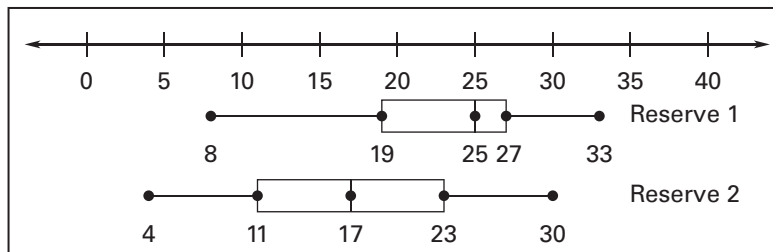




**LESSON**  
**10.5****Study Guide** *continued*  
*For use with the lesson "Interpret Box-and-Whisker Plots"***EXAMPLE 2** Interpret a box-and-whisker plot

**Bird count** The box-and-whisker plots show the number of American Goldfinches sighted each month for a year at two different wildlife reserves.



- For how many months is reserve 2's count at least 17 birds?
- Compare the count in reserve 1 to the count in reserve 2.

**Solution**

- For reserve 2, the upper half is at least 17 Goldfinches. The median is 17, so for 6 months, reserve 2 has 17 or more Goldfinch sightings each day.
- The median count for reserve 1 is 25. The median count for reserve 2 is 17. In general, reserve 1 has more Goldfinch sightings than reserve 2.

For reserve 1, the interquartile range is  $27 - 19$ , or 8 sightings.

For reserve 2, the interquartile range is  $23 - 11$ , or 12 sightings.

So, reserve 1 has less variation in the middle 50% of the data. The range for reserve 2 is greater than the range for reserve 1. When all the data are considered, reserve 2 has more variation in Goldfinch sightings.

**Exercises for Example 2**

- Bird Count** In Example 2, for how many months was the count lower than 11 at reserve 2?
- Bird Count** In Example 2, for how many months was the count at least 19 at reserve 1?