

•	Name:			
•	Date: _			

BUS 201: Principles of Global Economics

Quiz #2: Suggested Solutions

Fall 2025

INSTRUCTIONS:

- Write your name, date, and section clearly at the top of the first page.
- This is a closed-book quiz. You may not use your textbook, class notes, or electronic devices.
- The quiz consists of three parts: Definitions, Multiple Choice, and Short Answers.
- For definitions, write in complete sentences. Limit each definition to 3 sentences.
- For True/False questions, write TRUE or FALSE for each statement. If the statement is FALSE, provide a brief one- to two-sentence justification.
- For multiple-choice questions, circle the single best answer. Only one option is correct.
- For short-answer questions, write your responses in complete sentences. Limit your response to 5 sentences or fewer.
- The total time allowed is 100 minutes. Manage your time carefully.

Problem 1. Definitions

(3 Points Each)

Select six items on the list of items below, and provide a definition of the items that you chose.

- Willingness to Pay
- Total Surplus
- Tariff

- Producer Surplus
- Price Floor
- Price Elasticity of Demand

- Deadweight Loss
- Taxation
- Income Elasticity of Demand

• Willingness to Pay:

The maximum amount a buyer is willing to pay for a good or service; it reflects the buyer's valuation of one additional unit.

Producer Surplus:

The amount a seller is paid for a good minus the seller's cost of producing it; it measures the benefit sellers receive from market participation.

• Deadweight Loss:

The reduction in total surplus that occurs when a market distortion such as a tax, subsidy, or price control prevents some mutually beneficial trades.

• Total Surplus:

The sum of consumer and producer surplus; it represents the total net benefit to society from the production and consumption of a good.

• Price Floor:

A legally imposed minimum price for a good or service. If set above the equilibrium price, it is binding and creates a surplus.

• Taxation:

A mandatory payment to the government per unit or as a percentage of value, which creates a wedge between the price buyers pay and the price sellers receive.

• Tariff:

A tax on imported goods that raises the domestic price above the world price, reducing imports and creating both government revenue and deadweight loss.

• Price Elasticity of Demand:

A measure of how much the quantity demanded of a good responds to a change in its price, calculated as the percentage change in quantity demanded divided by the percentage change in price.

• Income Elasticity of Demand:

A measure of how much the quantity demanded of a good responds to a change in consumers' income; positive for normal goods and negative for inferior goods.

Problem 2. True or False

(3 Points Each)

Determine whether the following statements are either TRUE or FALSE. If you deem that the statement is TRUE, there is no need to justify your answer. If you deem that the statement is FALSE, you <u>MUST</u> justify your verdict by providing an explanation.

- 2.A. If the price elasticity of demand for a product is greater than 1, a price increase will raise the firm's total revenue.
 - FALSE
 - If demand is elastic, a price increase reduces total revenue because the percentage drop in quantity outweighs the price rise.
- 2.B. A binding price ceiling leads to a shortage in the market, while a non-binding price ceiling has no effect on equilibrium.
 - TRUE
- 2.C. In a competitive market, total surplus is maximized at the equilibrium quantity where supply equals demand.
 - TRUE
- 2.D. Tariffs improve overall economic welfare in the importing country by increasing both consumer and producer surplus.
 - FALSE
 - In an importing country, a tariff raises domestic price, reduces consumer surplus by more
 than the gains to producers and government, and creates deadweight loss, so overall welfare
 falls.

Problem 3. Multiple Choice

(3 Points Each)

- 3.A. When the price of a good rises by 10% and quantity demanded falls by 20%, demand is:
 - a) Elastic
 - b) Inelastic
 - c) Unit elastic
 - d) Perfectly inelastic
- 3.B. Which of the following goods is most likely to have the most inelastic demand?
 - a) Airline tickets for vacations
 - b) Toilet paper
 - c) Luxury watches
 - d) Restaurant meals
- 3.C. If two goods have a positive cross-price elasticity of demand, they are:
 - a) Complements
 - b) Substitutes
 - c) Normal goods
 - d) Inferior goods
- 3.D. A price floor set above the equilibrium price will:
 - a) Create a shortage
 - b) Create a surplus
 - c) Have no effect
 - d) Lower the equilibrium wage
- 3.E. Which of the following correctly describes tax incidence?
 - a) The side of the market that pays the tax to the government always bears the larger burden.
 - b) The side of the market that is more elastic bears the larger burden.
 - c) The side of the market that is less elastic bears the larger burden.
 - d) Tax incidence depends only on the size of the tax.

