**Computing the Inflation Rate, the Current Price, and the Original Price**

**Inflation** is the general increase in the cost of goods and services. The rate of inflation is a way to measure economic activity. At the corporate level, inflation is observed as increases in wholesale prices, utility costs, production and shipping costs, and demands for scarce materials. Some of the causes of inflation are heavy spending (resulting in high demand), increased production costs while producers try to maintain profit levels, and lack of competition. To calculate the rate of inflation you need to know the current price and the original price of something.

**Inflation Rate** = **(Current Price** - **Original Price)** / **Original Price**

**Current Price** = **Original Price** + **(Original Price** x **Inflation Rate)**

**Original Price** = **Current Price** / **(1** + **Inflation Rate)**

**Practice Example:**

**Find the rate of inflation.**

Missy and Lyle Winters paid $100,000 for their condominium when they bought it 5 years ago. A comparable condominium in their neighborhood now sells for $115,000. What is the inflation rate?

Find the rate of inflation.

**Inflation Rate** = **(Current Price** - **Original Price)** / **Original Price**

($115,000 - $100,000) / $100,000 = **15% inflation rate**

**STUDENT ASSIGNMENT:**

**Find the inflation rate (rounded to the nearest tenth percent), the current price, or the original price.**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Inflation Rate** | **Current Price** | **Original Price** |
| **1** |  | 5,250.00 | $ 5,000.00 |
| **2** |  | 387.50 | 336.75 |
| **3** | 6.00% |  | 250.00 |
| **4** | 4.75% |  | 15,000.00 |
| **5** | 1.45% | 9.99 |  |
| **6** | 10.48% | 27,500.00 |  |

**7.** In 1958, a first-class postage stamp cost $0.04. In 2005, a first-class postage stamp cost $0.37.

What is the rate of inflation over that time period?

**8.** The cost of a four-year college education 10 years ago was

$50,000. The inflation rate for education since that time is 150 percent. What does a four-year college education cost today?

**A.** $49,261.08 **B.** $125,000 **C.** $75,000 **D.** $33,333.33

**Calculating the Consumer Price Index, the Current Cost, and the Cost of Any Given Commodity**

To track inflation, you have to track the price of goods and services at regular intervals and then compare them to the base year. The **consumer price index (CPI)** is a measure of the average change in prices of a certain number of goods and services. The Bureau of Labor Statistics measures items in terms of their 1983 prices. The CPI for 1983 is set at 100. This means that a commodity that cost $100 in 1983 and that has a CPI of 180.5 today would cost $180.50 today.

**Current Cost** = **(Cost in 1983** x **CPI) /** **100**

**Practice Example:**

**Find the CPI and the cost in the base year.**

A pair of jeans cost $27.99 in 1983. Today, the same pair of jeans costs $39.99. What is the CPI for the jeans? If the CPI is the same for all jeans, what was the cost of a pair of jeans in 1983 that costs $34.99 today?

Find the CPI.

**CPI** = **(Current Cost** / **Cost in 1983) x** **100**

CPI = ($39.99 x 100) / $27.99 = **142.9 CPI**

Find the cost in the base year.

**Cost in Base Year =** **(Current Cost x 100) /CPI**

($34.99 x 100) / 142.9 = **$24.49 cost in base year**