

Your name ANSWERS

Parsons, Spring 2024

Quiz 1 2024 年 5 月 21 日

Part I

1.) What area(s) (1, 2, 3, 4, 5, etc. or some combination of them) describes the LOSS (decrease in CS) to the Consumer from an Import Tariff?

2) What area(s) (or some combination of them) describes the GAIN (increase in PS) to the Domestic Producer from an Import Tariff?

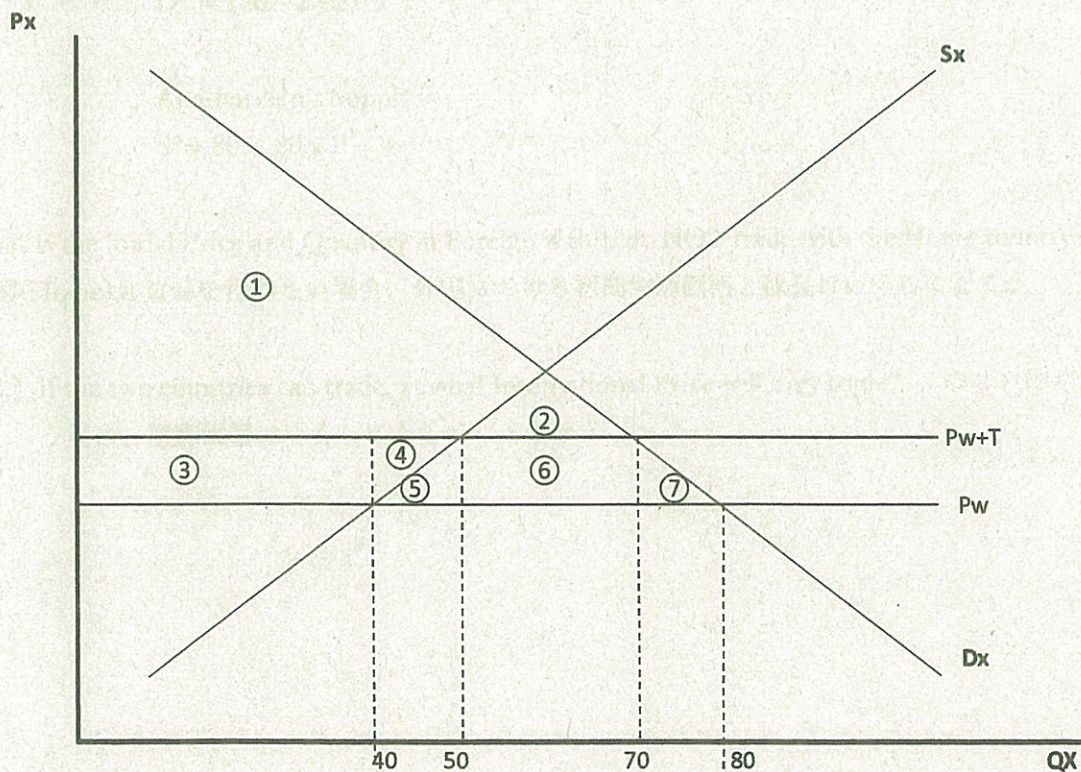
3) What is the quantity of imports under free trade (before the tariff is imposed)? (Provide a numerical answer.)

1) どの領域 (1, 2, 3, 4, 5 など、またはそれらの組み合わせ) が、輸入関税から消費者への損失(消費者余剰の減少)を示していますか？

2) どの領域 (またはそれらの組み合わせ) が輸入関税から国内生産者への利益 (生産者余剰の増加)を示していますか？

3) (関税が課される前の)自由貿易下の輸入量はどのくらいですか？ (数値で答えなさい。)

Graph for Problem 1: Tariff (small country)



答え:

- 1) 3 4 5 6 7
- 2) 3 4
- 3) $80 - 40 = 40$

Part II. KOM Problems

- 1.) (自国) Home's Demand Curve for Wheat is

$$D = 200 - 20 \times P$$

It's supply curve is

$$S = 80 + 20 \times P$$

$$\begin{aligned} D &= S \\ 200 - 20 \cdot P &= 80 + 20 \cdot P \\ 120 &= 40P \\ \boxed{\$3 = P} \\ S &= 80 + 20(3) = 80 + 60 = \boxed{140 = Q} \end{aligned}$$

What is the initial equilibrium (no-trade) Price and Quantity in Home if they do NOT trade with Foreign? 外国と貿易を行わない場合、自国における初期均衡価格と数量はいくらになるか。

