Module 19   Analyzing Data and Statistics
Lesson 5   Solving Statistics Problems

Lesson Objectives

- Calculate deviation from the mean.
- Calculate mean absolute deviation.
- Determine how many data points lie within one or two mean absolute deviations.

For a data value, the deviation from the mean measures the signed distance

from the ___**mean**___ to each data value.

Each deviation is calculated by subtracting the mean from that data value.

The mean absolute deviation is found by adding the absolute values of the

deviations and dividing that sum by the number of ___**data values**___ .

Two ways to measure dispersion are range and deviation from the mean.

Number of points scored in a basketball game by players who played for
30 minutes or more:

$$24, 15, 10, 8, 3$$

1 ▶ Find the deviations from the mean.

12, 3, –2, –4, –9

2 ▶ Find the mean absolute deviation.

6 points

3 ▶ Determine the number of players who scored within 1 mean absolute deviation

of the mean.

three players