

Unit 4 Review 1 – Statistics

Use the following data for questions #1 – 5. Remember to show all relevant work and make work clear and easy to follow.

These are recent test scores as percentages for one class of students.

92, 53, 68, 83, 67, 21, 75, 79, 0, 88, 95, 52, 75, 81, 79, 60, 90, 28, 0, 85, 62, 59, 93, 76, 37

1. Find the following data values:

Mean:

Median:

Mode:

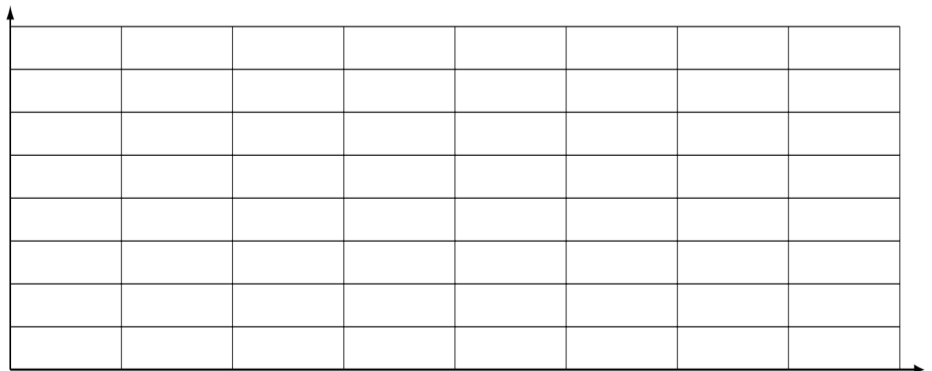
Range:

2. Make a box and whisker plot of the data.



3. Make a histogram of the data.

Intervals	Frequency



4. Describe the distribution of the data displayed in the histogram.

Mode:

Outliers:

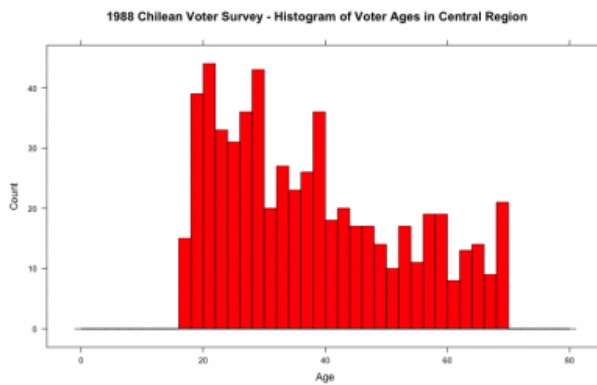
Skew:

Variability:

5. What conclusions can you draw about how the class did on the test?

Describe the data distribution for each of the following statistical models.

6.



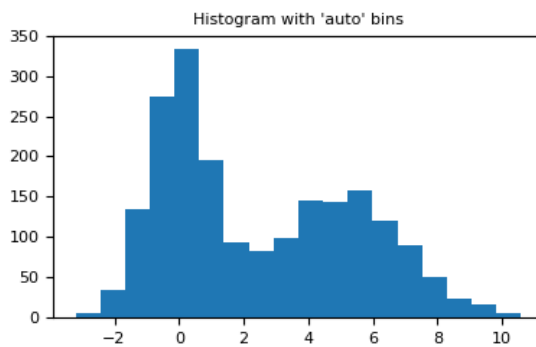
Mode:

Skew:

Outliers:

Variability:

7.



Mode:

Skew:

Outliers:

Variability:

Use the following Two-Way frequency table to answer questions #8 – 13.

You are in charge of finding a theme for homecoming. You gave a poll with these themes and this is the resulting data.

	Candyland	Starry Night	Moana	Totals
9 th grade	23	18	12	53
10 th grade	30	9	16	55
11 th grade	12	20	22	54
12 th grade	8	35	21	64
Totals	73	82	71	226

8. Calculate the relative frequencies for the table.

	Candyland	Starry Night	Moana	Totals
9 th grade				
10 th grade				
11 th grade				
12 th grade				
Totals				

9. Calculate the conditional frequencies of rows.

	Candyland	Starry Night	Moana	Totals
9 th grade				
10 th grade				
11 th grade				
12 th grade				
Totals				

10. Calculate the conditional frequencies of columns.

	Candyland	Starry Night	Moana	Totals
9 th grade				
10 th grade				
11 th grade				
12 th grade				
Totals				

	Candyland	Starry Night	Moana	Totals
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Totals	73	82	71	226

11. Highlight the marginal frequencies on the above table.
12. What are two immediate observations you can make from the original two way frequency table?
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13. Using the different relative or conditional frequencies you calculated, what homecoming theme did you choose? Back up your choice with frequency data you calculated.
14. Why are the different ways to calculate the data helpful? What is the biggest difference that you noticed?
15. Give two conditional statements from the conditional frequency tables. Label which is from the row and which comes from the column tables.