

Review for 3B Quiz

The stem and leaf plot at the right shows the amount of candy the students in Mrs. Hipp's math class ate the week after Halloween. Using the stem and leaf display, answer questions 1 through 4.

Stem	Leaf
1	0 3 6
2	1 6 7 8
3	5 5 6
4	1 1 5 6 9
5	0 3 6 8

1. What is the most common ~~age~~ group for candy eaten.

The 40's

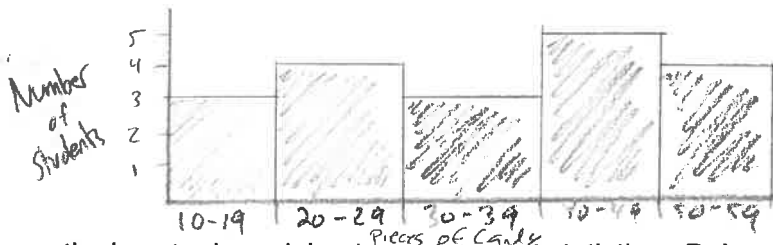
2. What is the median amount of candy eaten?

36

3. What percent of the students ate between 20 and 40 pieces?

$$\frac{7}{19} \approx 37\%$$

4. Make a histogram to represent the data.



Mrs. Hipp's math class took a mini quiz on data and statistics. Below are the scores for the quiz and the retake. There were 9 questions.

Quiz	
4	3
7	8
2	4
7	4

Retake	
5	5
7	9
8	9
7	6

2 3 4 4 4 7 7 8

5 5 6 7 7 8 9 9

5. Find the lower extreme, first quartile, median, third quartile, and upper extreme for the quiz and the retake.

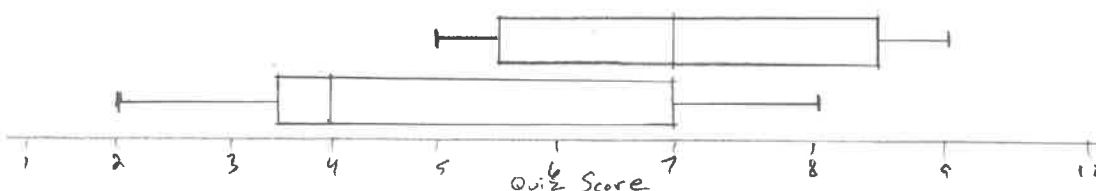
Quiz
 Mini: 2
 Q1: 3.5
 Med: 4
 Q3: 7
 Max: 8

Retake
 Mini: 5
 Q1: 5.5
 Med: 7
 Q3: 8.5
 Max: 9

6. Make a paired box-and-whisker plot comparing the quizzes.

Retake

Quiz



7. What information from #6 can be used to show students improved on the retake?

Ex: The minimum retake score is higher than the median quiz score.

Ex: The median retake score is the same as the Q3 quiz score.

In a survey, 100 people were asked, "Do you use snapchat?" The table breaks down the responses by age group: less than 30 years old, between 30 and 50 years old, and over 50 years old. Use the table to answer number 8 and 9.

8. Find the indicated percent.

a. the percent of people surveyed who are ~~under~~ 50 years old or younger

$$\frac{80}{100} = 80\%$$

	Yes	No	
< 30	30	20	50
30-50	15	15	30
> 50	5	15	20
	50	50	100

b. of those between 30 and 50 years old, the percent of people surveyed who have never used snapchat

$$\frac{15}{30} = 50\%$$

9. Is there an association between age and using snapchat? How do you know?

< 30 + Yes	$\frac{30}{50} = 60\%$
30-50 + Yes	$\frac{15}{30} = 50\%$
> 50 + Yes	$\frac{5}{20} = 25\%$

Yes, as age increases, the percentage of people using Snapchat decreases. 60% of people less than 30, 50% of people between 30 and 50, and 25% of people over 50 use snapchat.

10. Give an example of when there would be a negative correlation coefficient.

The time spent training for a 100 yard dash and the time it takes to run the 100 yard dash.