**Inflation and the Value of the Dollar**

There are two related ways to think about inflation.

- With inflation, the cost of a particular item or service *increases*.
- With inflation, the value of the dollar *decreases*.

The second concept is called **devaluation** of the dollar.

### The Value of the Dollar

The value $V$ of the dollar in year A is related to the value of the CPI in year A by the following formula.

\[
V \text{ in year } A = \frac{100}{\text{CPI in year } A}
\]

This depends on the base year, 1983, in which a dollar was worth $1.

### EXAMPLE 5  Graphing the Value of the Dollar

Graph the value of the dollar from 1931 through 2010. Compare your graph with the graph in Example 3 on page 164.

**SOLUTION**

You can use the same data you used in Example 3. However, in your spreadsheet, create a new column that divides 100 by the CPI column.

The value of the dollar is decreasing, whereas the CPI values are increasing.

**Checkpoint**

Why might the U.S. government encourage devaluation of the dollar during times of deficit spending? Explain your reasoning.