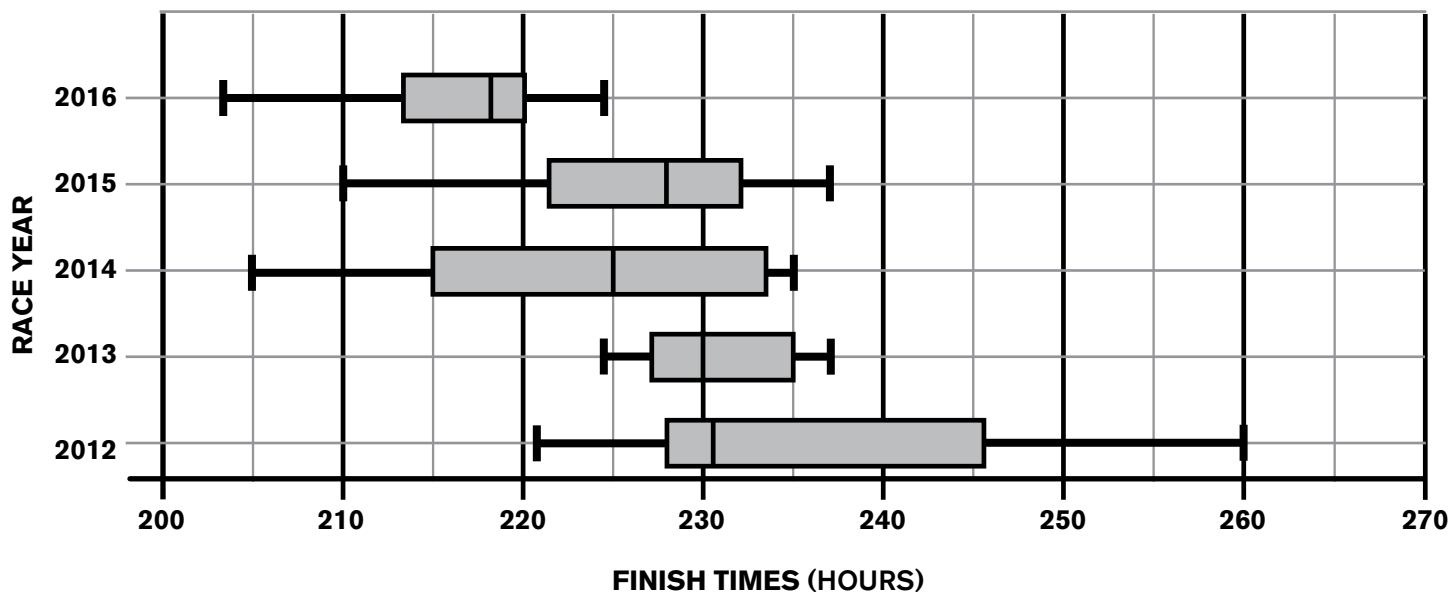


# Analyzing the Iditarod

In “Off to the Races!” on page 8, you read box-and-whisker plots to compare the results of the past five Jr. Iditarod races. Use what you learned and the box-and-whisker plots below that show the race results for the past five (adult) Iditarod races to answer five more questions.

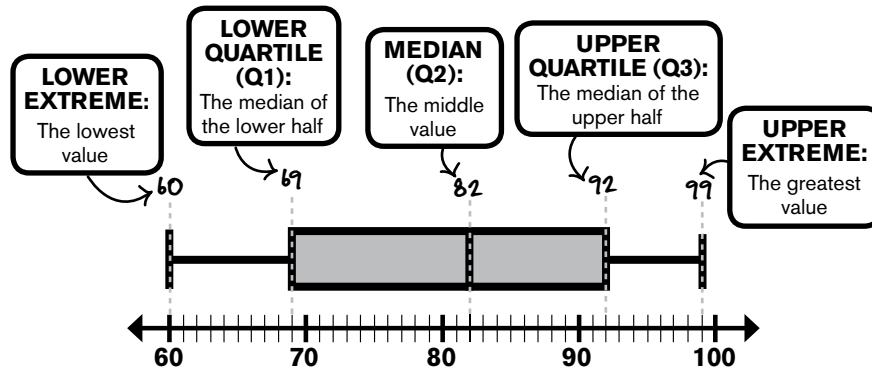
**DISTRIBUTION OF IDITAROD RACE TIMES**



- 1.** Dallas Seavey of Willow, Alaska, won the Iditarod in 2012, 2014, 2015, and 2016. Approximately, what was his fastest finish time?
- 2A.** In which two years did the last mushers finish the race with the same finish times?
- 2B.** About how many hours did it take them to finish? Write your answer in days and hours.
- 3.** The interquartile range is the difference between the upper and lower quartiles of a box-and-whisker plot. Which year had the smallest interquartile range? Which had the largest?
- 4.** Jonathan said that the 2012 Iditarod had the greatest numbers out of all the years for all five values of the box-and-whisker plot. Is he correct? Explain your answer.
- 5.** Compare the 2012 and 2013 box-and-whisker plots. Give at least two similarities and two differences between them. Use evidence to support your answers.

