### 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

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