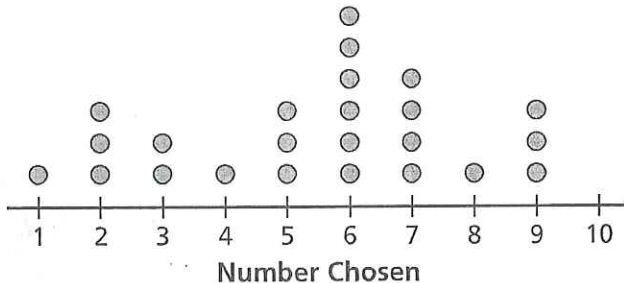


Additional Practice

Investigation 1

Data About Us

1. Ms. Snow's students wrote down a whole number between 1 and 10 on a slip of paper. She collected the numbers and displayed the data in the dot plot below.



- a. What is the typical number chosen by students in this class?

6 or 7 showed up the most

- b. Two students were absent on the day Ms. Snow collected the data. How many students are enrolled in the class? Explain your reasoning.

$$24 + 2 = 26 \text{ students}$$

2. Mr. Watkins arranged the quiz scores of his afternoon math class from least to greatest: 5, 5, 6, 6, 6, 7, 7, 7, 7, 7, 8, 8, 8, 8, 8, 8, 9, 9, 9, 10, 10

- a. How many students are in Mr. Watkins's afternoon math class?

21 students

- b. How do the quiz scores vary? → how different is your data

minimum: 5 Range: $10 - 5 = 5$

maximum: 10

- c. What is the mode of the scores?

most

mode: 8

- d. What is the median of the scores?

21 pieces of data

21 rounds up to 22

$22 \div 2 = 11$ → the 11th number is our median

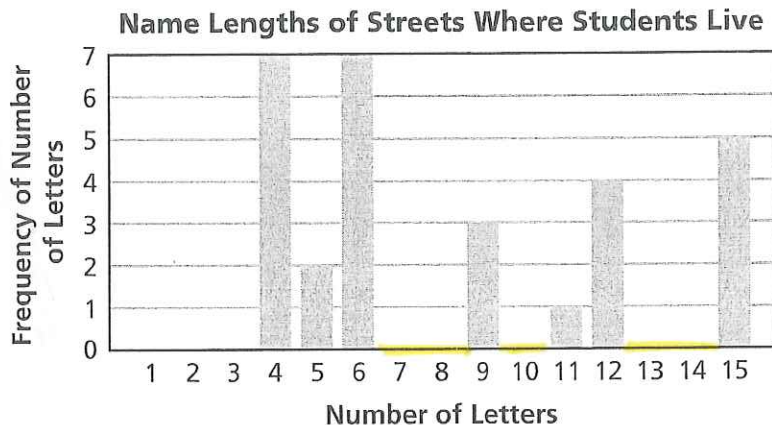
median: 8

Additional Practice *(continued)*

Investigation 1

Data About Us

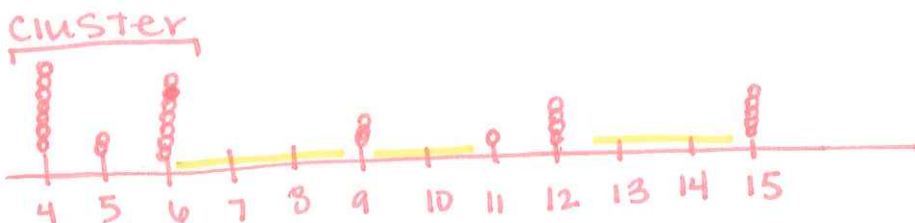
3. The students in Mr. Furgione's math class counted the letters in the names of the streets where they lived. Then they made the bar graph below.



- a. Use the bar graph to make a table showing each name length and the number of students who live on streets with names of that length. Then make a dot plot showing these name lengths.

29 students if no one was gone

| Number of Letters | Frequency |
|-------------------|-----------|
| 4 | 7 |
| 5 | 2 |
| 6 | 7 |
| 7 | 0 |
| 8 | 0 |
| 9 | 3 |
| 10 | 0 |
| 11 | 1 |
| 12 | 4 |
| 13 | 0 |
| 14 | 0 |
| 15 | 5 |



- b. Nobody was absent when the data were collected. How many students are in Mr. Furgione's class? Explain your reasoning.

29 student because we counted

29, and no one was missing

- c. What is the typical street-name length for this class? Use the mode, median, and range to help you answer this question.

mode: 4 and 6

median: 29 → 30 $30 \div 2 = 15 \rightarrow 15^{\text{th}}$ dot

6

Range: $15 - 4 = 11$

Additional Practice (continued)

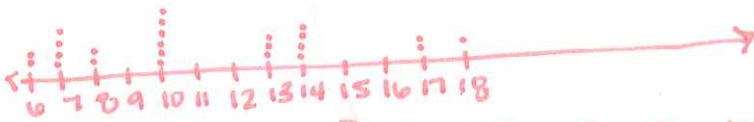
Investigation 1

Data About Us

For Exercises 4-7, make a frequency table and either a dot plot or a bar graph of a set of name-length data that fits the description.

4. 24 names that vary from 6 letters to 18 letters

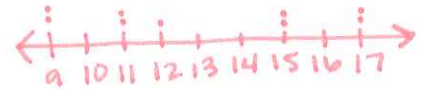
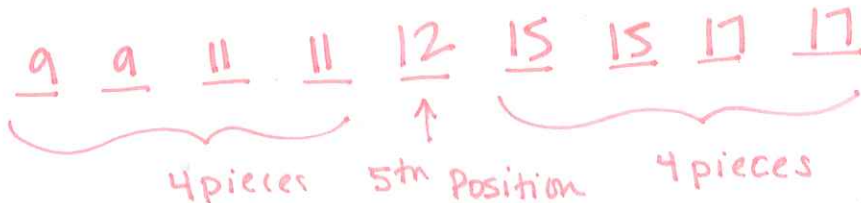
- 24 pieces of data
- minimum: 6
- maximum: 18



| | | | | | | | | | | | | | |
|-------------------|---|---|---|---|----|----|----|----|----|----|----|----|----|
| Number of letters | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 |
| Frequency | 2 | 4 | 2 | 0 | 6 | 0 | 0 | 3 | 4 | 0 | 0 | 2 | 1 |

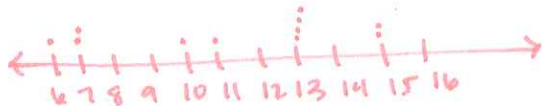
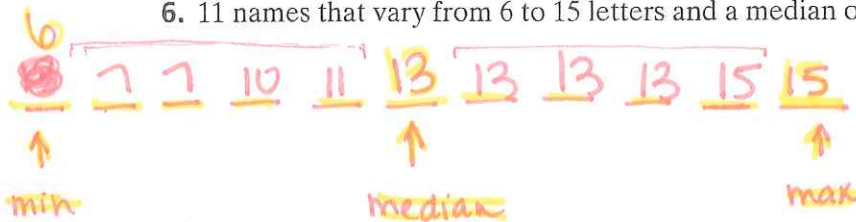
5. 9 names with a median of 12 letters

- 9 pieces of data
- median: 12



6. 11 names that vary from 6 to 15 letters and a median of 13 letters

- 11 pieces of data
- median is 13
- minimum is 6
- maximum is 15



7. 14 names with a median of 12 letters and a range of 7 letters to 17 letters

- 14 pieces
- median: 12
- min: 7
- max: 17

