

Lesson 8-1

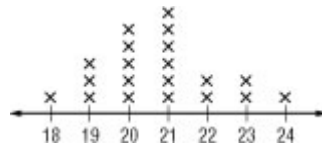
Example 1 Display Data Using a Line Plot

SCHOOL The table shows the number of students in each class at Greenview Middle School. Make a line plot of the data.

Number of Students				
21	23	19	20	21
24	20	21	19	21
22	18	20	21	22
19	20	23	21	20

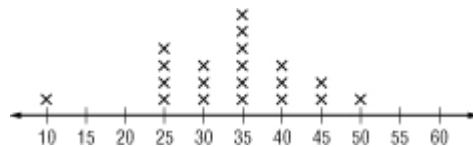
Step 1 Draw a number line. The smallest class has 18 students and the largest class has 24 students. So, you can use a scale from 18 to 24 with an interval of 1.

Step 2 Put an \times above the number that represents the number of students in each class.



Example 2 Use a Plot to Analyze Data

TYPING The line plot below shows the number of words typed per minute for different people. What is the range of the data?



The greatest number of words per minute is 50, and the least number of words per minute is 10.

range: $50 - 10$ or 40

The range is 40 words per minute.

Example 3 Use a Plot to Analyze Data

Identify any clusters, gaps, and outliers in the data in Example 2 and explain what they mean.

Many of the data cluster around 35 words per minute. You could say that most people typed between 25 and 40 words per minute.

There is a gap from 10 to 25 words per minute, so there were no people typing in this range of words per minute.

The number 10 appears removed from the rest of the data, so it could be considered an outlier. This means that 10 words per minute is extremely low and not representative of the whole data set.