

LESSON
16-1

Measures of Center

Reteach

When calculating the mean, you can use *compatible numbers* to find the sum of the data values. Compatible numbers make calculations easier. For example, adding multiples of 5 or 10 is easier than adding all of the individual data values.

A group of students are asked how many hours they spend watching television during one week. Their responses are: 15, 7, 12, 8, 4, 13, 11. What is the mean?

$4 + 11 = 15$
 15 7 12 8 4 13 11
 $12 + 8 = 20$
 $7 + 13 = 20$
 $15 + 20 + 20 + 15 = 70$
 $\frac{70}{7} = 10$

Group numbers that have sums which are multiples of 5 or 10.

Find the sum of the numbers.

Divide the sum by the number of data values.

The mean is 10 hours.

Use compatible numbers to find the mean.

- The costs (in dollars) of items on a lunch menu are 9, 14, 11, 6, 16, 10.

Mean: _____

- The numbers of students in Mr. Silva's math classes are 19, 18, 22, 24, 20, 18, 26.

Mean: _____

- In the television viewing data above, is there more than one way to pair the data values to form compatible numbers? Explain.
