

Objective:

Find measures of center, spread, and position.

Lesson 0-9

### Example 1 Measures of Center

**SOFT DRINKS** The number of milligrams of sodium in a 12-ounce can of ten different brands of regular cola are shown below. Find the mean, median, and mode.

50, 30, 25, 20, 40, 35, 35, 10, 15, 35

**Mean**  $\bar{x} = \frac{50 + 30 + 25 + 20 + 40 + 35 + 35 + 10 + 15 + 35}{10}$   
 $= \frac{295}{10}$  or 29.5 milligrams

Find the sum of the data values and divide by the number of values, 10.

**Median** 10, 15, 20, 25, 30, 35, 35, 40, 50  
 $\frac{30 + 35}{2}$  or 32.5 milligrams

Arrange the data in order.

Find the mean of the middle two values.

**Mode** The value that occurs most often in the set is 35, so the mode of the data set is 35 milligrams.

P27 problems 1, 2, 3