

Lesson #4 · Topic 1C · Practice

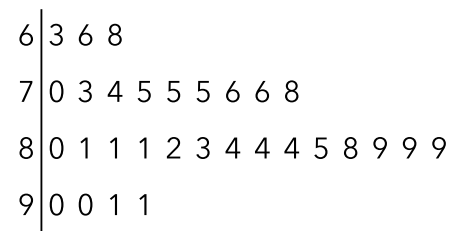
Name _____

1. Identify if the variable described is categorical or quantitative. If it is quantitative, also identify if it is discrete or continuous.
 - a. Patient body temperature recorded in an emergency room
 - b. Population of a randomly selected city
 - c. The brand of each car in the student parking lot

2. Owen is a former AP Statistics student who recorded his scores on each unit test throughout the course. His test scores are listed.
79, 84, 81, 88, 78, 82, 84, 97, 86, 80, 79
 - a. Make a dotplot to display the distribution of Owen's test scores.
 - b. Calculate the mean and median of the data.
 - c. Which measure of center is most appropriate to describe the data? Why?

3. The stem and leaf plot shows the daily high temperature (in °F) for Grand Rapids, Michigan for each day in June of a recent year.

a. Find the median of the distribution.



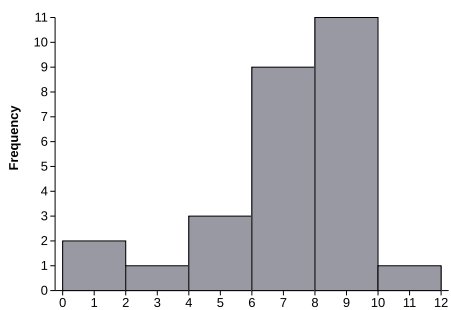
c. Describe the shape of the distribution.

High Temperature (°F)

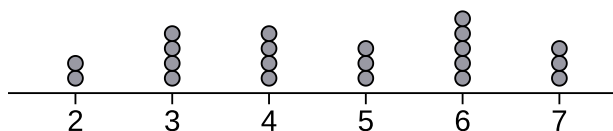
Key: 9 | 1 = 91

4. Describe the shape of each of the distributions.

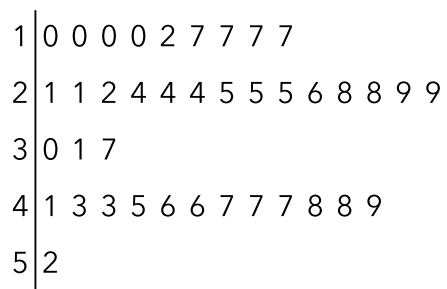
a.



b.



c.



Key: 5 | 2 = 52

5. Luke's bowling score average after bowling three games is 146 points. What score does he need to get on the fourth game to raise his score average by 5 points?

6. All the students in a statistics class were asked to bring their backpacks to class before unpacking them. The teacher brought in a scale and each student weighed their backpack. The results are in the table. Each weight is rounded to the nearest pound.

Weight (pounds)	Frequency
4	2
5	4
6	5
7	4
8	5
9	1
10	1

- a. Create a histogram displaying the students' backpack weights.
- b. Calculate the mean and median of the students' backpack weights.
- c. Describe the distribution.
7. Sylvia is wondering how many AP classes the seniors at her high school have taken. She surveys 100 seniors and records the number of AP classes they have taken. Which of following displays would not be a good way to display her results?
- A) Dotplot
- B) Histogram
- C) Bar chart
- D) None of these graphs would be a good way to display the number of classes.

8. Megan is a zoologist and is responsible for monitoring the weights of the penguins at the zoo. Megan weighs each of the Macaroni and King penguins at the zoo. The results are shown in the table. What is the median weight for the combined group of 27 measurements?

	n	Mean	Median
Macaroni	17	11.2	10.5
King	10	31.9	33

- A) $\frac{17(10.5) + 10(33)}{27}$
- B) $\frac{10.5 + 33}{2}$
- C) $\frac{17(11.2) + 10(31.9)}{27}$
- D) It cannot be determined from the information given.