Problem 3. Multiple Choice (continued)

(3 Points Each)

- 3.F. Which situation best illustrates a deadweight loss caused by taxation?
 - a) Consumers buying more of a subsidized good
 - b) Producers and consumers losing mutually beneficial trades
 - c) Government revenue exceeding total surplus
 - d) A budget deficit caused by tax cuts
- 3.G. The "invisible hand" refers to:
 - a) The ability of central planners to guide the economy efficiently
 - b) The self-interest of individuals leading to socially desirable outcomes
 - c) Government policies correcting market failures
 - d) The random behavior of prices in competitive markets
- 3.H. Suppose the government imposes a tax on gasoline. If demand for gasoline is inelastic and supply is elastic, who bears most of the tax burden?
 - a) Buyers
 - b) Sellers
 - c) Government
 - d) Both sides equally
- 3.I. When supply and demand are both highly elastic, a tax will:
 - a) Generate high revenue and small deadweight loss
 - b) Generate high revenue and large deadweight loss
 - c) Generate little revenue and large deadweight loss
 - d) Generate little revenue and no deadweight loss
- 3.J. The Laffer Curve illustrates the relationship between:
 - a) Tax rates and tax revenue
 - b) Supply elasticity and demand elasticity
 - c) Income and consumption
 - d) Government spending and inflation

Problem 3. Multiple Choice (continued)

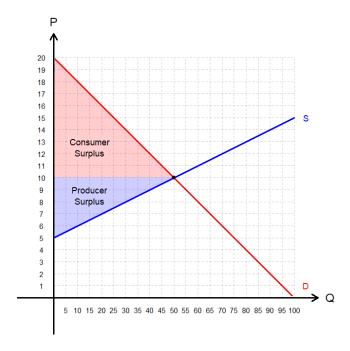
(3 Points Each)

- 3.K. A country that can produce a good at a lower opportunity cost than another country has:
 - a) An absolute advantage
 - b) A comparative advantage
 - c) A production advantage
 - d) A scale advantage
- 3.L. When an economy opens to international trade and becomes an importer of a good:
 - a) Domestic consumers gain and domestic producers lose
 - b) Domestic consumers lose and domestic producers gain
 - c) Both consumers and producers lose
 - d) Total surplus decreases
- 3.M. Which of the following best describes the effect of a tariff on imports?
 - a) It lowers domestic prices and reduces producer surplus
 - b) It raises domestic prices and increases consumer surplus
 - c) It raises domestic prices and creates deadweight loss
 - d) It eliminates deadweight loss by balancing trade

Problem 4. Short Answers

(10 Points Each)

4.A. Consider a market for hamburgers illustrated in the diagram below. Find or calculate the following values:



• Equilibrium Price: \$10

• Equilibrium Quantity: 50

• Consumer Surplus: \$250

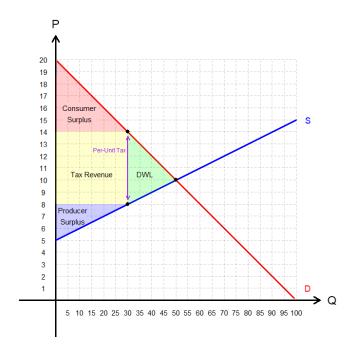
• Producer Surplus: \$125

• Total Surplus: \$375

Problem 4. Short Answers (continued)

(10 Points Each)

4.B. Consider a market for hamburgers illustrated in the diagram below. The government decides to levy a per-unit \$6 tax on hamburgers. Find or calculate the following values under the per-unit \$6 tax:



• Quantity Traded: 30

• Price Paid by Consumers: \$14

• Price Received by Producers: \$8

• Consumer Surplus: \$90

• Producer Surplus: \$45

• Tax Revenue: \$180

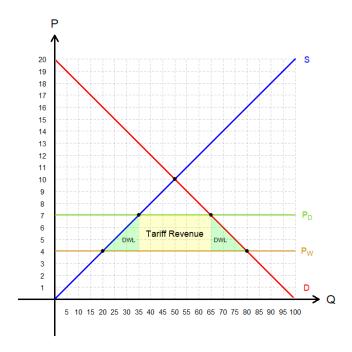
• Total Surplus: \$315

• Deadweight Loss of Taxation: \$60

Problem 4. Short Answers (continued)

(10 Points Each)

4.C. Consider the domestic market for imported coffee shown in the diagram below. The world price of coffee is \$4 per pound, and the domestic market is open to trade. Suppose the government introduces a tariff of \$3 per pound. Using the diagram, determine the following:

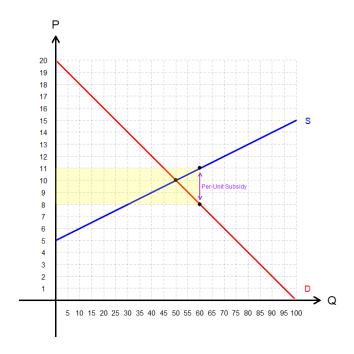


- The domestic price of coffee before tariffs are imposed: \$4
- The domestic price of coffee after tariffs are imposed: \$7
- The quantity of imports before tariffs are imposed: **60**
- The quantity of imports after tariffs are imposed: 30
- The government's tariff revenue: \$90
- The deadweight loss of tariffs: \$45

Problem 5. Extra Credit: Challenging Question

(5 Points)

5. Consider the market for hamburgers illustrated in the diagram below. The government decides to subsidize the hamburger industry by paying a \$3 per-unit subsidy for each hamburger sold. Find or calculate the following values:



- Quantity Traded: 60
- Price Paid by Consumers: \$8
- Price Received by Producers: \$11
- Government Expenditure on Subsidies: \$180

- Original Score: ________
- Recovered Score: _______
- Original Date: ________
- Recovered Date: ________