

Practice Midterm Exam

EC 380 - International Economic Issues

Winter 2025

Attempt all problems.

At the very least, identify where you no longer know what to do.

Be aware of timing.

Name: ANSWER KEY 95#: _____

The maximum amount of points on this exam is **X points**. You have a total of 1h 20min (80 minutes) to complete the exam, unless otherwise noted. The only items allowed on your desk at any time are a pen and/or pencil, scratch paper, a 3x5 note card, and a calculator. Everything else must be stored in your bag underneath your desk. Any form of cheating will result on a zero on the exam.

There are three sections to be completed:

- **Multiple Choice:** 3 Questions
- **Short Answer Questions:** 1 Questions
- **Multi-Part Analysis Questions:** 1 Question

Point totals and question specific instructions are listed for each section. Please ask for clarification if a question is not clear to you.

The exam is a total of 4 pages. **Please verify you have all 4 in your exam. If you do not, let me know immediately.**

Multiple Choice - 20 Points

Circle or "X" the answer you think most correctly answers the following questions. If you mark a choice and would like to change it, **clearly indicate which one is your correct answer**.

1. [4 points] Under **autarky**, what must the relative price of a good be equal to?
 - A. The cost of inputs
 - B. The world price
 - C. Its opportunity cost of production
 - D. The consumer's willingness to pay

2. [4 points] The **Stolper-Samuelson theorem** states that a **decrease** in the price of a good _____ the income earned by factors are that are used _____ in its production
 - A. Lowers; intensively
 - B. Raises; intensively
 - C. Lowers; non-intensively
 - D. Raises; non-intensively

3. [4 points] When trade occurs, we expect the price of the **import good** to be _____ relative to pre-trade prices.
 - A. Equal
 - B. Lower
 - C. Higher
 - D. Cannot tell without knowing more

Short Answer - 15 Points

Answer the following questions to the best of your ability. For full credit, show all of your work and clearly indicate your final solution for each party by circling the answer.

4. Suppose that Mexico and Costa Rica have the following capital and labor endowments:

	Capital	Labor
Mexico	540	650
Costa Rica	455	480

- (a) [5 points] Which country has the comparative advantage in producing the **labor-intensive** good?

$$\text{LABOR INTENSIVE} = \frac{L}{K}$$

$$\text{MEX: } \frac{650}{540} = 1.20$$

$$\text{CRC: } \frac{480}{455} = 1.05$$

ALTERNATIVELY, FIND $\frac{K}{L}$

PICK THE SMALLEST VALUE

- (b) [5 points] How would things change in terms of comparative advantages if suddenly migrants entered Mexico, causing labor to jump up by an additional 200 units?

LET MEX LABOR NOW BE
 $650 + 200 = 850$

$$\text{MEX: } \frac{850}{540} = 1.57$$

$$\text{CRC: } 1.05$$

NOTHING CHANGES

IF CRC \rightarrow MEX

$$\text{MEX: } 1.57$$

$$\text{CRC: } \frac{280}{455} = 0.62$$

NOTHING CHANGES

Multi-Part Analysis - 30 Points

Answer the following questions to the best of your ability. For full credit, show all of your work and clearly indicate your final solution for each party by circling the answer.

5. Suppose we are in an **autarky scenario** and considering the market for an imported good at Home. Use the following **demand and supply** functions for solving the various equilibrium scenarios.

$$\text{Demand: } P = 415 - \frac{1}{7}Q_d$$

$$\text{Supply: } P = 10 + \frac{1}{4}Q_s$$

Be sure to show all your work

- (a) [5 points] Report the coordinates of the equilibrium point, which represent the **price and quantity the market operates at**

$$\text{Demand} = \text{Supply}$$

$$415 - \frac{1}{7}Q = 10 + \frac{1}{4}Q$$

$$415 - 10 = \left(\frac{1}{4} + \frac{1}{7}\right)Q$$

$$405 = \left(\frac{11}{28}\right)Q$$

$$Q^* = \frac{405 \cdot 28}{11} = 1030.9$$

$$P = 10 + \frac{1}{4}(1030.9)$$

$$P = 10 + 257.7$$

$$P = 267.7$$

- (b) [5 points] Calculate the consumer and producer surplus values under **autarky**. What is the total welfare for the economy?

$$CS = \frac{1}{2}(415 - 267.7) \cdot 1030.9 = 75,925.79$$

$$PS = \frac{1}{2}(267.7 - 10) \cdot 1030.9 = 132,831.5$$

$$\text{WELFARE} = CS + PS = 208,757.3$$

- (c) [6 points] Suppose the government imposes a tariff of t value on every good. What would we **expect to happen to quantity supplied, quantity demanded, and price, relative to free-trade**? Provide a clear answer for each part mentioned and briefly explain why you expect those movements.

(a) **Quantity Supplied**

Will increase under the tariff. More domestic producers will re-enter the market.

(b) **Quantity Demanded**

Will decrease under the tariff. Higher prices "price" out consumers.

(c) **Price**

Will increase as tariffs inherently mean higher prices.