

Lesson 14

Line Graphs (pages 68–73)

GAIN Learning Objective Graphs: Retrieve information from line graph, compute differences

Focus

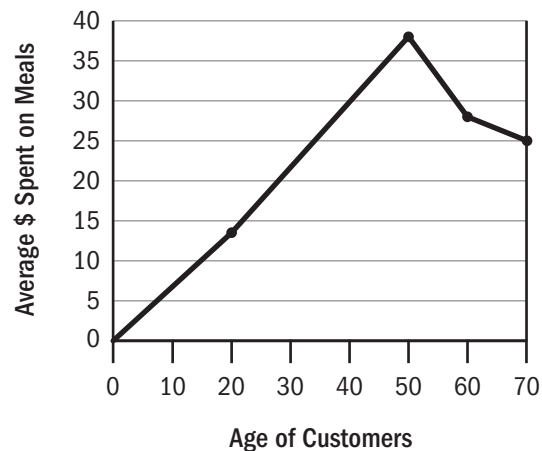
Provide students with a sample line graph from the newspaper. Ask students: *What type of graph is this? What does it tell you?* Explain that students will encounter line graphs in the classroom, on tests, and in real-life. Reinforce that reading and interpreting graphs are important skills. Then have students read pages 68 and 69.

Model

A line graph is used to show continuing data: how one variable is affected by another variable. A line graph provides a way to summarize how two pieces of information are related and how they are different. Draw the outline of the line graph at right on the board. Highlight each element within the graph (titles, labels, etc.) using arrows. As you fill in the line graph, discuss each element and why it is important.

Have students complete **Try It** on page 70 and check their answer.

Study Shows Age Impacts Spending in Local Restaurants



Teaching Tip

Some students may have difficulty understanding the difference between independent and dependent variables. In the sample graph, a person's age is the independent variable; it does not change based on the money spent. However, the amount of money an individual spends does change (dependent) based on a person's specific age.

GAIN Practice

Have students complete the **GAIN Practice** on pages 71–73. Have students check their answers. To assist students with specific questions, ask: *What was different about this graph? What information did this line graph provide you? How could you use this information?*

Active Learning

Have students work in teams. Provide each team with sets of data. Examples may include the ages of children and the number of hours they watch television or use the Internet in a week's time; test scores and preparation time; months of the year and average sunny days for a given city.

Differentiate

If you have a multi-level classroom, differentiate instruction based on the skill level of the student. During the Active Learning, assign each team member a task based on the individual's level of readiness. For example, a less proficient student may have the task of reading the data to the rest of the team, while another student writes the information on each axis. Another member would plot the information on the graph, while the final member of the team would present the findings to the class. This allows each student to work at his/her ability level and ensures that everyone is involved in the activity.