

Lesson 65

Objective

Students will calculate mean, median and mode.

Students will distinguish between a measure of center and a measure of variation.

Students will use stem and leaf plots.

Preparation

No special preparation is required.

Lesson Plan

This lesson introduces other methods of averaging as a way to describe data.

Read through the lesson and do #1 – #9 together. For #3, the median has to be calculated because there is an even number of values in the set. 86 and 100 are the two middle values, so the mode will be the average of those two numbers.

For #7 – #9, have students explain why they would choose a particular method over another.

Now use data from the Lesson Sheet to create statements about the mean, median or mode for each set of data. Then have students indicate whether the statements are true or false. They may need to compute the mean or arrange the values from least to greatest in order to evaluate the statement.

For example, a statement might be: "The median for Shondra's scores is 87." Answer: False

Next, explain that a *measure of center* for a set of data is a number that summarizes all the values in the set (such as the mean or median). For #1-3 and #6, decide which numbers are also measures of center. (1, 2 and 3) Mode is not a measure of center; it is a measure of frequency.

Point out that a *measure of variation* for a set of data is a number that describes how the values in the data set vary. The *range* is the simplest measure of variation. Range is the highest number minus the lowest number in the data set. Have your students calculate the range for each student's test results on the lesson sheet. (Shondra - 9, Maria - 62, Aaron - 70)

Read through the right side of the lesson with the class. To check their data for the question at the bottom of the page, the students could repeat their surveys at the same stores or go to other stores.

Stretch 65

Draw this chart across the top of the board.

Jan	Feb	Mar	Apr	May	Jun
31	28	31	30	31	30

Jul	Aug	Sep	Oct	Nov	Dec
31	31	30	31	30	31

Explain that the number under each month is the number of days in the month that year. Brit's birthday is the 124th day of the year. What is the date of her birthday?

Answer: $31 + 28 + 31 + 30 = 120$, $124 - 120 = 4$, May 4