In these activities you will interpret data presented in tables and find the mean, median, and interquartile range of a set of data. After completing the activities, discuss and/or present your findings to the rest of the class.

Activity 1 [Page 1.5]

1. Page 1.5 shows the original data in a table and dot plot.

   a. Estimate the balance point of the distribution.

   b. Select **Show Median** and **Show Mean**. How do the two measures of center compare? Give a reason for the difference.

Activity 2 [Page 1.9]

1. Identify the following as always true, sometimes true, or never true. Give an example using the TNS activity to support your thinking.

   a. When the sum of the deviations from a given point is 0, that point will be the mean of the distribution.

   b. If *n* people have *m* objects, the total number of objects is *mn*.

   c. You can find the median of a set of data using the values given in a frequency table.

   d. A frequency distribution is the same as a dot plot.

Activity 3 [Page 2.2]

1. A second class had four students who each had 7 caps, six students with 2 caps, one student with no caps, eight students with 10 caps and three students with 5 caps.

    a. How many students were in the class?

    b. What was the total number of caps the students in the class owned?

    c. Enter the data into the table on page 2.2. Use the columns in the table to verify your answers to a and b.

    d. Select **Graph**. Describe the distribution.

2. Use the TNS activity to answer the following.

    a. Find the median and IQR for the number of caps for this class.

    b. Make a conjecture about the values of the mean and mean+/-MAD and how they will compare to the median and IQR.

    c. Find the mean and IQR and check your conjecture in b.

3. Enter the data for the number of caps owned by students in your class (note that no one entry can have more than 10 students).

   a. Describe the distribution.

   b. Find the measure of center and spread you would like to use to describe the number of caps of students in your class.