

## **Introductory Macroeconomics**

Pre-Tutorial #1 Week Starting 8th March 2021

The Tutorial. This week's tutorial looks at the concept of GDP.

Note that your tutor is under no obligation to go through the answers to the pre-tutorial work in detail. The focus in the tutorial will be on the tutorial work itself – the questions here are preparatory.

**Reading Guide.** You should look carefully over your lectures notes for Week 1. You may also find Chapters 1 and 2 of BOFAH useful.

**Key Concepts.** Measurement and meaning of GDP.

## Problems.

- 1. Suppose total government spending over a year is \$275 billion of which \$150 billion is spending on a system of payments made to low income families, \$75 billion is spent on the construction of roads and other infrastructure, and \$50 billion is spent on salaries for workers in the education sector. What is the government's contribution to GDP in that year? Explain.
- 2. Over a three month period, not everything that is produced is necessarily purchased (i.e., there might be inventories of unsold stock). Yet economists maintain that in any period, the values of production and expenditure will be the equal. How can this be?
- 3. Distinguish between 'final' goods and services and 'intermediate' goods and services.
- 4. Consider the following data for a hypothetical economy that manufactures engines (the only intermediate good), motorcycles and cars.

Year	Commodity	Price	Quantity	
2009	Engines	\$2	150	
2009	Cars	\$15	100	
2009	Motorcycles	\$10	50	
2010	Engines	\$6	154	
2010	Cars	\$50	99	
2010	Motorcycles	\$9	55	
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2011	Engines	\$10	160	
2011	Cars	\$90	90	
2011	Motorcycles	\$8	70	

## Using this data:

- (a) Calculate nominal GDP for each year.
- (b) Calculate a real GDP index for each year using 2009 base year prices.
- (c) Calculate a real GDP index for each year using the chain-weighted method with real GDP in 2009 equal to 1.

## Write your answers below:

		Real GDP		
Year	Nominal GDP	Base Year	Chain-Weighted	
2009				
2010				
2011				