# Data in Box Plots

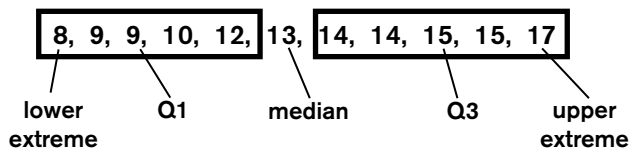
To draw a box-and-whisker plot, you need to order your data from least to greatest and determine five values, called the five-number summary. These values are:



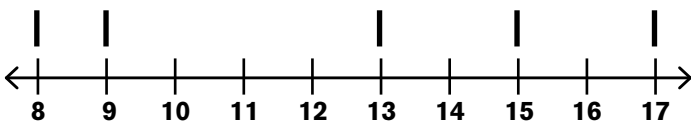
**EXAMPLE:** The data below shows the number of wins earned by Texas Rangers pitcher Cole Hamels in each year of his 11-year career. Graph the data using a box-and-whisker plot.

9, 15, 14, 10, 12, 14, 17, 8, 9, 13, 15

**Step 1:** Write the numbers from least to greatest and determine each value for the five-number summary.



**Step 2:** Make a number line and put vertical marks at the five numbers.



**Step 3:** Draw a box around the lower quartile, median, and upper quartile. Draw "whiskers" to the lower and upper extremes.



## YOUR TURN

Graph the data below with box-and-whisker plots.

- The data below represents the number of goals scored by U.S. Women's Soccer player Carli Lloyd for the past 7 seasons.

17, 18, 15, 6, 3, 15, 6

- The numbers below show the average number of points per basketball game the Golden State Warriors' Kevin Durant has scored each year during his career (2016-2017 season not included).  
*(Hint: To find the median for an even number of values, find the mean for the two middle values.)*

28, 25, 32, 28, 28, 28, 30, 25, 20

- The data below shows the number of Grand Slam and Women's Tennis Association tournament titles Serena Williams won the past 8 years.

2, 3, 2, 3, 4, 0, 4, 7

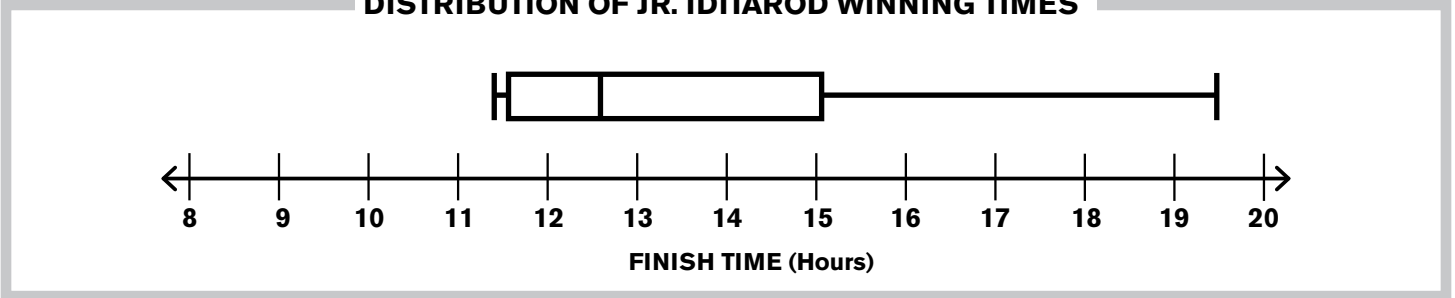
NAME: \_\_\_\_\_

# EXIT SLIP **A**

FEBRUARY 13, 2017 > p. 8 Off to the Races! > **READING BOX-AND-WHISKER PLOTS**

The box-and-whisker plot below shows the distribution of finish times for the winners of the past 10 Jr. Iditarod races. (You'll have to estimate some values.)

**DISTRIBUTION OF JR. IDITAROD WINNING TIMES**



1. What is the median of the data set?
2. What is the interquartile range (difference between the upper and lower quartiles)?

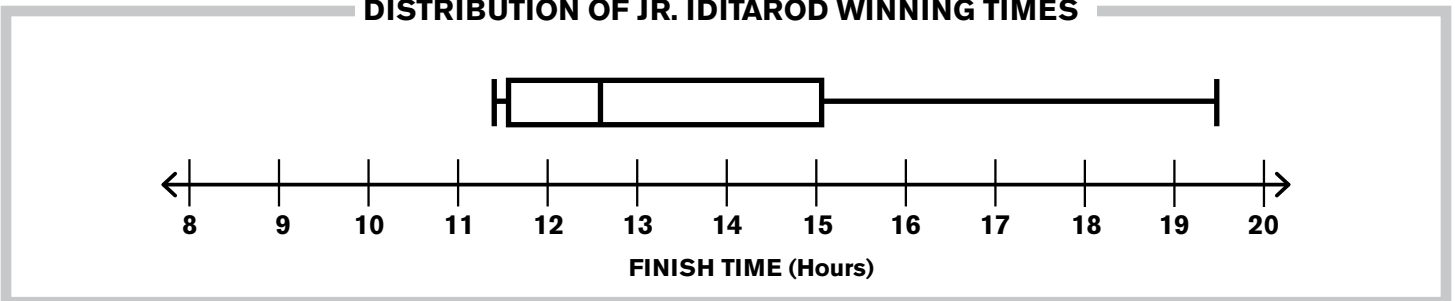
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# EXIT SLIP **B**

FEBRUARY 13, 2017 > p. 8 Off to the Races! > **READING BOX-AND-WHISKER PLOTS**

The box-and-whisker plot below shows the distribution of finish times for the winners of the past 10 Jr. Iditarod races. (You'll have to estimate some values.)

**DISTRIBUTION OF JR. IDITAROD WINNING TIMES**



1. What are the lower extreme, lower quartile, median, upper quartile, and upper extreme of the data set?
2. Describe the distribution of the data. Use evidence to support your answer.