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Summer 2018
Quiz \#2

To get full credit on this quiz you must show your work and you must do your work neatly.

1. Pakoa is a small, closed economy that produces only cellphones. The domestic demand and domestic supply curves for cellphones in Pakoa is given by the following equations, where $P$ is the price per unit and Q is the quantity of cellphones:

Domestic Demand: P = 200 - (1/20) Q
Domestic Supply: P = $20+(1 / 20)$ Q
The world price is $\$ 80$ per cellphone.
a. (2 points) Compute the values of each of the following if Pakoa keeps its cellphone market closed to trade. Show your work to get full credit.

Consumer Surplus if closed market $=$ $\qquad$
Producer Surplus if closed market = $\qquad$
Equilibrium Price if closed market = $\qquad$
Equilibrium Quantity if closed market = $\qquad$
b. (2 points) Compute the values of each of the following if Pakoa allows its cellphone market to be opened to trade. Show your work to get full credit.

Consumer Surplus if open market $=$ $\qquad$
Number of cellphones supplied domestically if open market =
Producer Surplus if open market = $\qquad$
Quantity of cellphones bought if open market = $\qquad$
c. (2 points) Suppose that the cellphone market is open to trade, but that the government implements a tariff of $\$ 20$ per imported cellphone. Compute the values of each of the following for Pakoa given these changes. Show your work to get full credit.

Number of cellphones demanded domestically with the tariff = $\qquad$ Number of cellphones imported with the tariff = $\qquad$ Deadweight loss due to imposition of the tariff = $\qquad$ Government tariff revenue $=$ $\qquad$
2. (2 points) For each scenario determine what kind of unemployment is represented by the description.
a. Suppose during a recession Samantha decides it is time for a change in her job, so she quits her job as a legal assistant and decides to look for a new job as a bread baker. Samantha's unemployment is an example of $\qquad$ unemployment.
b. McDonald's makes the hard decision to fire Ronald McDonald and replace him with a burger-flipping robot. Ronald McDonald's unemployment is an example of
$\qquad$ unemployment.
c. Marcy's neighbors are now paying $\$ 10$ an hour for a babysitter. Marcy would be willing to do this work for $\$ 8$ an hour but she never gets hired by the neighbors due to their loyalty and commitment to their favorite babysitter, Nancy. Marcy's unemployment is an example of $\qquad$ unemployment.
d. Joe is a member of a Heavy Machinery Union and he is a skilled operator of steam shovels, paving machines, and large tonnage trucks. But Joe lives in Alaska and his skills are not in demand from November through April. Joe knows with certainty that he will be hired May through October. Joe's unemployment this past February is an example of $\qquad$ unemployment.
3. (2 points) Use the following data to answer the next question:

| Fruits Incorporated |  | Rejuicinated Co |  |
| :--- | :--- | :--- | :--- |
| Revenues |  | Revenues |  |
| Sales to Rejuicinated Co | $\$ 15,000$ | Sales of juice to customers |  |
| Expenses |  | Expenses |  |
| Wages | $\$ 8000$ | Inputs: Fruits, Inc. | $\$ 15,000$ |
| Profits | $\$ 500$ | Wages | $\$ 11,000$ |
| Rent | $\$ 750$ | Rent | $\$ 7000$ |
| Interest Payments | $\$ 400$ | Profits | $\$ 4000$ |

Suppose you are told that GDP is equal to $\$ 32,000$. Given this information and holding everything else equal to zero, what are the values for the following? Show your work to get full credit.

Interest payments made by Rejuicinated Co.
The value added by Rejuicinated Co.

