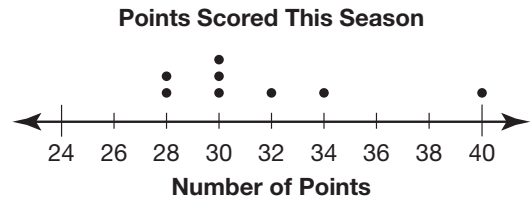


Appropriate Use of Statistical Measures

Paige tracked the number of points scored so far this season by each member of her basketball team: 28, 30, 28, 30, 40, 30, 34, 32. Which measure of center and measure of variability best describe the typical number of points scored?

Make a dot plot to organize the data and identify any outliers.

The median and mode are 30. The mean is 31.5. There is a gap between 34 and 40, and 40 is an outlier.



Since the outlier, 40, affects the mean, the median is the best measure of center for the data. For measures of variability, use the mean absolute deviation when the mean is the appropriate measure of center. Use the interquartile range when the median is more appropriate. Since the median is the best measure of center, you would use the IQR to measure variability of this data.

1. Make a dot plot using this set of data:
38, 68, 78, 88, 98

2. Which measure of center and measure of variability best describes this data set? Why?

3. Make a dot plot using this set of data:
35, 38, 40, 35, 37, 38, 36, 40, 43

4. Find the mean, median, and mode of the data set.

5. Which measure of center best describes this data set? Why?
