

Name: \_\_\_\_\_

You **MAY** use a calculator on this assessment.

**Selected Response:** For each of the following problems, choose the best answer and bubble in the corresponding letter on your answer sheet.

Use the back-to-back stem-and-leaf plot to answer questions #1 and #2.

Scores for the Wizards and Pistons first 9 basketball games are displayed in the back-to-back stem-and-leaf plot below.

**Scores from the First 9 Games**

Wizards		Pistons
8	6	9
7 3	7	1 4 8
9 5 2 1	8	4 8
5 4	9	2 8 8

Key:

\_\_\_\_\_

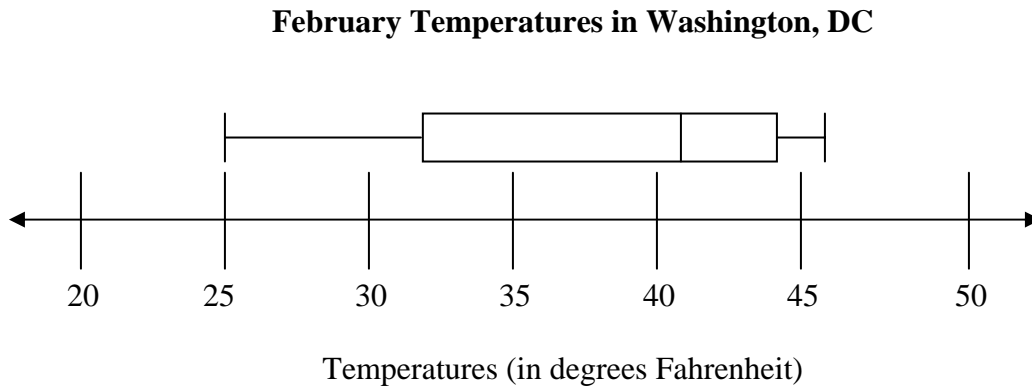
Key:

 $7|1 = 71$  points

1. Which of the following keys is most useful for understanding the left side of the plot?
  - A.  $3|7 = 73$  points
  - B.  $7|1 = 71$  points
  - C.  $7|3 = 73$  points
  - D.  $7|7 = 77$  points
  
2. Which statement is correct based on the back-to-back stem-and-leaf plot above?
  - A. The mode score for Pistons is 8.
  - B. The mode score for Wizards is 95.
  - C. The median score for Pistons is 84.
  - D. The median score for Wizards is 85.

Use the box-and-whisker plot to answer questions #3 and #4.

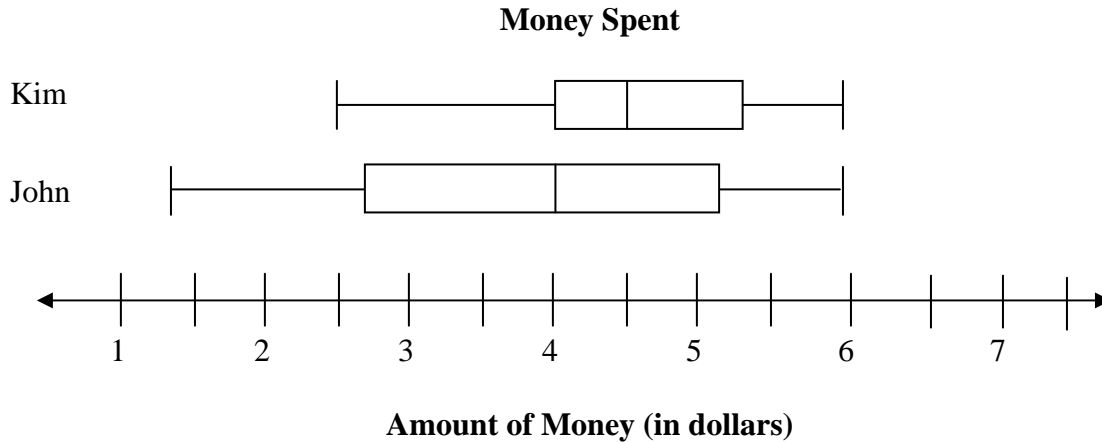
The box-and-whisker plot below represents the temperatures in Washington, DC during the month of February.



3. What is the median temperature?
- A. 25° F
  - B. 35° F
  - C. 37° F
  - D. 41° F
4. The entire box-and-whisker plot above represents the 28 days in February. How many days are represented by the box?
- A. 12
  - B. 14
  - C. 21
  - D. 28

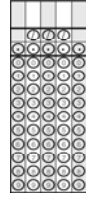
Use the box-and-whisker plots to answer questions #5 and #6.

The box-and-whisker plots below represent the amount of money that Kim and John spent on lunch 20 school days in September.



5. Which person's data has more variability?
- A. Kim
  - B. John
  - C. The variability is the same
  - D. There is not enough information to determine
6. Which statement is correct?
- A. John spent money for lunch on more days than Kim.
  - B. Both John and Kim spent a median amount of four dollars.
  - C. John and Kim spent the same amount of money.
  - D. Kim spent more money than John.

**Student Produced Response:** Grid and bubble the answers to problems #7 and #8 on your answer sheet.



Use the table below to answer questions #7 and #8. The table shows the number of tickets sold by two teams each day for ten days.

**Tickets Sold**

	Mon	Tue	Wed	Thu	Fri	Mon	Tue	Wed	Thu	Fri
Lions	25	26	28	30	33	37	38	40	42	75
Cougars	19	24	28	31	32	34	40	41	42	49

7. Which number in the data display would most affect a measure of central tendency?
8. How much greater is the median of the Lions' data than the Cougars' data?

9. Joe's scores in English are 50, 50, 78, 80, 81, and 83.  
Beth's mean English score is 75.

**BCR**

- a. Joe claims his average score is higher than Beth's. Which measure of central tendency (mean, median, mode) did Joe use to support his claim?
- b. Use what you know about the measures of central tendency to justify your answer. Use words, symbols, and/or numbers in your explanation.

10. Ms. Jones surveyed teachers to determine the number of students in each math class at Rocky Stone Middle School. The results of the survey are below.

ECR

18    19    20    21    22    25    27    28    29    31    32

- a. Using the data above, determine the following:

Lower Extreme: \_\_\_\_\_

Lower Quartile: \_\_\_\_\_

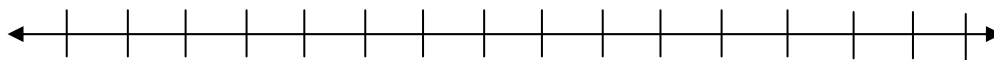
Median: \_\_\_\_\_

Upper Quartile: \_\_\_\_\_

Upper Extreme: \_\_\_\_\_

- b. Construct a box-and-whisker plot to display the data from the survey.

**Rocky Stone Middle School Math Classes**



**Number of Students**

- c. Explain how the median would change if a class with 35 students is added to the list of data.