CONCEPT: NOMINAL GDP AND REAL GDP

● ***Gross Domestic Product (GDP)*** is the value of the final goods and services produced by a country during a year

□ ***Nominal GDP*** uses _____ prices when calculating the value of goods

□ ***Real GDP*** uses _____ prices when calculating the value of goods

$$GDP = C + I + G + NX$$

C = _____ I = _____ G = _____ NX = _____

$$Nominal\ GDP = (Quantity_1 * Current\ Price_1) + (Quantity_2 * Current\ Price_2) + \cdots$$

$$Real\ GDP = (Quantity_1 * Base\ Price_1) + (Quantity_2 * Base\ Price_2) + \cdots$$

EXAMPLE: The simple economy of Clutchtopia produces three final goods and services necessary for the survival of its citizens, the Clutchtopians: Pizza, Caffeine Pills, and Exam Reviews. Use the information in the following table to compute nominal GDP and real GDP for 2018. Assume that the base year is 2006.

	2006		2018	
Product	**Quantity**	**Price**	**Quantity**	**Price**
Pizza	250	$8	220	$10
Caffeine Pills	1,200	$5	1,500	$4
Exam Reviews	90	$15	130	$20

● Since Real GDP holds prices _____, it is seen as a better measure of changes in production of goods and services

□ Drawback: over time, prices may change relative to each other

> Price of HDTVs have fallen since 2006, while the price of milk has stayed relatively constant

□ Solution: use ***chain-weighted*** prices – a adjusted average price, rather than a constant base year price

> Calculation beyond scope of this course

● ***Inflation*** refers to a state of the economy where _____ are rising from one year to the next

□ We can use nominal GDP and real GDP to monitor inflation and general price levels in the economy

□ The ***GDP deflator*** is a statistic that measures only the prices of goods and services:

$$GDP\ deflator = \frac{Nominal\ GDP}{Real\ GDP} * 100$$

$$Inflation\ Rate = \frac{GDP\ deflator\ in\ Year\ 2 - GDP\ Deflator\ in\ Year\ 1}{GDP\ deflator\ in\ Year\ 1}$$

□ In the base year, the GDP deflator = _____

> This is because Nominal GDP ____ Real GDP in the base year

PRACTICE: The United States of Barbeque produces two goods: Hot Dogs and Hamburgers. Use the following information to calculate the GDP Deflator for 2012, assuming the base year is 2010.

Year	Price of Hot Dogs	Quantity of Hot Dogs	Price of Hamburgers	Quantity of Hamburgers
2010	$1	400	$2	600
2011	$1.05	450	$2.05	700
2012	$1.10	500	$2.10	800

PRACTICE: Using the information above, calculate the inflation rate for 2012 in the United States of Barbeque.