## **Interpreting Box-and-Whisker Plots**

## CD's

The accompanying box-and-whisker plot represents the cost, in dollars, of twelve CD's.



**Guide Practice** 

- a) What is quartile 1?
- b) What is the upper extreme?
- c) What is quartile 2 (median)?
- d) What is the lower extreme?
- e) What is the interquartile range?
- f) What is quartile 3?
- g) How much is the least expensive CD?
- h) What is the range of the costs of the CD's?
- i) How much is the most expensive CD?
- j) How many CD's cost between \$14.50 and \$26.00?

## **Interpreting Box-and-Whisker Plots**

The accompanying box-and-whisker plot represents the scores earned on a math test.



- 1) What is the median score?
- 2) What score represents the first quartile?
- 3) What statement is *not* true about the box and whisker plot shown?
  - (a) 75 represents the mean score
- (c) 85 represents the 3rd quartile
- (b) 100 represents the maximum score (d) 55 represents the minimum score
- 4) A score of an 85 on the box-and-whisker plot shown refers to:
  - (1) the third quartile
  - (2) the median

- (3) the maximum score
- (4) the mean

5) What is the value of the third quartile shown on the box-and-whisker plot below?



6) A movie theater recorded the number of tickets sold daily for a popular movie during the month of June. The box-and-whisker plot shown below represents the data for the number of tickets sold, in hundreds.



Which conclusion can be made using this plot?

- (a) The second quartile is 600.
- (b) The mean of the attendance is 400.
- (c) The range of the attendance is 300 to 600.
- (d) Twenty-five percent of the attendance is between 300 and 400.
- 7) The accompanying box-and-whisker plots can be used to compare the annual incomes of three professions.



Based on the box-and-whisker plots, which statement is true?

- (a) The median income for nuclear engineers is greater than the income of all musicians.
- (b) The median income for police officers and musicians is the same.
- (c) All nuclear engineers earn more than all police officers.
- (d) A musician will eventually earn more than a police officer.

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8) The data set 5, 6, 7, 8, 9, 9, 9, 10, 12, 14, 17, 17, 18, 19, 19 represents the number of hours spent on the Internet in a week by students in a mathematics class. Which box-and-whisker plot represents the data?

