

Data Analysis Homework

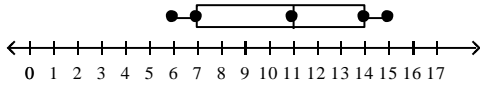
Multiple Choice

Identify the choice that best completes the statement or answers the question.

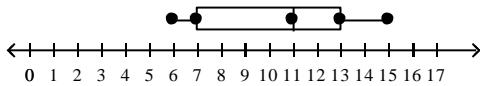
- ___ 1. The number of calls responded to by a paramedic team over an 8-day period are given. Use the data to make a box-and-whisker plot.

12, 6, 8, 15, 14, 6, 14, 10

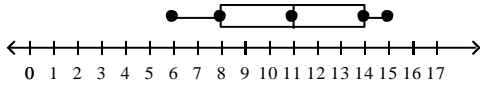
a.



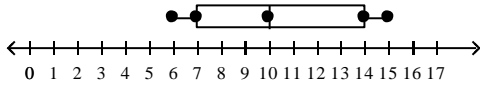
b.



c.



d.



- ___ 2. Use this data set.

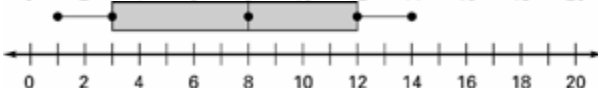
10, 1, 3, 14, 8, 12, 5

Which is the correct box-and-whisker plot for the data set?

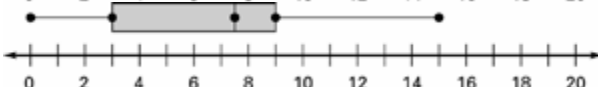
a.



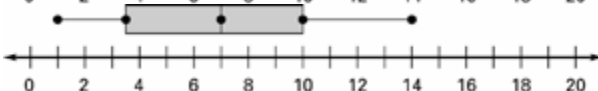
b.



c.



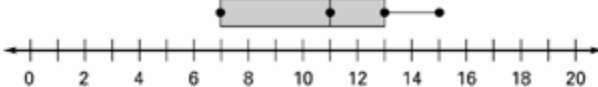
d.



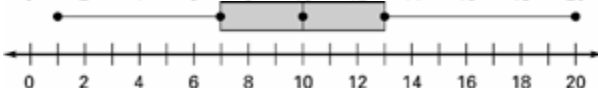
- ___ 3. Which is the correct box-and-whisker plot for the data set?

7, 13, 9, 15, 11, 7, 11

a.

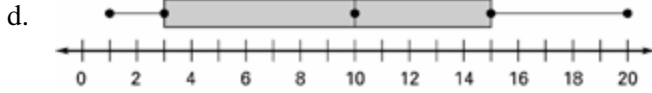


b.

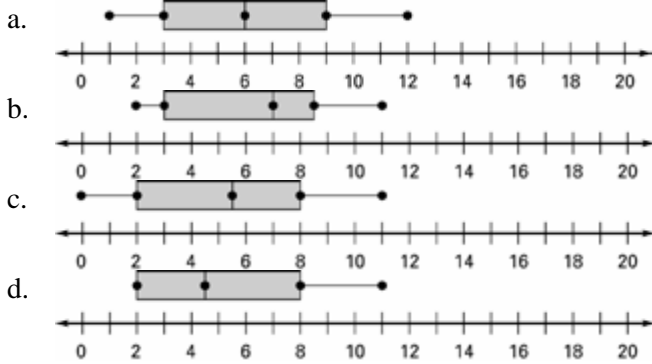


c.

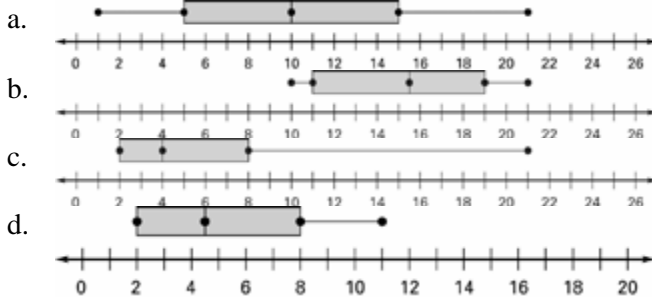




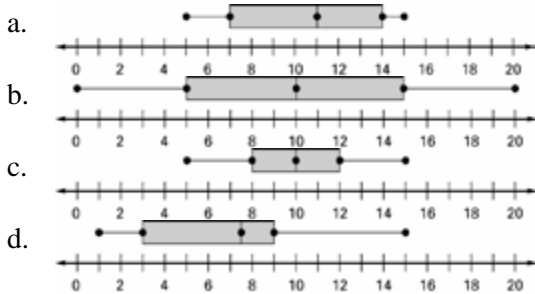
4. Which is the correct box-and-whisker plot for the data set?
3, 2, 11, 8, 9, 8, 7, 3, 5



