

Due Date: Friday, September 2nd

1. Use the model of supply and demand to explain how a fall in the price of frozen yogurt would affect the price of ice cream and the quantity of ice cream sold. In your explanation, identify the exogenous and endogenous variables.

2. Jimmy is an avid candy connoisseur. Last year, he purchased 75 Snickers bars costing \$1.75 each and 100 Butterfinger bars costing \$1.25 each. This year, he purchased 150 Snickers bars for \$1.25 each and 80 Butterfinger bars for \$2.25 each.

Assume that a typical consumer basket includes 50 bars of each type. Compute a consumer price index for each year and determine the percentage change in the index over the two years.

Calculate the implicit price deflator (defined as Jimmy's nominal spending divided by his real spending). How does this deflator compare to the CPI you calculated above? Which measurement do you think is more relevant in determining the change in Jimmy's cost of living?

3. Consider an economy that produces and consumes bread and automobiles. The following table contains data for two different years:

	Year 2000	Year 2010
Price of an automobile	\$40,000	\$50,000
Price of a loaf of bread	\$1.50	\$2.50
Number of automobiles produced	100	120
Number of loaves of bread produced	5,000,000	4,000,000

Using the year 2000 as the base year, compute the following statistics for each year: nominal GDP, real GDP, the implicit price deflator for GDP, and a fixed-weight price index such as the CPI.

4. List and explain (one or two sentences each) the differences between the CPI Index and the GDP Deflator. Which do you believe is a better measure of actual inflation in the U.S? Why?

5. Place each of the following transactions in one of the 4 components of expenditure: consumption, investment, government purchases, and net exports:

- a) Boeing sells an airplane to the Air Force
- b) Boeing sells an airplane to American Airlines
- c) Boeing sells an airplane to Air France.
- d) Boeing sells an airplane to Amelia Earhart.
- e) Boeing builds an airplane to be sold next year.

6. Consider how each of the following events is likely to affect real GDP. Do you think the change in real GDP reflects a similar change in economic well-being? Explain briefly.

- a) A hurricane in Florida forces Disney World to shut down for a month.
- b) The discovery of a new, easy-to-grow strain of wheat increases farm harvests.
- c) Increased hostility between unions and management sparks a rash of strikes.
- d) Firms throughout the economy experience falling demand, causing them to lay off workers.
- e) Congress passes new environmental laws that prohibit firms from using production methods that emit large quantities of pollution.
- f) More high-school students drop out of school to take jobs mowing lawns.
- g) Fathers around the country reduce their work-weeks to spend more time with their children.