

# Week 3 Review Session Questions

Thursday, April 17<sup>th</sup>, 5 and 6pm, North Hall 1110

Questions that are not covered in week 3 may be discussed in the following week.

1. Consider the following economy that produces four goods and services: cell phones, homes, coffee drinks, and coffee beans. Assume all the coffee beans are used in the production of the coffee drinks.

Product	Year 1		Year 2	
	Quantity	Price	Quantity	Price
Cell Phones	200	25.00	400	30.00
Homes	400	100.00	600	125.00
Coffee	1000	2.00	1200	3.00
Coffee Beans	2000	1.00	2400	2.00

- A. Using the information in the above table, what does is nominal GDP in year 1?
- B. What is the nominal GDP in year 2?
- C. What is the real GDP in year 2?
- D. What is the GDP Deflator in Year 1? Year 2?
- E. What is the inflation rate between Year 1 and Year 2?
- F. The GDP deflator in Year 3 is 140. What is the inflation rate between Year 2 and Year 3?
- G. If the real GDP in Year 3 is 80000, what is the nominal GDP?

2. Imagine gasoline prices rise significantly, but the production of gasoline contributes a small portion to GDP. How will this affect the GDP Deflator and the CPI differently?

3. The CPI is measured using a fixed basket of goods. Explain why the basket might not reflect changes in consumer behavior over time.

4. How does technological innovation in products, such as the introduction of smartphones or electric vehicles, impact the calculation of the Consumer Price Index (CPI)? Specifically, explain how the inclusion of new products and improvements in quality might create challenges for accurately measuring changes in the cost of living.

5. Consider the economy of Surf City. Surf City only produces three products: beach chairs, BBQ Grills and Surfboards.

	Base Year (2000)		2016	2017
Product	Quantity	Price	Price	Price
Beach Chairs	50	10	12	15
Grills	20	20	24	32
Surfboards	30	15	20	24

A. Use the information in the following table to calculate the inflation rate for 2017, as measured by the CPI.

B. Assume that the CPI in 2018 is 200. What is the inflation rate between 2017 and 2018?