2–6 **Mean**

MAIN IDEA

- Find the mean of a data set.

The **mean**, or **average**, of a set of data is the [ ] of the

data [ ] the number of pieces of data.

EXAMPLES **Find Mean**

1 **VOTES** **The picture graph shows the current number of electoral votes for selected states. Find the mean number of electoral votes for these four states.**

Electoral Votes   ✓ = 1 vote
TN   ✓✓✓✓✓✓✓✓✓✓✓
KY   ✓✓✓✓✓✓✓✓
VA   ✓✓✓✓✓✓✓✓✓✓✓✓✓
SC   ✓✓✓✓✓✓✓

Source: FEC

Write and simplify an expression.
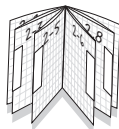
$$\text{mean} = \frac{11 + 8 + 13 + 8}{4}$$

$$= \boxed{} \text{ or } \boxed{}$$

Each state has a mean or [ ] of [ ] electoral votes.

FOLDABLES

ORGANIZE IT

Under Lesson 2-6 in your Foldable, explain what a measure of central tendency is and explain how to compute the mean of a set of data.

Check Your Progress **PRACTICE** The number of days per week that members of the middle school band practice their instrument is shown in the table. Find the mean.

Days of Practice					
6	7	5	5	3	6
5	1	4	6	7	5

BUILD YOUR VOCABULARY (pages 27–28)

An **outlier** is a value that is much [ ] or much

[ ] than the other values in a set of data.

EXAMPLE **Determine How Outliers Affect Mean**

1 BASKETBALL **Identify the outlier in the data. Then find the mean with and without the outlier. Describe how the outlier affects the mean of the data.**

WRITE IT

Write a general statement that tells how any outlier might affect the mean of a set of data.

_____

_____

_____

_____

_____

Points per Game			
92	102	88	76
78	44	98	101
100	77	108	86

Compared to the other values, 44 is extremely [ ]. So, it is an outlier.

mean with outlier

$$= \frac{92 + 102 + 88 + 76 + 78 + 44 + 98 + 101 + 100 + 77 + 108 + 86}{12}$$

$$= \frac{1{,}050}{12} \text{ or } \boxed{}$$

mean without outlier

$$= \frac{92 + 102 + 88 + 76 + 78 + 98 + 101 + 100 + 77 + 108 + 86}{11}$$

$$= \frac{1{,}006}{11} \text{ or about } 91.5$$

The outlier lowers the mean of the data by [ ] points.

Check Your Progress

EXAM SCORES Identify the outlier in the data. Then find the mean of the exam scores with and without the outlier. Describe how the outlier affects the mean of the data.

Exam Scores			
84	75	93	82
84	36	79	91

HOMEWORK ASSIGNMENT

Page(s):

Exercises: