NAME

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

## 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 $\qquad$
and $\qquad$ values.

The median is also known as the $\qquad$ or $\mathrm{Q}_{2}$.
$\qquad$ percent of the data fall at or below the median.
The first quartile, $\mathrm{Q}_{1}$, is the median of the $\qquad$ of the data set. $\qquad$ percent of the data fall at or below the first quartile.

The $\qquad$ $\mathrm{Q}_{3}$, is the median of the upper subset.
$\qquad$ percent of the data fall at or below the third quartile.

The interquartile range, $I Q R$, is the difference between the
$\qquad$ and $\qquad$ quartiles.

The $\qquad$ 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, $\mathrm{Q}_{1}$ : 23
Median, $\mathrm{Q}_{2}$ : $\quad 25.5$
Third Quartile, $\mathrm{Q}_{3}$ : 29
Maximum: 37

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.

> Age (yrs)

Minimum:
22
First Quartile, $\mathrm{Q}_{1}$ : $\quad 28$
Median, $\mathrm{Q}_{2}$ : $\quad 31$
Third Quartile, $\mathrm{Q}_{3}$ : $\quad 35$
Maximum: 41

Compare the box-and-whisker plots for the weights of the Yankees' players and the Expos' players.

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