

Vocabulary and Concept Check

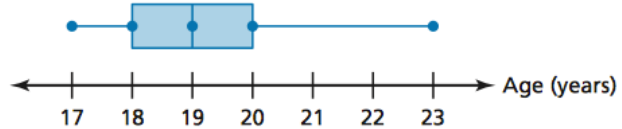
- VOCABULARY** Explain how to find the five-number summary of a data set.
- NUMBER SENSE** In a box-and-whisker plot, what fraction of the data is greater than the first quartile?
- DIFFERENT WORDS, SAME QUESTION** Which is different? Find “both” answers.

Is the distribution skewed right?

Is the left whisker longer than the right whisker?

Are the data more spread out below the first quartile than above the third quartile?

Does the lower fourth of the data vary more than the upper fourth of the data?



Make a box-and-whisker plot for the data.

5. Ages of teachers (in years): 30, 62, 26, 35, 45, 22, 49, 32, 28, 50, 42, 35



6. Quiz scores: 8, 12, 9, 10, 12, 8, 5, 9, 7, 10, 8, 9, 11



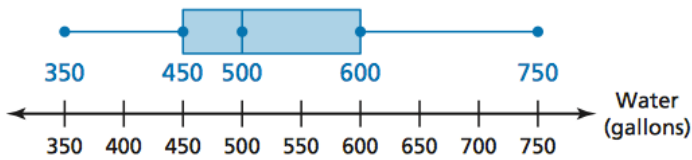
7. Donations (in dollars): 10, 30, 5, 15, 50, 25, 5, 20, 15, 35, 10, 30, 20



8. Ski lengths (in centimeters): 180, 175, 205, 160, 210, 175, 190, 205, 190, 160, 165, 195



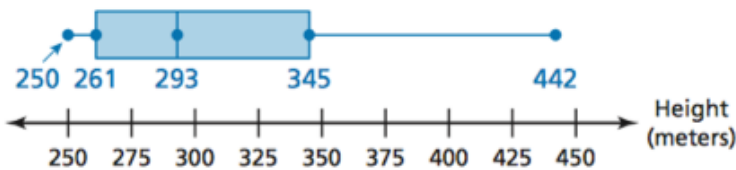
11. **DUNK TANK** The box-and-whisker plot represents the numbers of gallons of water needed to fill different types of dunk tanks offered by a company.



- a. What fraction of the dunk tanks require at least 500 gallons of water?
 b. Are the data more spread out below the first quartile or above the third quartile? Explain.

- c. Find and interpret the interquartile range of the data.

12. **BUILDINGS** The box-and-whisker plot represents the heights (in meters) of the tallest buildings in Chicago.



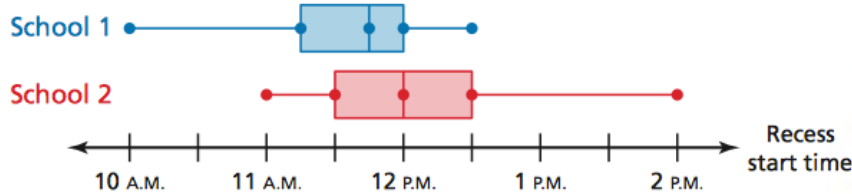
- a. What percent of the buildings are no taller than 345 meters?
 b. Is there more variability in the heights above 345 meters or below 261 meters? Explain.

- c. Find and interpret the interquartile range of the data.

Identify the shape of the distribution. Explain.



17. **RECESS** The double box-and-whisker plot represents the start times of recess for two schools.



- a. Identify the shape of each distribution.
 b. Which school's start times for recess are more spread out? Explain.
 c. Which school is more likely to have recess before lunch? Explain.