

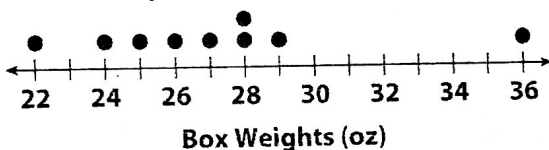
MODULE
10

Random Samples and Populations

Module Quiz: B

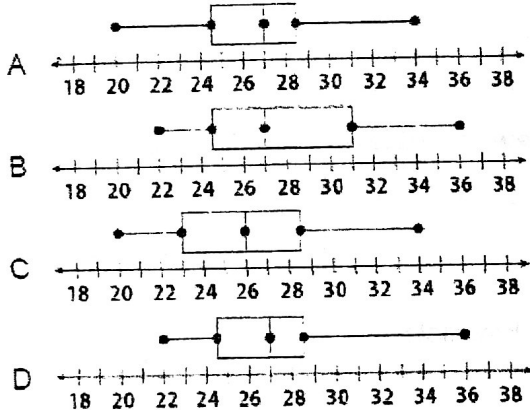
- Which of these statements best describes a biased sample?
 - It is very small.
 - It is not randomly chosen.
 - It results in incorrect predictions.
 - It does not accurately represent the population.
- In a survey about new bike paths, which group is least likely to be a biased sample?
 - randomly chosen voters
 - randomly chosen drivers
 - randomly chosen dog-walkers
 - randomly chosen gym members

Use the dot plot for 3–5.



A shipping manager weighed a random sample from a shipment of 90 boxes and made the dot plot above.

- Which range of weights has the greatest number of boxes?
 - 22–25
 - 25–29
 - 28–30
 - 30–36
- Which box plot shows the same data as the dot plot?



- Use the data to estimate the weight of all 90 boxes.
 - 2,000 oz
 - 2,500 oz
 - 3,000 oz
 - 3,500 oz
- A town has 35,000 registered voters. A random sample of 500 voters finds that 125 are in favor of a new dog park. How many are likely to vote for the dog park?
 - 25
 - 125
 - 2,625
 - 8,750
- Which could be the shape of a cross section of a cone?
 - triangle
 - rectangle
 - pentagon
 - square

Use the information below for 8–9.

A baker produces 500 loaves a day. On Monday, 50 loaves did not meet quality standards. The baker generates a random sample to simulate 10 loaves to inspect on Tuesday. The integers 1 to 50 represent sub-standard loaves.

351	207	148	428	272
121	47	205	56	4

- Based on this sample, how many loaves will not meet quality standards on Tuesday?
 - 2
 - 20
 - 100
 - 150
- What is the difference between the number of sub-standard loaves produced on Monday and the number predicted to be sub-standard on Tuesday?
 - 10
 - 50
 - 100
 - 200
- A circle has a diameter of 50 meters. What is its circumference?
 - 50 m
 - 157 m
 - 314 m
 - 625 m

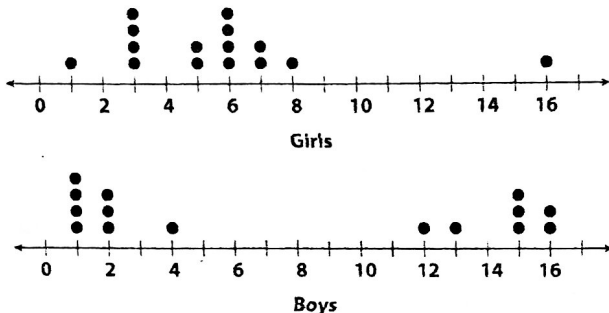
Name _____ Date _____ Class _____

MODULE 11

Analyzing and Comparing Data

Module Quiz: B

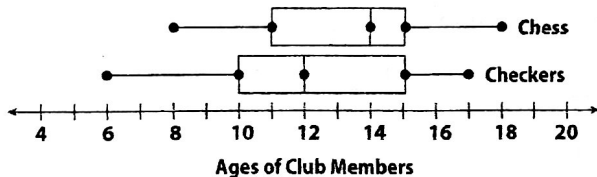
Use the dot plots for 1 and 2.



The dot plots compare the number of raffle tickets sold by boys and girls during a school fundraiser.

- Which plot has an outlier?
 - A Girls
 - B Boys
 - C both plots
 - D neither plot
- What is the difference between the medians for the two data sets?
 - A 0 tickets
 - B 2 tickets
 - C 4 tickets
 - D 6 tickets

Use the box plots for 3 and 4.



- What is the interquartile range for the Checkers Club?
 - A 4
 - B 5
 - C 10
 - D 11
- Which data set shows a greater spread?
 - A Chess Club
 - B Checkers Club
 - C They have the same spread.
 - D You cannot tell from the box plots.

- Kiana is making a recipe. She pours $3\frac{1}{3}$ cups of flour into a bowl. Then she adds $1\frac{1}{4}$ cups of nuts. What is the total amount of ingredients in the bowl?
 - A $2\frac{1}{6}$ cups
 - B $2\frac{3}{4}$ cups
 - C $4\frac{7}{12}$ cups
 - D $5\frac{1}{12}$ cups

Use the information below for 6 and 7.

Statistical measures are shown below for the number of hours per week spent doing homework by the students in two classes.

Class 1: Mean number of hours spent doing homework = 20, mean absolute deviation = 2

Class 2: Mean number of hours spent doing homework = 24, mean absolute deviation = 2

- What is the difference between the means for the two data sets?
 - A 2
 - B 4
 - C 6
 - D 8
- Which statement about the data is true?
 - A The difference of the means is equal to the mean absolute deviation.
 - B The difference of the means is 1.5 times the mean absolute deviation.
 - C The difference of the means is 2 times the mean absolute deviation.
 - D The difference of the means is 4 times the mean absolute deviation.
- What is $11\frac{4}{5}$ written as a decimal?
 - A 11.4
 - B 11.5
 - C 11.8
 - D 11.9