

## Calculating the Price Index to Measure the Rate of Inflation

### Formula for calculating price index

$$\frac{\text{cost of current market basket}}{\text{cost of market basket in base year}} \times 100 =$$

Example:

$$\frac{\$100}{\$75} \times 100 = 133 \text{ is the price index}$$

The **rate of inflation** is calculated with the following

$$(\text{current market basket} - \text{market basket in base year}) / \text{base year} \times 100$$

$$(100 - 75) / 75 \times 100 = 25 / 75 \times 100 = 33.3\%$$

**Notice the rate of inflation is equal to the price index - 100**

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**Use the following information to calculate both the price index and the rate of inflation.**

Current year prices = 120 Base Year prices is 75

Calculate the Price Index

Calculate the rate of inflation

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Design an inflation problem for your partner. Have the compute both the index and the rate of inflation

### Calculating the Price Index for a Two-Good Market Basket

The CPI measures the change in market basket prices over time. Solve the simple Two - Good Market Basket problem below using the data.

Good	Quantity	Base Year Price 2001	Cost of Market Basket in 2001	2011 Price per Unit	Cost of Market Basket in 2011
Corn	100 bushels	\$ 4		\$ 8	
Computers	2	\$ 500		\$ 600	
<b>Totals</b>					

Calculate the Price Index for the Two-Good Market Basket.

Calculate the rate of inflation for the Two-Good Market Basket

### Deflation

The Calculation of Deflation or a general fall in prices uses the same formula.

Good	Quantity	Base Year Price 2001	Cost of Market Basket in 2001	2011 Price per Unit	Cost of Market Basket in 2011
Corn	100 bushels	\$ 4		\$ 3	
Computers	2	\$ 500		\$ 400	
<b>Totals</b>					

What is the price index?

What is the rate of deflation (represented by a negative number)?