

Graphic Statistics Quiz Solutions

Given the following data set:

7.5 8.3 4.9 2.1 3.7 7.2 9.4 4.7 4.6 5.4 2.5 3.2 9.7 8.7 4.6 5.2

1. Draw a stem and leaf diagram

ANSWER. First, order the data:

2.1 2.5 3.2 3.7 4.6 4.6 4.7 4.9 5.2 5.4 7.2 7.5 8.3 8.7
9.4 9.7

Then draw the stem and leaf plot:

2 | 1 5

3 | 2 7

4 | 6 6 7 9

5 | 2 4

6 |

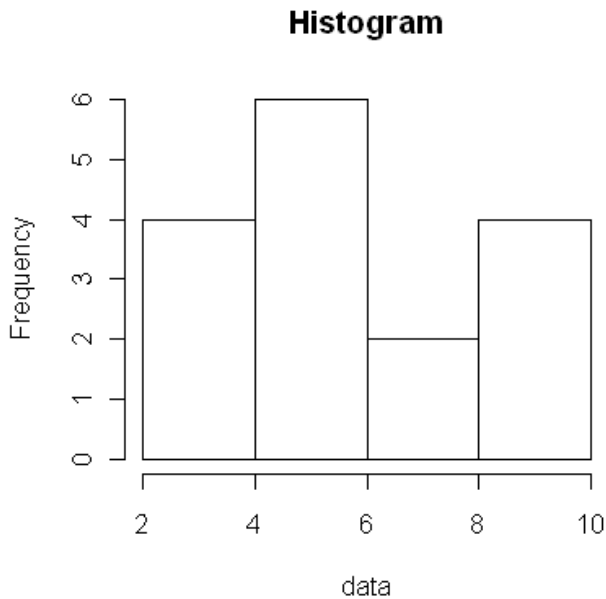
7 | 2 5

8 | 3 7

9 | 4 7

2. Draw a histogram with 4 categories

ANSWER: The min is 2.1 and the max is 9.7, so let's set our category range from 2 to 10. $\frac{10-2}{4} = 2$ so each category will be 2 units wide. For example, the first category will go from 2 to just under 4. Therefore these are the categories 2.0 - 3.9, 4.0 - 5.9, 6.0 - 7.9, 8.0 - 9.9. Count the frequencies of each category, and then plot each category versus their frequency:



3. Draw a boxplot of the data

ANSWER. Find the 5 number summary:

MIN	Q_1	MEDIAN	Q_3	MAX
2.100	4.375	5.050	7.700	9.700

Then draw box plot:

