rainfall for Honolulu, HI.



(a) Which month has the most rainfall? Which has the least?

(b) What is the most common amount of rain to fall in one month?

(c) What is the average amount of rain to fall in a month?

(d) Which data descriptor (mean, median, mode, range) is each of these questions asking for?

Here you can find additional help on starred problems:

1. `https://www.youtube.com/watch?v=-kyjOVmjy7s`
2. `https://www.youtube.com/watch?v=u_zwnehckm8&index=3&list=PLiADMg9o4gHmYoI2R1yMirdI7OmQj0g19`