Section 4: Nominal & Real GDP, Unemployment Rate, Policy
Introduction to Economics

TA: Sara Sutherland
sutherland@umail.ucsb.edu
www.sasutherland.com

Practice Problem: Calculating Nominal and Real GDP

PRODUCT	2007 Quantity	2007 Price	2008 Quantity	2008 Price	2009 Quantity	2009 Price
Books	90	$50	100	$60	100	$65
Haircuts	75	$2	100	$2	120	$2.25
Light bulbs	50	$30	50	$25	65	$25

1) Calculate **Nominal GDP** for each year:

Value of final goods and services evaluated at current-year prices.

1) Calculate **Real GDP:**
   Value of final goods and services evaluated at base year prices.
   Note: Uses current quantities and fixed prices (base year)

Q. Why do we use real GDP?

Q. What are the two ways GDP can increase?

1) Increase in prices of goods and services

2) Increasing quantity of goods and services

Calculating percent change:

$$Percent\ Change = \frac{New - Old}{Old} x\ 100$$

Side Note: Use Nominal and Real GDP to calculate Price Level:
A measure of average prices of goods and services in the economy

Unemployment Rate

$$Unemployment\ Rate = \frac{Unemployed}{Total\ Labor\ Force}$$

Types of Unemployment

1) Frictional Unemployment:

2) Cyclical Unemployment

3) Structural Unemployment

Goal of many government policies is to eliminate ______________ unemployment.

Policies and the economy

Fiscal Policy:

Monetary Policy:

The GDP Deflator

Def. The measure of price deflation/inflation with respect to a given baseline year.

$$GDP\ Deflator_t = \frac{Nominal\ GDP_t}{Real\ GDP\ \ _t} x100$$

$$Real\ GDP = \frac{Nominal\ GDP}{GDP\ Deflator} x100$$

Note: The GDP deflator always equals 100 in the baseline year.