Module 19   Analyzing Data and Statistics
Lesson 3   Analyzing and Describing Graphs

guided notes

Lesson Objectives

- Analyze stem-and-leaf plots.
- Create and analyze box-and-whisker plots.

The range of a data set is the difference between the **maximum**

and **minimum** values.

The median is also known as the **second quartile**, or Q_2.

Fifty percent of the data fall at or below the median.

The first quartile, Q_1, is the median of the **lower subset** of the data

set. **Twenty-five** percent of the data fall at or below the first quartile.

The **third quartile**, Q_3, is the median of the upper subset.

Seventy-five percent of the data fall at or below the third quartile.

The interquartile range, IQR, is the difference between the

third and **first** quartiles.

The **five-number summary** consists of the minimum,

the first quartile, the median, the third quartile, and the maximum.

**1** ▷ Using the given five-number summary, make a box-and-whisker plot for the ages

of the baseball players who play for the Tigers.

|	Age (yrs)
Minimum:	20
First Quartile, Q_1:	23
Median, Q_2:	25.5
Third Quartile, Q_3:	29
Maximum:	37

Tigers' Ages

Years
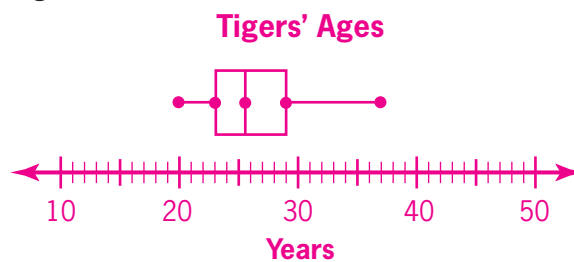
2 ▶ Using the given five-number summary, make a box-and-whisker plot for the ages

of the baseball players who play for the Braves on the same graph as the

Tigers players' ages.

Tigers' and Braves' Ages

	Age (yrs)
Minimum:	22
First Quartile, Q_1:	28
Median, Q_2:	31
Third Quartile, Q_3:	35
Maximum:	41
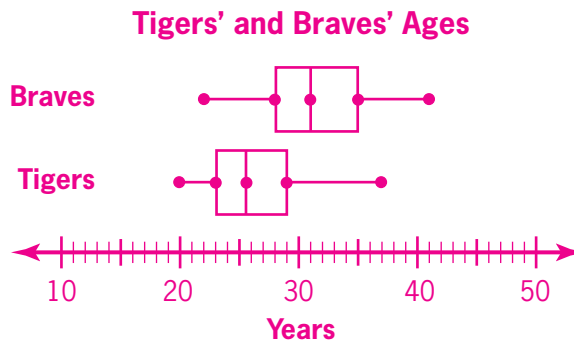
3 ▶ Compare the box-and-whisker plots for the weights of the Yankees' players and

the Expos' players.
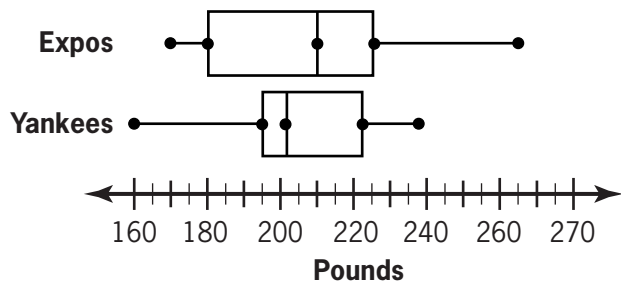
Possible answers: Expos have a larger spread of data, a higher median,

and the heaviest player.