5. Which is the correct box-and-whisker plot for the data set?
21, 15, 10, 16, 11, 19

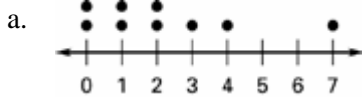


6. Which is the correct box-and-whisker plot for the data set 15, 8, 11, 5, 12, 14, 7?



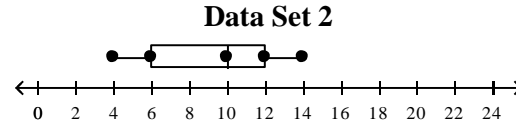
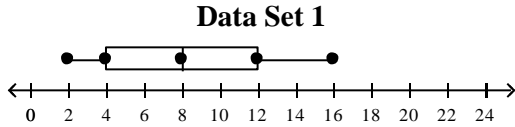
7. Kendra asked her friends how many pets they each had in their family. Her results are shown below.
4, 2, 1, 1, 0, 2, 7, 3, 1, 0, 0

Which is a line plot of the data?





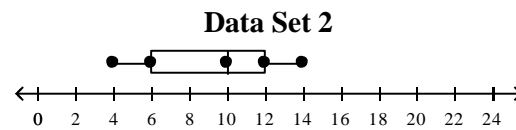
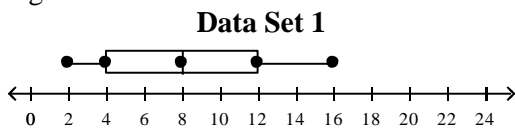
8. The box-and-whisker plots show the distribution of two data sets. Which data set has a greater median?



a. Data Set 1

b. Data Set 2

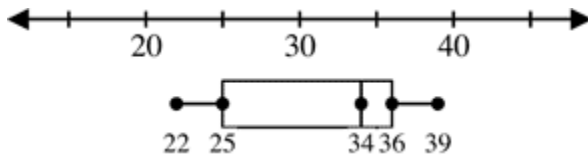
9. The box-and-whisker plots show the distribution of two data sets. Which data set has a greater interquartile range?



a. Data Set 2

b. Data Set 1

10. The box-and-whisker plot shows the ages of clerks in a supermarket.



Find the median age of the clerks.

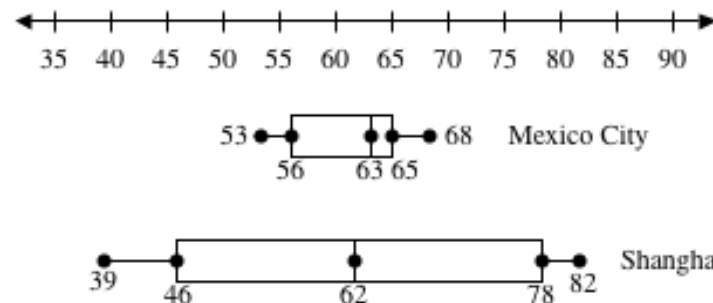
a. 34

b. 31

c. 22

d. 36

11. The box-and-whisker plots below show the mean monthly temperatures ($^{\circ}\text{F}$) for Mexico City, Mexico, and Shanghai, China.



What percent of the temperatures for Shanghai fall between 46°F and 78°F ?

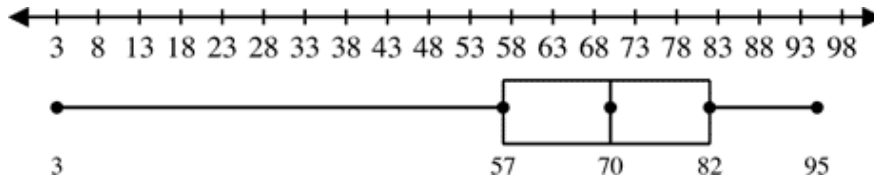
a. 50%

b. 25%

c. 100%

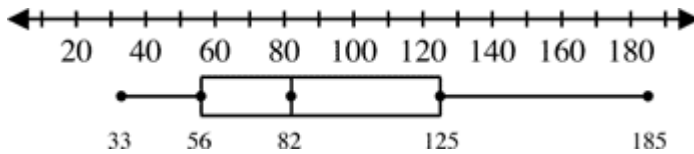
d. 75%

12. Ms. Alison drew a box-and-whisker plot to represent her students' scores on a mid-term test.



Julie earned a 70 on the test. Describe how her score compares with those of her classmates.

