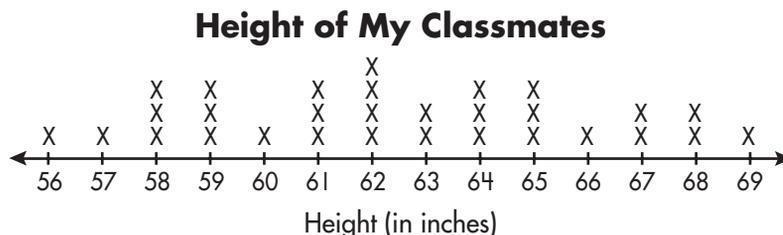


## Lesson 4.8 Line Plots

A **line plot** is a graph that shows frequency of data on a number line. Line plots make it easy to identify the mode, range, and any outliers. Recall that an outlier is an extreme value, a number that is much larger or smaller than the other numbers in the set.

To make a line plot, draw a number line from the least to the greatest value in the number set. Then, make an X above each number every time it appears in the set. The number of Xs above each number shows how many times that number appears—its frequency.



What is the mode, or most frequent height? Look for the tallest stack of Xs. The mode is 62 inches. What is the range of heights in the class? Subtract the least height from the greatest:  $69 - 56 = 13$  inches. How many students were polled? Count the total number of Xs. Thirty students were polled. What is the median height of the students? Count 15 Xs in from the left and 15 Xs in from the right. The median is the average of these two numbers. Because both numbers are 62 inches, the median is 62 inches.

The Eagles baseball team scored these numbers of runs per game: 4, 2, 6, 3, 1, 0, 2, 0, 4, 5, 0, 7, 6, 4, 3, 2, 6, 8, 1, 3, 11, 7, 3. Make a line plot. Then, answer the questions.



1. What is the mode? \_\_\_\_\_ What is the range? \_\_\_\_\_
2. How many games did the Eagles play? \_\_\_\_\_ What is the median? \_\_\_\_\_
3. If there is an outlier, identify it. \_\_\_\_\_