



• Name: \_\_\_\_\_

• Date: \_\_\_\_\_

• Section: \_\_\_\_\_

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## **BUS 201: Principles of Global Economics**

### **Problem Set #3: Suggested Solutions**

**Fall 2025**

#### **INSTRUCTIONS:**

- Write your full name, date, and section clearly at the top of the first page.
- This problem set is designed as a check-in assignment to help you practice the core ideas. It is not intended to be difficult, but you are expected to think carefully about your answers.
- For multiple-choice problems, circle the best answer.
- For short-answer problems, limit your response to no more than 4 sentences. Be concise but complete, and use economic reasoning in your answers.
- You may use your textbook, lecture slides, and personal notes.

**Problem 1. Multiple Choice**

1.A. In welfare economics, total surplus is defined as:

- a) The total revenue collected by sellers.
- b) The sum of consumer surplus and producer surplus.**
- c) The difference between consumer and producer surplus.
- d) The total benefits received only by consumers.

1.B. A decrease in the market price of a good will:

- a) Increase consumer surplus and decrease producer surplus.**
- b) Decrease both consumer and producer surplus.
- c) Increase both consumer and producer surplus.
- d) Leave total surplus unchanged.

1.C. In a competitive market at equilibrium, which of the following is true?

- a) Total surplus is minimized.
- b) The marginal buyer's willingness to pay is less than the marginal seller's cost.
- c) The allocation of goods maximizes total surplus.**
- d) Some mutually beneficial trades do not occur.

1.D. The deadweight loss from a tax represents:

- a) The tax revenue collected by the government.
- b) The loss in total surplus that is not recaptured by any other party.**
- c) The reduction in producer surplus only.
- d) The transfer of surplus from buyers to sellers.

1.E. When supply and demand are both highly elastic, the deadweight loss from taxation tends to be:

- a) Smaller, because the tax affects few buyers and sellers.
- b) Larger, because quantity traded falls sharply.**
- c) Zero, because the burden is shared equally.
- d) Independent of elasticity.

**Problem 1. Multiple Choice (continued)**

1.F. According to the Laffer Curve, increasing a tax rate will:

- a) Always increase tax revenue.
- b) Always decrease deadweight loss.
- c) Initially raise but eventually lower total tax revenue.**
- d) Have no relationship with tax revenue.

1.G. When a country opens to trade and becomes an exporter of a good:

- a) Domestic consumers gain, and domestic producers lose.
- b) Domestic producers gain, and domestic consumers lose.**
- c) Both domestic consumers and producers gain.
- d) Both domestic consumers and producers lose.

1.H. A tariff on imports generally leads to:

- a) Higher domestic prices, larger imports, and higher total surplus.
- b) Higher domestic prices, lower imports, and a deadweight loss.**
- c) Lower domestic prices, higher consumer surplus, and no deadweight loss.
- d) No effect on consumer or producer surplus.

1.I. The “Jobs Argument” for restricting trade claims that free trade:

- a) Increases domestic employment in import-competing industries.
- b) Shifts jobs away from inefficient sectors but creates new ones elsewhere.**
- c) Reduces overall employment permanently.
- d) Makes the labor market less flexible.

1.J. The “Protection-as-a-Bargaining-Chip” argument can fail because:

- a) It always raises national welfare.
- b) Threats to impose trade restrictions may backfire and harm the domestic economy.**
- c) It guarantees that the trading partner will reduce its tariffs.
- d) Economists widely support it as a negotiation tactic.

**Problem 2. True / False**

Determine whether each statement is TRUE or FALSE. If you deem that the statement is FALSE, you MUST justify your verdict by providing a brief explanation.

2.A. Total surplus is maximized when a market is in equilibrium under perfect competition.

- TRUE

2.B. A tax on a good always increases total welfare in the economy.

- FALSE
- Taxes transfer part of surplus to government but create DWL, lowering overall welfare.

2.C. When the supply of labor is inelastic, an increase in the income tax results in a small deadweight loss.

