LESSON 7-2 Reading Strategies

Understanding Vocabulary

There are different ways to look at data. The **mean,** the **median,** the **mode,** and the **range** help us understand the information we gather.

The mean, or **average,** is the sum of the values divided by the total number of values. Example: Ages in years → 18 11 6 12 18

The average age is (18 + 11 + 6 + 12 + 18) ÷ 5 = 13 years

The **median** is the middle value in a set of data, when the values are listed in order. The median is 12.

6 11 **12** 18 18

The **mode** is the most frequent value in a set of data. The mode is 18.

6 11 12 **18** **18**

The **range** indicates the spread of the data. It is the difference between the least and greatest values in a set of data.

18 − 6 = **12**. The range is 12.

These are Jack's test scores for 5 math tests: 83, 79, 92, 95, 83. Use this data to help Jack look at his scores. Write "mean," "median," "mode" or "range" to answer the following questions.

1. 83 occurs more than any of the other values. Which measure is 83?

   mode

2. Jack added his test scores and divided by 5 to find which measure?

   mean

3. Jack found that the difference between his highest and lowest score was 16 points. What is this measure called?

   range

4. Jack found that the middle value is 83. What is that value called?

   median

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LESSON 7-2 Puzzles, Twisters & Teasers

Stuck in the Middle!

Ever wonder what number in a data set sticks out like a sore thumb? To find out, use the data sets below to answer each question. Fill in the letter corresponding to each question above the question's answer in the decoder below.

1, 4, 2, 9, 5, 3

T: What is the range? 8

L: What is the mean? 4

I: What is the median? 3.5

6, 7, 4, 8, 12, 2, 1, 2

U: What is the range? 11

R: What is the mean? 5.25

O: What is the median? 5

E: What is the mode? 2

What number in some data sets sticks out like a sore thumb?

O	U	T	L	I	E	R
5	11	8	4	3.5	2	5.25

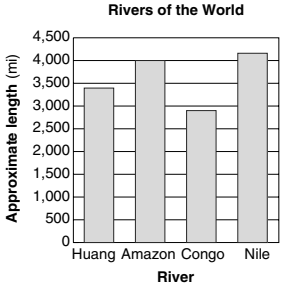


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LESSON 7-3 Practice A

Bar Graphs and Histograms

The bar graph shows the lengths of four rivers. Use the graph for Exercises 1–3.



1. Which river is the longest?

   Nile River

2. About how much longer is the Amazon River than the Congo River?

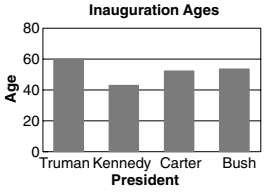
   about 1,100 mi

3. About how much longer is the Nile River than the Huang River?

   about 700 mi

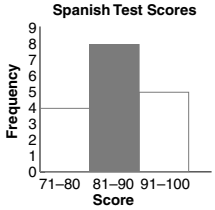
4. The table shows the ages of four U.S. Presidents when they first entered office. Make a bar graph of the data.

Name	President's Age
Truman	60
Kennedy	43
Carter	52
Bush	54



5. The table below shows the scores on a Spanish test. Make a histogram of the data.

Scores	Frequency
71–80	4
81–90	8
91–100	5

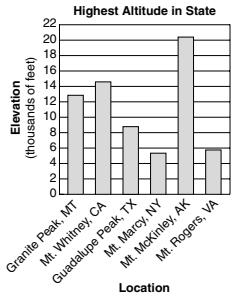


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LESSON 7-3 Practice B

Bar Graphs and Histograms

The bar graph shows the elevations of the highest points in several states. Use the graph for Exercises 1–3.



1. Which state has the highest elevation?

   Alaska

2. About how much higher is Granite Peak than Guadalupe Peak?

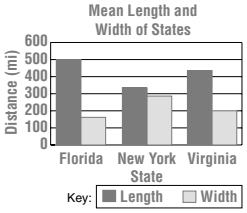
   about 4,000 ft

3. About how much higher is Mount Whitney than Mount Marcy?

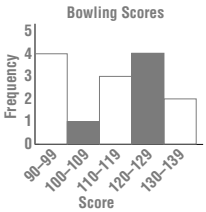
   about 9,000 ft

4. The table shows the approximate mean length and width of three states. Make a double-bar graph of the data.

State	Length (mi)	Width (mi)
Florida	500	160
New York	330	283
Virginia	430	200



5. The list shows the bowling scores of the first game played by a group of bowlers on Thursday night. Make a histogram of the data.
   96, 110, 132, 128, 105, 94, 116, 95, 126, 114, 123, 136, 121, 99



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