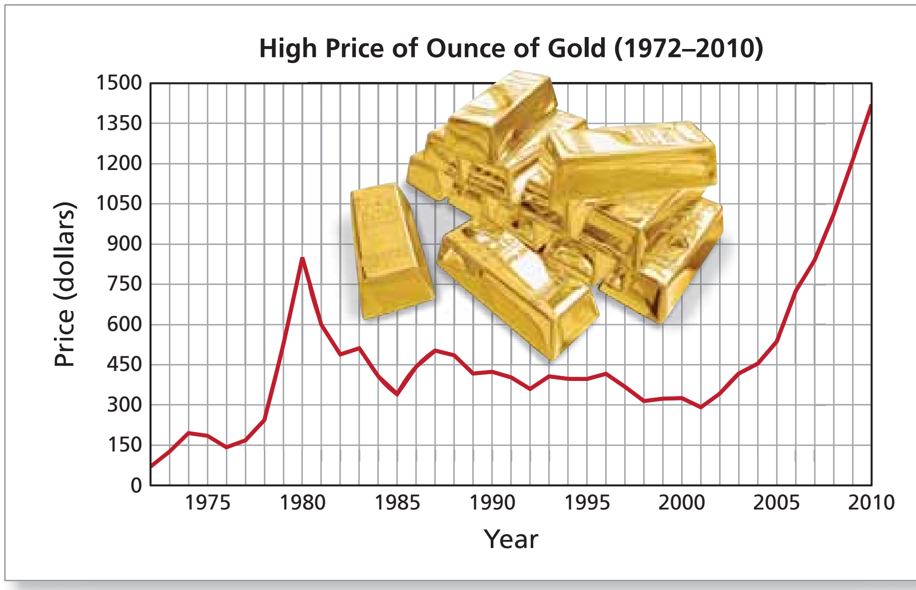
EXAMPLE 6 Using Percent to Describe an Increase

The line graph shows the daily high price of gold per ounce. Use the graph to describe the change in the high price of gold (a) from 1980 to 2010 and (b) from 2000 to 2010.



SOLUTION

a. Suppose you bought gold in 1980 for \$800 per ounce and sold it in 2010 for \$1200 per ounce.

2010 price

1980 price

$$\frac{\$1200}{\$800} = 1.5 = 150\%$$

The 2010 price was 150% of the 1980 price. Another way of saying this is that your investment increased by 50%.

b. Suppose you bought gold in 2000 for \$250 per ounce and sold it in 2010 for \$1250 per ounce.

2010 price

2000 price

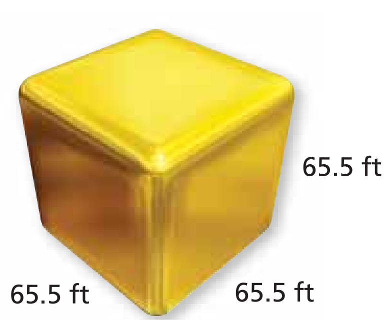
$$\frac{\$1250}{\$250} = 5.0 = 500\%$$

The 2010 price was 500% of the 2000 price. Another way of saying this is that your investment increased by 400%. Be sure you see that the 500% is a result of comparing the two prices. If you compare only the *increase* in price to the original price, you obtain 400%.

Price increase

2000 price

$$\frac{\$1000}{\$250} = 4.0 = 400\%$$



All the gold that has been mined in human history would fit into a cube that is 65.5 feet on each side.

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Use the graph to describe the change in the high price of gold from 1975 to 2010.