



Data Display Analysis

Do you watch TV on the weekends?
Mr. Iverson asked everyone in his class, “How many hours did you watch TV yesterday?” He recorded their answers in the table.

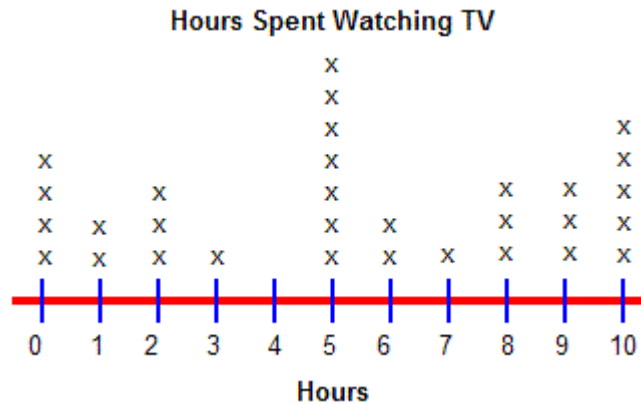
Hours Spent Watching TV		
Number of Hours	Tally	Number of Students
0	IIII	4
1	II	2
2	III	3
3	I	1
4		0
5	### II	7
6	II	2
7	I	1
8	III	3
9	III	3
10 or more	###	5

Mr. Iverson collected his data by conducting a survey. **Data** is collected information. A **survey** is a way to gather information by asking questions or observing events. Mr. Iverson used a frequency table to organize his data. A **frequency table** shows the number of times each item or number appears. In Mr. Iverson’s survey, the **frequency** is the number of students who gave each answer.

Once data is collected it needs to be organized in a way that others can understand what you have discovered. The following are some of the ways in which you can organize your information.

Use a line plot. A **line plot** is a vertical graph that shows data in a column of Xs above a number line.

1. Draw a number line.
2. Under the number line, write the numbers for the number of hours.
3. Use an X to represent one student.
4. Give the line plot a title.



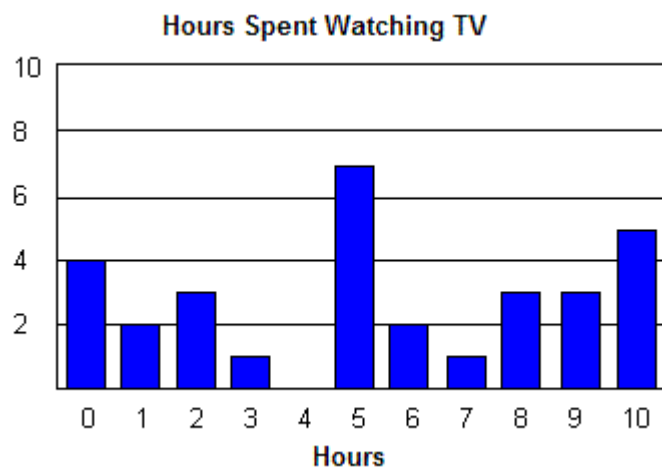


Math Lesson 8
Population Samples (Grade 6)

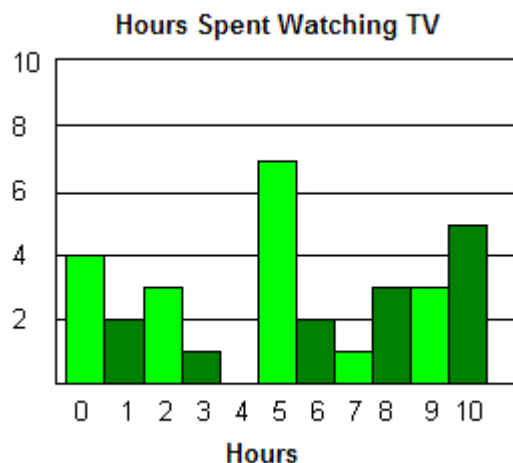
Instruction 8-3
Data Display Analysis

A bar graph can also be used to organize your data. A **bar graph** is a graph that uses bars to display data.

1. Decide on the intervals for the graph.
2. Label the horizontal and vertical axes.
3. Draw bars for each data set.
4. Give the graph a title.



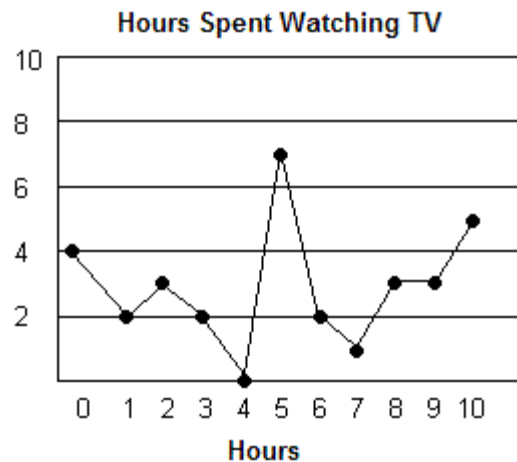
A histogram can be used to organize your data. However, a **histogram** is a bar graph that shows frequencies in equal intervals on the horizontal axis. There are no gaps between the bars of a histogram except where the frequency is zero.



Other graphs that can be used to summarize data are the line graph and a pie chart.

A **line graph** is a graph that uses one or more line segment to show changes in data.

1. Decide on the intervals for the axes.
2. Draw and label each axis.
3. Plot and connect the points.
4. Give the graph a title.



A **pie graph**, also known as a pie chart, depicts the percent or proportion of an item.

For instance, the number of students who watched 0-2 hours of TV is 9. There are a total of 31 students, therefore the percentage of students who watched 0-2 hours of TV is 29%.

