40 50 60 60 80 80

Algebra 1 0.12
Find measures of central tendency, variation, and position 4 17.14

Activity: grab cubes



## KeyConcept Measures of Center

- The mean is the sum of the values in a data set divided by the total number of values in the set.
- The median is the middle value or the mean of the two middle values in a set of data when the data are arranged in numerical order.
- The mode is the value or values that appear most often in a set of data. A set of data can have no mode, one mode, or more than one mode.

## **Example 1** Measures of Center

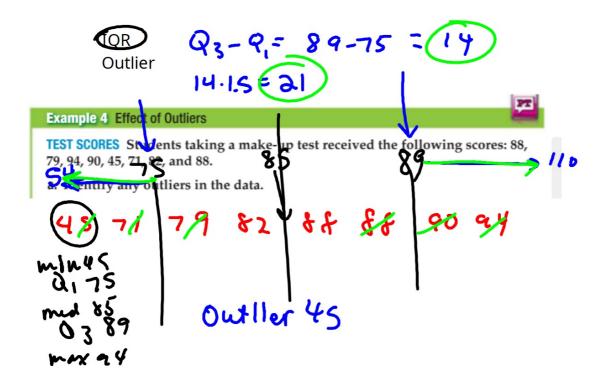
**BASEBALL** The table shows the number of hits Marcus made for his team. Find the mean, median, and mode.

Team Played	Hits	
Badgers	3	
Hornets	6	
Bulldogs	5	
Vikings	2	
Rangers	3	
Panthers	7	

## **Example 3** Five-Number Summary



FUNDRAISED. The number of boxes of donuts Aang sold for a fundraiser each day for the last 11 days were 22, 16, 35, 26, 14, 17, 28, 29, 21, 17, and 20. Find the minimum, lower quartile, median, upper quartile, and maximum of the data set. Then interpret this five-number summary.



**b.** Find the mean and median of the data set with and without the outlier. Describe what happens.

Data Set	Mean	Median
with outlier	$\frac{88 + 79 + 94 + 90 + 45 + 71 + 82 + 88}{8} \text{ or about } 79.6$	85
without outlier	88 + 79 + 94 + 90 + 71 + 82 +88 or about 84.6	88

Do pt.