## 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.

$$
V \text { in year } \mathrm{A}=\frac{100}{\text { CPI in year } \mathrm{A}}
$$

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.

## $\sqrt{ }$ Checkpoint

Help at Math.andYOU.com
Why might the U.S. government encourage devaluation of the dollar during times of deficit spending? Explain your reasoning.

