

Economics 102  
Summer 2015  
Quiz #2  
Tuesday, June 30, 2015

Name \_\_\_\_\_

Please write your answers neatly and legibly.

1. (1 point) Alice goes to the store and purchases \$135 worth of groceries. In her grocery bag there is \$10 worth of cheese produced this year in France; \$20 worth of mangoes from a tropical country; \$25 worth of beef produced this year in Texas; \$15 worth of paper goods produced this year in Appleton, WI; and \$40 worth of brats and hotdogs produced in Madison, WI. Given these expenditures and holding everything else constant, what is Alice's contribution measured in dollars to the following given these purchases?

Alice's contribution to GDP in the U.S. this year = \_\_\_\_\_

Alice's contribution to consumption spending in the U.S. this year = \_\_\_\_\_

2. (5 points: 1/2 point for each answer and 1/2 point for each explanation) Maury this week writes five checks. The first check is made out to "Maude Rivers" as payment for cleaning services Maude provides to Maury. Maury does not report this payment to any government authority and Maude does not report this payment to the Internal Revenue Service. The second check is made out to "Ace Awnings" a company that has provided tents for outdoor celebrations for the last fifty years. The third check is made out to "Bill's Auto Shop" as payment for a hit-and-run accident that Maury experienced last week that destroyed the right side of his car. The fourth check is to "Bob Miller" and represents a contribution to a neighborhood group that sponsors a low-key party each summer. The fifth check is to "Jane Doe" and is a payment to Jane for legal services that she rendered in drawing up an updated will for Maury. Determine whether the dollar amount of each of these checks is part of the economy's GDP calculation for the year. Fill in your answers ("counted in GDP", "NOT counted in GDP") in the provided blanks. Then provide a short explanation for your answer.

First check to Maude Rivers: \_\_\_\_\_

Explanation:

Second check to Ace Awnings: \_\_\_\_\_

Explanation:

Third check to Bill's Auto Shop: \_\_\_\_\_

Explanation:

Fourth check to Bob Miller: \_\_\_\_\_

Explanation:

Fifth check to Jane Doe: \_\_\_\_\_  
Explanation:

3. Consider the market for cellphones in an economy that can be described by the following demand and supply equations where P is the price per cellphone in dollars and Q is the number of cellphones:

$$\text{Demand Curve: } Q = 5000 - 10P$$

$$\text{Supply: } Q = 10P - 1000$$

- a. (1 point) Given the above information, calculate the value of consumer surplus (CS) and producer surplus (PS) in this market. Show your work and provide units of measurement in your answer. Put your answers in the provided blanks.

$$\text{CS} = \underline{\hspace{2cm}}$$

$$\text{PS} = \underline{\hspace{2cm}}$$

- b. (3 points: 1/2 point for each answer and its required work) Suppose the government in this economy decides that there are too many cellphones. The government passes legislation that limits the total number of cellphones to 1000. Given this legislation, compute the following values. Show your work and include your units of measurement in your answers.

$$\text{Number of cellphones sold in market} = \underline{\hspace{2cm}}$$

$$\text{Price of cellphone in this market} = \underline{\hspace{2cm}}$$

$$\text{CS given this legislation} = \underline{\hspace{2cm}}$$

$$\text{PS given this legislation} = \underline{\hspace{2cm}}$$

$$\text{Deadweight Loss (DWL) given this legislation} = \underline{\hspace{2cm}}$$

$$\text{Total gain or loss in PS due to this program relative to no government intervention in the market} = \underline{\hspace{2cm}}$$