- about 75% scored higher; about 50% scored lower
- about 25% scored higher; about 75% scored lower
- about 50% scored higher; about 50% scored lower
- about 75% scored higher; about 25% scored lower



13.

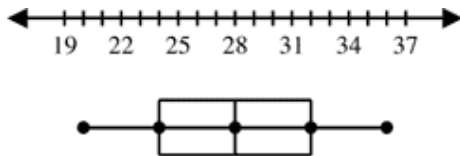
What can you conclude from the box-and-whisker plot?

- The mode of the data is 82.
- The mean of the data is 82.
- The median of the data is 82.
- none of these

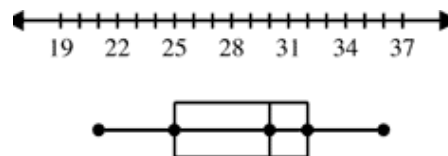
14. Only one of the box-and-whisker plots correctly displays data about the ages of team members on a company baseball team. The statements below are all true about the team. Use the statements to correctly choose the box-and-whisker plot.

- The youngest member is 20 years old.
- About 75% of the members are between 24 and 36 years old.
- No one is older than 36 years old.
- About 50% of the members are at least 28 years old.

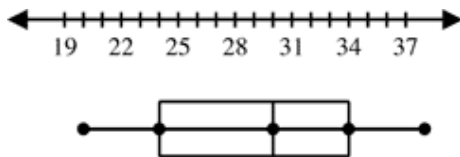
a.



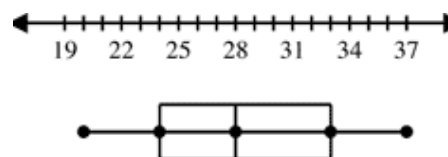
c.



b.



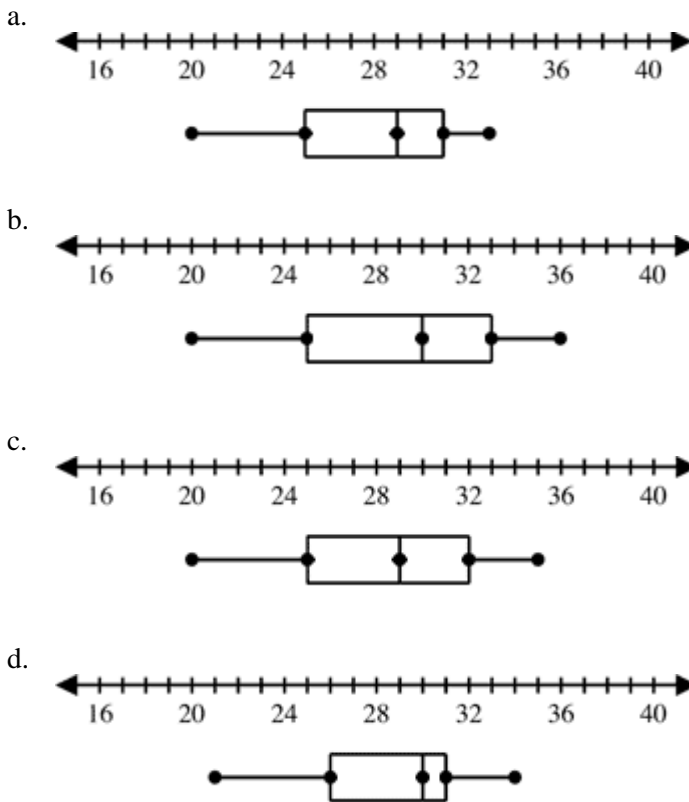
d.



15. A dog trainer offers classes that group dogs by size. Only one of the box-and-whisker plots correctly displays data about the weights of the dogs in her small-dog class. The statements below are all true about the dogs in this class. Use the statements to correctly choose the box-and-whisker plot representing the weights of the dogs in this class.

- The lightest dog weighs 20 pounds.

- About 50% of the dogs weigh at least 29 pounds.
- About 25% of the dogs weigh between 25 and 29 pounds.
- The range of the dog weights is about 15 pounds.



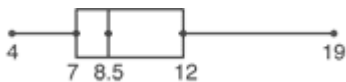
Short Answer

16. Use the box-and-whisker plot. There are 20 numbers in the collection and each number is different.



Name the first, second, and third quartiles.

17. Use the box-and-whisker plot. There are 20 numbers in the collection and each number is different.



Name the smallest and largest numbers.

18. Use the box-and-whisker plot. There are 20 numbers in the collection and each number is different.



What percent of the numbers are between 7 and 8.5?

19. Ms. Brodie drew these box-and-whisker plots to represent her students' scores on the mid-year test and the final exam. What do the plots tell you about the test scores of Ms. Brodie's class?