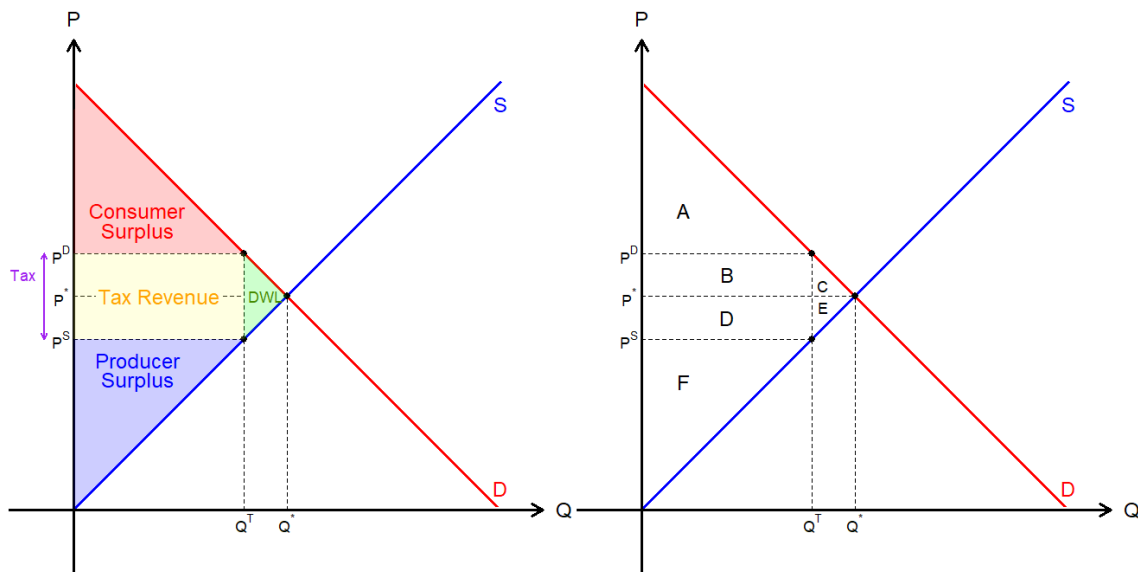
- TRUE

2.D. A nation that imports a good must have a comparative advantage in producing that good.

- FALSE
- Countries import goods they produce at relatively higher opportunity cost.

**Problem 3. Short Answer**

3.A. Using a properly labeled supply-and-demand diagram, illustrate consumer surplus, producer surplus, and total surplus in equilibrium. Then show how a per-unit tax reduces total surplus and creates deadweight loss.



- Before Taxation:
  - Consumer Surplus:  $A+B+C$
  - Producer Surplus:  $D+E+F$
  - Total Surplus:  $A+B+C+D+E+F$
- After Taxation:
  - Consumer Surplus:  $A$
  - Producer Surplus:  $F$
  - Tax Revenue:  $B+D$
  - Total Surplus:  $A+B+D+F$
  - Deadweight Loss:  $C+E$

3.B. Explain how elasticities of supply and demand determine who bears the greater burden of a tax. Include an example of a good with relatively inelastic demand.

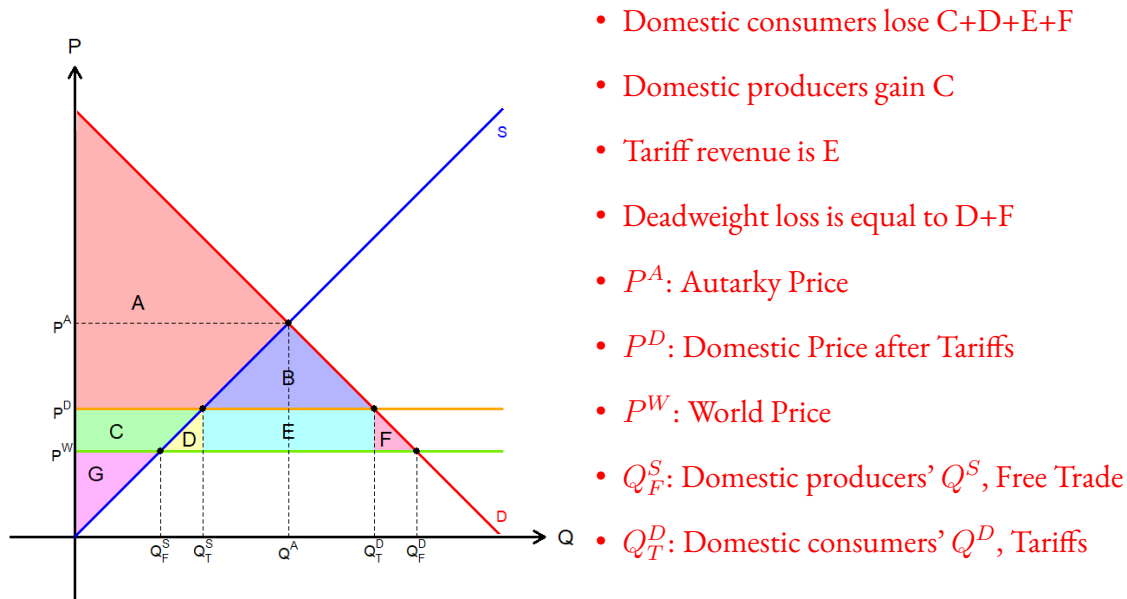
- Tax burden falls more on the side that is less elastic.
- For instance, the demand for gasoline in the short-run is price inelastic, so consumers bear more of the burden.

**Problem 3. Short Answer (continued)**

3.C. Draw a diagram showing the effects of a tariff on an imported good. Label and identify:

- Changes in consumer and producer surplus,
- Tariff revenue, and
- Deadweight loss.

Explain in one paragraph who gains, who loses, and why total welfare falls.



3.D. Evaluate the “Jobs Argument” and “Infant-Industry Argument” for restricting trade. How do economists respond to each of these claims?

- The jobs argument often ignores job creation in other sectors, and the role of automation in job replacements.
- The infant-industry argument is often misused by those with political capital, and the temporary protections rarely are removed.
- Overall, economists are in favor of adjustment aid, not protectionism, as long-run efficiency favors open trade.

• Original Score: \_\_\_\_\_

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