

NAME \_\_\_\_\_

**Module 19** Analyzing Data and Statistics  
**Lesson 2** Interpreting Graphs of Data

**guided  
notes**

**Lesson Objectives**

- Interpret line graphs.
- Interpret bar graphs.
- Interpret circle graphs.

A **line** graph is a graph that uses **line segments**

between data points to show changes in data over a period of time.

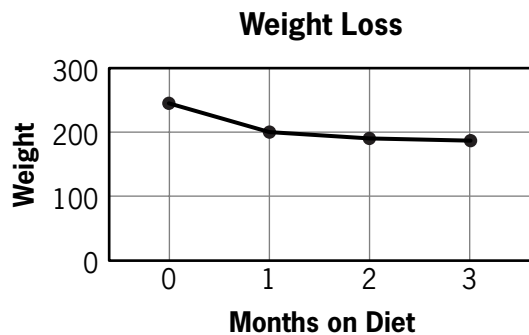
You can use line graphs to look for trends in data.

A **positive** slope indicates an increase.

A **negative** slope indicates a decrease.

A **steep** slope indicates a sharp change.

A horizontal line with a slope of zero indicates **no change**.



The line graph shows the progress Newt's father is making on his diet.

1 What is the maximum weight displayed on the graph?

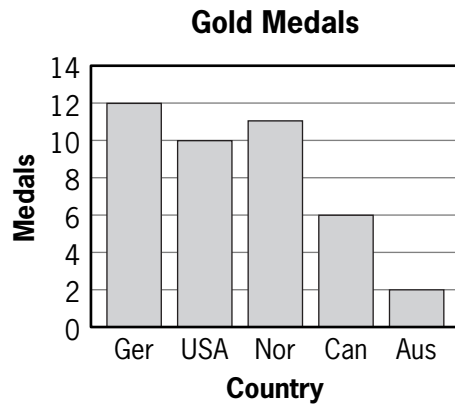
**245 lbs.**

2 What trends are displayed on the line graph?

**First month: steep negative slope, most weight lost; next two months:**

**slightly negative slope, weight loss leveled off to slow, gradual pace**

A **bar** \_\_\_\_\_ graph is used to compare amounts and uses **bars** \_\_\_\_\_ to represent data.

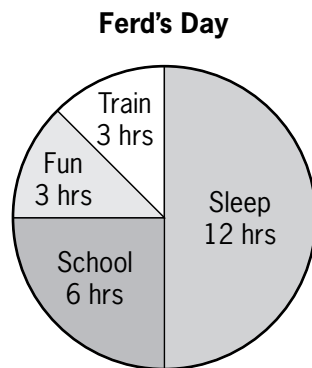


3 Use the gold medal graph to list the countries, in order, from most gold medals won to least gold medals won. **Germany, Norway, United States, Canada, and Australia**

A circle graph, or pie chart, compares **parts** \_\_\_\_\_ to a **whole** \_\_\_\_\_.

The entire circle represents the **whole** \_\_\_\_\_.

Each sector of the circle represents **a part** \_\_\_\_\_ of the **whole** \_\_\_\_\_.



4 What fraction of the circle represents sleep? **one-half**

5 Which two activities together make up twenty-five percent of the circle?  
**fun and training**