

DOT PLOTS

DOT PLOT

- A dot plot is a _____ display of data using a number line and dots to represent each data point. The data that repeats itself most often is the mode. In a dot plot, the mode is the _____ value.

A survey in the 6th grade class asked students to record the number of devices they had in their home. The information is recorded in the table below.

# OF DEVICES	0	1	2	3	4	5	6	7	8	9
FREQUENCY	1	2	4	5	7	5	4	2	2	1

1. Use the data in the table to make a dot plot. Then answer the questions that follow.

- a. What do you notice about the shape of the dot plot? List any other observations in the space below.



b. Where would you say that most of the data lies on the dot plot? What is the median of the data?

SPREAD

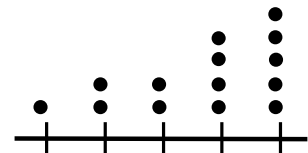
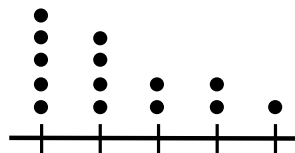
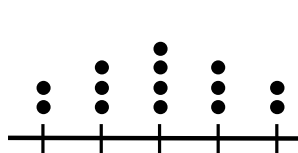
- The variability in the data points describes how far apart the data is from one another. This can also be represented by the _____.

CENTER

- The median and the mean both represent the center of the data.
 - When the data is skewed, then the _____ is the best representation of the data.
 - When the data is symmetric, then the _____ is the best representation of the data.

SHAPE

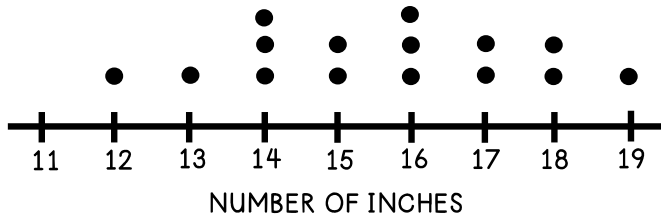
- Data can take on three different shapes:



Use your understanding of dot plots and statistical data to answer the questions below.

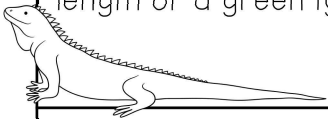
2. The ecological society sampled the green iguana population and made note of the length of each iguana sampled. The data is displayed in the dot plot below.

LENGTH OF A GREEN IGUANA



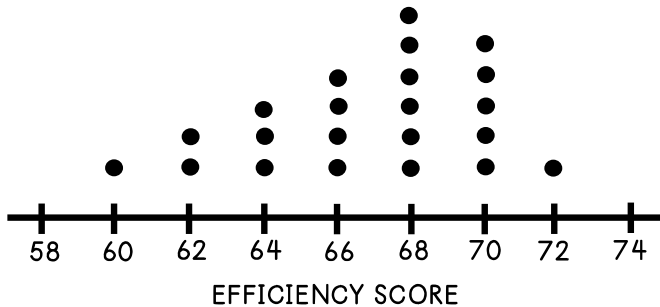
- What is the mean? _____
- What is the range? _____
- What is the median? _____
- What is the interquartile range? _____

e. Based on the shape of the data, which measure of center is the best representation of the length of a green iguana?



3. A local neighborhood is seeking to become certified in energy efficiency. The efficiency scores of each home are displayed in the dot plot below.

ENERGY EFFICIENCY RATING



- The peak score is _____.
- The shape of the data distribution is _____.
- The range of scores is _____.

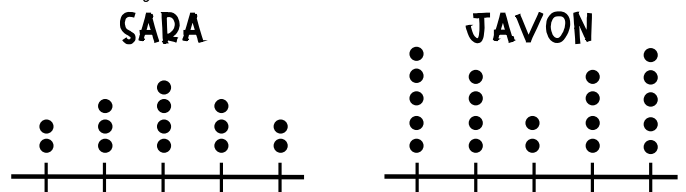
d. Label each of the following statements as true or false.

- _____ A total of 20 homes were rated.
- _____ Exactly half of the ratings were greater than 66.
- _____ The most common home rating was 66.



4. Mr. Tips asked his students to sketch a dot plot that was symmetrical and had data that was close together. Which student(s) completed the task correctly?

- Sara only
- Javon only
- Both Sara and Javon
- Neither Sara nor Javon



Summarize today's lesson:

DOT PLOTS

Four students were given dot plots to create. Sketch the dot plots in questions 1-4. Then use the clues in A-D to determine each student's data set.

A Sara's data set has a range of 5.

B Julius's data set is skewed right.

C Elisa's data set has a median of 10.5.

D Inez's data set is symmetrical.

1. The number of minutes a customer waits in line at the grocery curbside pickup:

6, 9, 12, 7, 6, 10, 8, 8, 6, 6, 7, 6



Name: _____

2. The number of miles Mrs. Estrada walks in a week:

1, 2, 0, 5, 3, 3, 3



Name: _____

3. The number of elementary schools in ten regional cities:

5, 8, 10, 22, 16, 16, 3, 11, 19, 5



Name: _____

4. The number of minutes spent on homework over a period of time:

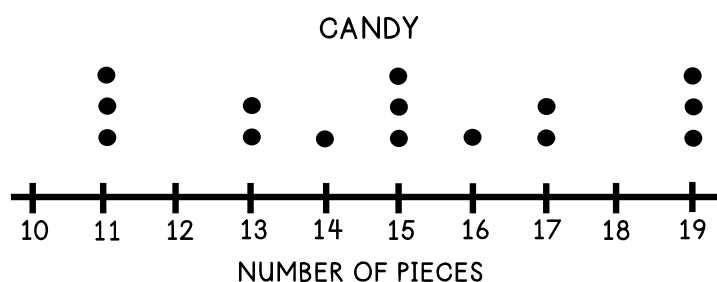
65, 80, 90, 65, 70, 75, 100, 90, 65, 70, 85, 85, 90



Name: _____

Use your knowledge of dot plots to answer question 5.

5. A large bag of individual candy packs is opened. The amount of candy in each pack is counted and marked on the dot plot below. Which of the statements is not represented by the data?



- A. Each bag of has 11-19 pieces of candy.
- B. There is a total of 15 pieces of data.
- C. The data is skewed right.
- D. More than half of the bags had less than 16 pieces of candy.