

10.5 Lesson

Key Vocabulary

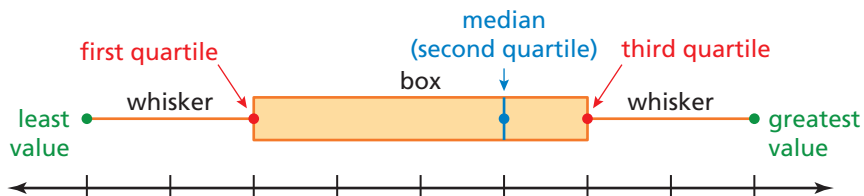
box-and-whisker plot,
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five-number summary,
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Key Idea

Box-and-Whisker Plot

A **box-and-whisker plot** represents a data set along a number line by using the least value, the greatest value, and the quartiles of the data. A box-and-whisker plot shows the *variability* of a data set.



The five numbers that make up the box-and-whisker plot are called the **five-number summary** of the data set.

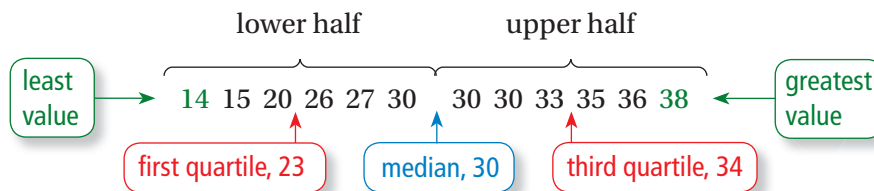
EXAMPLE 1 Making a Box-and-Whisker Plot



Make a box-and-whisker plot for the ages (in years) of the spider monkeys at a zoo.

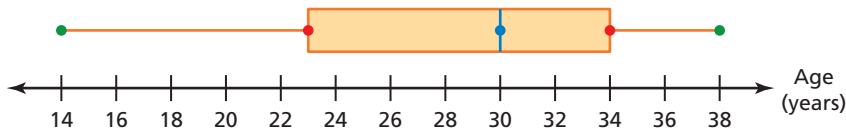
15, 20, 14, 38, 30, 36, 30, 30, 27, 26, 33, 35

Step 1: Order the data. Find the quartiles.



Step 2: Draw a number line that includes the least and greatest values. Graph points above the number line that represent the five-number summary.

Step 3: Draw a box using the quartiles. Draw a line through the median. Draw whiskers from the box to the least and the greatest values.



Try It

1. A group of friends spent 1, 0, 2, 3, 4, 3, 6, 1, 0, 1, 2, and 2 hours online last night. Make a box-and-whisker plot for the data.