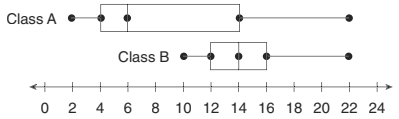
LESSON 7-5 Problem Solving
Box-and-Whisker Plots

Write the correct answer.

A fitness center offers two different yoga classes. The attendance for each class for 12 sessions is represented in the box-and-whisker plot.



1. Which class has a greater median attendance? How much greater is it?

   Class B; 8

2. Which class appears to have a more predictable attendance?

   Class B

3. Which class has an attendance of less than 14 people 75% of the time?

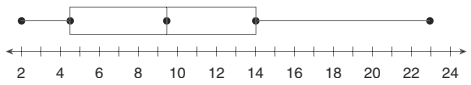
   Class A

4. What percent of the time does Class B have an attendance greater than 16?

   25% of the time

Choose the letter for the best answer.

The box-and-whisker plot shows the percent of people in eight Central American countries who used the Internet in 2005.



5. What is the range in the percents of people who used the Internet in the eight countries?

   A 23% **C** 14%
   B 21% **D** 9.5%

6. In how many of these eight countries did at least 9.5% of the people use the Internet?

   F less than 2 **H** at least 4
   G less than 4 **J** cannot be determined

7. What is the mode of the data?

   A 2% **C** 9.5%
   B 4.5 **D** cannot be determined

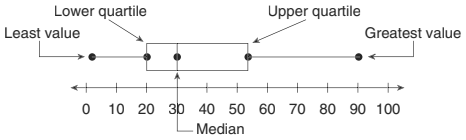
8. What is the interquartile range of the data?

   F 23% **H** 14%
   G 21% **J** 9.5%

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LESSON 7-5 Reading Strategies
Use Graphic Aids

A **box-and-whisker plot** shows a set of data divided into four equal parts called **quartiles.**



- The median score divides the set of data in half. The median score for this plot is 30.
- The box shows the middle half of the data, located on either side of the median. The box extends from 20 to 53.
- The two whiskers identify the remaining half of the data. One whisker extends from the box to the greatest value: from 53 to 90.The other whisker extends from the box to the least value: from 2 to 20.

Answer each question.

1. What does the box stand for in a box-and-whisker plot?

   the middle half of the data

2. How are the whiskers determined?

   The whiskers extend from both ends of the box to the least and greatest values.

3. Why is it important to find the median score?

   It divides the set of data in half.

Describe where these scores are located in the box-and-whisker plot above.

4. 18 between the least value and the lower quartile.
5. 75 between the upper quartile and the greatest value.
6. 45 between the median and the upper quartile.

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LESSON 7-5 Puzzles, Twisters & Teasers
The Plot Thickens!

Circle words from the word list in the word search below.

box whisker plot first third upper
quartile extreme data median range fraction

E	B	O	X	Z	D	W	P	Y	J	I	O	R	C
X	F	D	Q	O	W	E	R	F	C	O	D	A	T
P	R	R	U	E	H	H	T	I	P	J	A	D	A
L	A	D	A	W	T	H	I	R	D	U	T	B	M
O	C	A	R	C	S	B	I	S	R	P	A	I	E
T	T	O	T	A	T	A	L	T	K	P	G	H	D
U	I	K	I	O	N	M	T	N	F	E	A	Z	I
P	O	M	L	D	E	G	R	D	G	R	R	W	A
L	N	B	E	X	T	R	E	M	E	E	S	V	N

Now think about the alphabet and the letters you see above.

What two letters of the alphabet hold nothing when you say them together?

M T



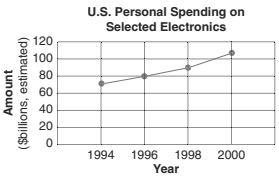
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LESSON 7-6 Practice A
Line Graphs

Use the table to answer the questions.

U.S. Personal Spending on Selected Electronics	
Year	Amount Spent ($billions, estimated)
1994	$71
1996	$80
1998	$90
2000	$107

1. Use the data in the table to make a line graph.



2. When did the amount spent on electronics increase the most?

   from 1998 to 2000

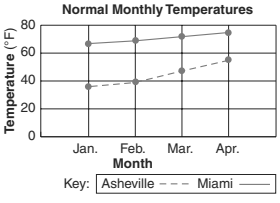
3. About how much was spent on electronics in 1999?

   Possible answer: about $100 billion

The table below shows normal monthly temperatures in Asheville, North Carolina, and Miami, Florida, for the first 4 months of the year. Use the table to answer the questions.

	Jan.	Feb.	Mar.	Apr.
Asheville	36°F	39°F	47°F	55°F
Miami	67°F	69°F	72°F	75°F

4. Make a double-line graph of the data.



5. During which month is there the greatest difference in temperatures between the two cities?

   during January

6. During which month is there the least difference in temperatures between the two cities?

   during April

7. In which city did the temperature vary the least during these 4 months?

   Miami

8. Where should you spend your April vacation if you want to go hiking wearing your new sweatshirt?

   Asheville

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