## Lesson 4.4 - Understanding Indices

## Goal: Interpret and use price indices to solve problems

Price Indices help citizens, businesses and industries follow and $\qquad$ in prices.

A price index describes the price of an item compared to a $\qquad$ measured at a particular time or in a particular place.

Statistics Canada tracks price changes using several different indices. The most important is the CPI or

To determine the CPI, Statistics Canada collects THOUSANDS of price quotations from across the country for a basket of about 600 popular consumer goods and services, from French fries and bus fares to tuition and Internet services


EXAMPLE 1 Use this CPI graph to answer the following questions.
a) What is the base year for the CPI?
b) In what year was the cost of the basket of goods about $90 \%$ of the base cost?

Consumer Price Index (CPI)

c) What was the CPI in 1990 ? What does this mean?
d) Describe the change in the CPI from 1990 to 1991 . What do you notice about the line segment representing this period?
e) Describe the overall trend in the CPI and its significance.

EXAMPLE 2 Use the same graph to calculate the following:
a) Calculate the average annual rate of inflation from 1990 to 2006

b) Use your answer in part a) to predict the CPI for 2010. Justify your prediction.

EXAMPLE 2 The 2006 UBS Prices and Earnings report includes a comparison of clothing prices in 71 cities. The base price is the price in New York.
a) Which cities in this table have index values less than 100 ?

What does this tell you?

| City | Clothing Price Index <br> (New York = 100) |
| :--- | :---: |
| Zurich | 115.6 |
| Oslo | 114.4 |
| Dublin | 97.5 |
| New York | 100.0 |
| Toronto | 73.8 |
| Tokyo | 148.1 |
| Rome | 87.5 |
| Hong Kong | 75.0 |
| Delhi | 43.8 |

b) How do clothing prices in Zurich and Toronto compare to clothing prices in New York?

