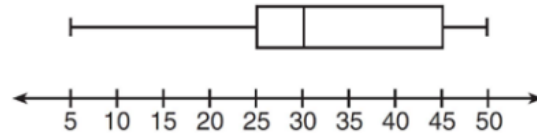


Investigating Box-Plots

Name _____ Period: _____ Date: _____

Directions: Use the information given to solve each problem.

1. A grocery store owner made the boxplot shown below to represent the hourly pay for each of his employees.

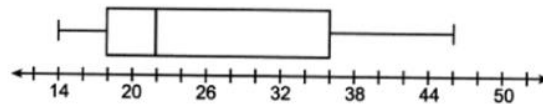


Hourly Pay (in \$)

Which can be inferred from the data. Select **all** that apply.

- A. The mean is equal to the median.
- B. The mean is probably less than \$30 per hour.
- C. The mean is probably more than \$30 per hour.
- D. If the owner hired a new employee with a salary of \$80 per hour, the mean must change.
- E. If the owner hired a new employee with a salary of \$80 per hour, the median must change.

2. A website owner monitors the age of each person that visits his homepage and made the boxplot shown below.

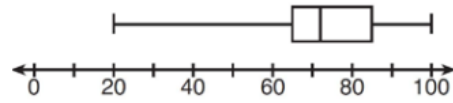


Age (in years)

Which can be inferred from the data. Select **all** that apply.

- A. The mean is greater than the median.
- B. The mean is probably less than 22 years old.
- C. The mean is probably more than 22 years old.
- D. If a 9-year-old person visits the home page, the mean must change.
- E. If a 9-year-old person visits the home page, the median must change.

3. A teacher organized the test scores for a recent test and made the boxplot shown below.

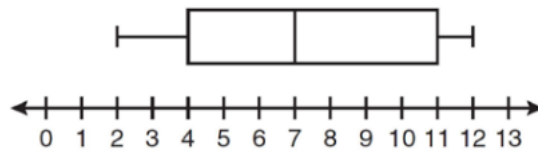


Test Scores

Which can be inferred from the data. Select **all** that apply.

- A. The mean is greater than the median.
- B. The mean score is probably less than 72.
- C. The mean score is probably more than 72.
- D. If a new student scored a 0 on the test, the mean must change.
- E. If a new student scored a 0 on the test, the median must change.

-
4. A teacher organized the test scores for a recent test and made the boxplot shown below.



Which can be inferred from the data. Select **all** that apply.

- A. The interquartile range of the data set is 10.
- B. The median of the data set is 7.
- C. The mean of the data set is about the same as the median because the boxplot is not skewed.
- D. The range of the data set is 10.
- E. About 75 percent of the data set is above 4.

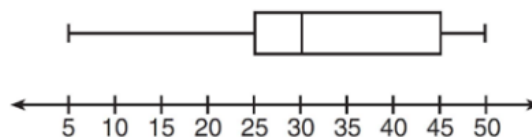
Investigating Box-Plots

Name _____ Period: _____ Date: _____

Answer Key

Directions: Use the information given to solve each problem.

1. A grocery store owner made the boxplot shown below to represent the hourly pay for each of his employees.



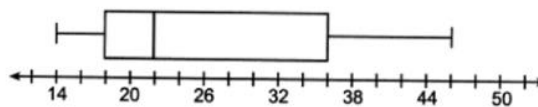
Hourly Pay (in \$)

Which can be inferred from the data. Select **all** that apply.

- A. The mean is equal to the median.
- B. The mean is probably less than \$30 per hour.
- C. The mean is probably more than \$30 per hour.
- D. If the owner hired a new employee with a salary of \$80 per hour, the mean must change.
- E. If the owner hired a new employee with a salary of \$80 per hour, the median must change.

B, D

2. A website owner monitors the age of each person that visits his homepage and made the boxplot shown below.



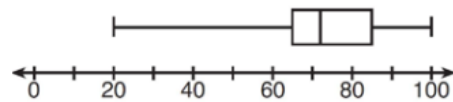
Age (in years)

Which can be inferred from the data. Select **all** that apply.

- A. The mean is greater than the median.
- B. The mean is probably less than 22 years old.
- C. The mean is probably more than 22 years old.
- D. If a 9-year-old person visits the home page, the mean must change.
- E. If a 9-year-old person visits the home page, the median must change.

A, C, D

3. A teacher organized the test scores for a recent test and made the boxplot shown below.



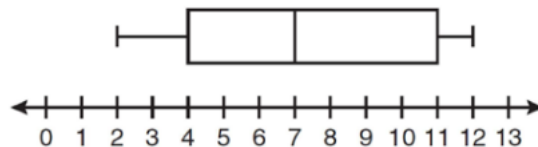
Test Scores

Which can be inferred from the data. Select **all** that apply.

- A. The mean is greater than the median.
- B. The mean score is probably less than 72.
- C. The mean score is probably more than 72.
- D. If a new student scored a 0 on the test, the mean must change.
- E. If a new student scored a 0 on the test, the median must change.

B, D

-
4. A teacher organized the test scores for a recent test and made the boxplot shown below.



Which can be inferred from the data. Select **all** that apply.

- A. The interquartile range of the data set is 10.
- B. The median of the data set is 7.
- C. The mean of the data set is about the same as the median because the boxplot is not skewed.
- D. The range of the data set is 10.
- E. About 75 percent of the data set is above 4.

B, C, D, E