

11.2**Practice**

For use with pages 588–593

Complete the statement.

1. The interquartile range of a data set is the _____ of the _____ quartile and the _____ quartile.
2. In a box-and-whisker plot, the entire box represents about _____ % of the data.
3. In a box-and-whisker plot, one whisker represents about _____ % of the data.

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

4. School days missed: 0, 4, 7, 2, 5, 9, 11, 3
5. Fuel economy of small sedans (in miles per gallon):
51, 41, 38, 42, 35, 32, 29, 30
6. Shoe prices (in dollars): 10, 20, 18, 8, 13, 15, 11, 16, 14, 20, 25, 17, 30
7. Battery life in laptop computers (in hours): 5, 3.75, 4.75, 2.75, 3, 5.5, 4, 3.5

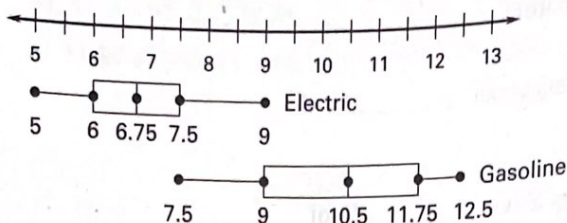
11.2

Continued

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The box-and-whisker plots show the weights of electric handheld power blowers and gasoline handheld power blowers.



- Compare the median, range, and interquartile range for the two types of blowers.
- About what percent of the electric blowers are less than 7.5 pounds? About what percent of the gasoline blowers are more than 10.5 pounds?
- Which type of blower would you say is the "lighter" blower? Explain.

In Exercises 11–13, use the following information. An outlier is a data value whose distance from the upper or lower quartile is more than 1.5 times the interquartile range.

- Make a box-and-whisker plot for the following data (snowfall, in inches, of the top ten snowiest cities in the U.S. in a recent year): 100, 129, 105, 97, 112, 103, 241, 110, 117, 98.
- Determine if there are any outliers in the snowfall data set. Make a box-and-whisker plot for the data, excluding any outliers.
- What conclusion(s) can you make from the plot in Exercise 12 that you would not make from the plot in Exercise 11?