

Macro I. Quiz 1. Name: _____

1. (a) (1 point) Which of the following is NOT a flow variable?
 - A. GDP
 - B. Consumption
 - C. Labor Force**
 - D. Exports
- (b) (1 point) GDP is...
 - A. a flow**
 - B. a stock
 - C. both a stock and a flow
 - D. neither a stock nor a flow
- (c) (1 point) Suppose that a farmer grows apples and sells them to a factory for \$1, the factory makes apple juice and sells it to a store for \$2, and the store sells it to the customer for \$3. This transaction increases GDP by
 - A. \$1
 - B. \$2
 - C. \$3**
 - D. \$6
- (d) (1 point) Which of the following actions INCREASE GDP?
 - A. Taras cooks soup and eats it.
 - B. The parking lot that was free before introduces fees.**
 - C. Kolya sells his used car.
 - D. Milena changes her daily consumption from one to two imported oranges a day.
- (e) (1 point) Which of the following events will cause the unemployment rate to INCREASE?
 - A. Increase in the number of employed, the number of unemployed stays the same.
 - B. A proportionally equal increase in the labor force and the number of unemployed workers
 - C. An increase in population, with no change in the size of the labor force
 - D. An increase in the labor force with no change in the number of employed workers**

2. Consider the following table:

Year	Quantities		Prices	
	Tea	Coffee	Tea	Coffee
2000	5	3	5	8
2005	12	5	5	10

(a) (1 point) Compute nominal GDP in years 2000 and 2005.

Solution: 49 and 110 correspondingly.

(b) (2 points) Compute real GDP in 2005. Find GDP deflator in 2005.

Solution: $RGDP=12*5+5*8=60+40=100$

Deflator= $110/100=1.1$

(c) (2 points) Assume that the following basket of goods is used to construct CPI: 1 unit of tea and 1 unit of coffee. Compute the inflation rate using CPI. Now compute the inflation rate using GDP deflator. Explain the source of differences in two measures of inflation in one sentence.

Solution: Cost of CPI basket in 2000: $5+8=13$

CPI basket in 2005: $5+10=15$

Inflation(CPI)= $(15-13)/13*100\% \simeq 15.38\%$

Inflation(Deflator)= $(1.1-1)/1*100\%=10\%$

CPI and deflator use different weights; CPI might include prices for imported goods.