- 2.) (外国) Foreign's Demand curve is

$$D^* = 180 - 20 \times P$$

And Foreign's Supply is

$$S^* = 80 + 30 \times P$$

$$\begin{aligned} D &= S \\ 180 - 20P &= 80 + 30P \\ 100 &= 50P \\ \boxed{\$2 = P^*} \\ S &= 80 + 60 = 140 \quad \boxed{Q^* = 140} \end{aligned}$$

What is the initial Price and Quantity in Foreign if they do NOT trade with the Home country? 自国(Home)と貿易を行わない場合、外国における初期均衡価格と数量はいくらになるか。

- 3.) If the two countries can trade, at what International Price will they trade? この2カ国が貿易を行う場合、国際価格はいくらになるでしょうか?

$$\begin{aligned} D + D^* &= 200 - 20P + 180 - 20P = 380 - 40P \\ S + S^* &= 80 + 20P + 80 + 30P = 160 + 50P \end{aligned}$$

$$380 - 40P = 160 + 50P$$

$$220 = 90P$$

$$\frac{220}{90} = P$$

$$\Rightarrow \underline{P = \$2.44}$$

Quiz 1 (second one)

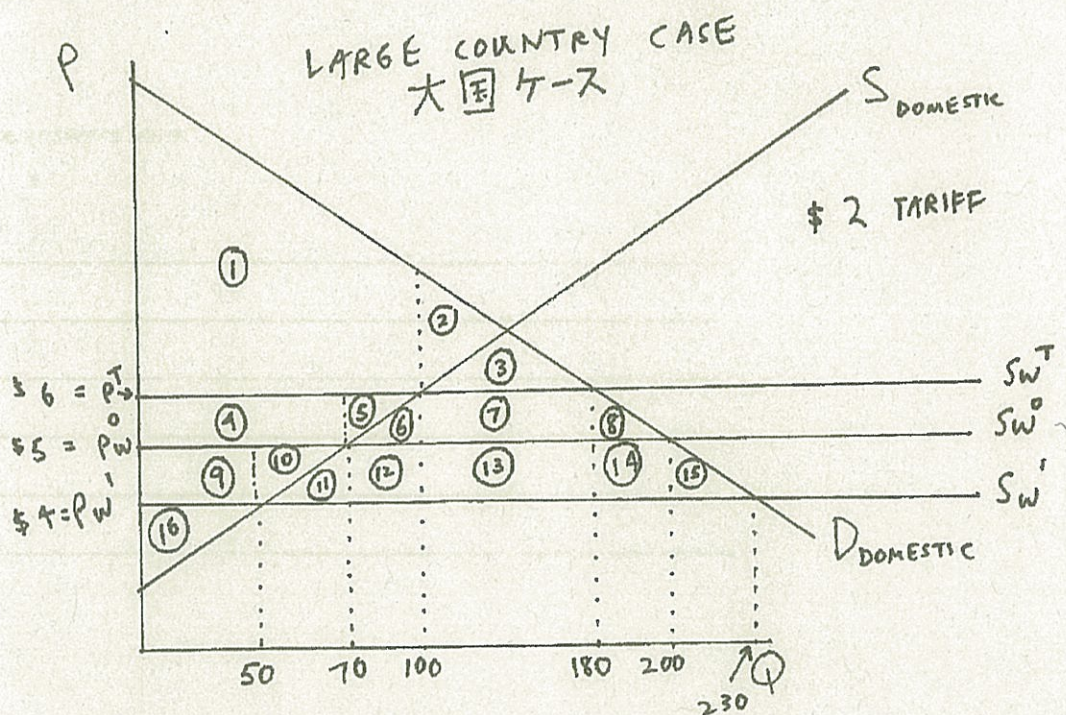
May 30th, 2023

Sw^0

Is the world price BEFORE the tariff.

Sw^1

Is the world price AFTER the tariff.



1.) What area(s) (1, 2, 3, 4, 5, 6, etc. or some combination of them) describes the LOSS (decrease in CS) to the Consumer from an Import Tariff (remember, this is the **Large Country case**)? 消費者の余剰のロス? $4+5+6+7+8$

2) What area(s) (or some combination of them) describes the GAIN (increase in PS) to the Domestic Producer from an Import Tariff? 生産者のゲイン?

3) What is the quantity of imports under free trade (before the tariff is imposed)? (Provide a numerical answer.) 関税前の輸入数量? $200(\text{total demand at price} = \$5) - 70(\text{domestic production when } p = \$5) = 130$ (imported amount)

4) What is the quantity of imports after the tariff is imposed? (Provide a numerical answer.) 関税後の輸入数量 $180 - 100 = 80$

5) How much is the tax revenue (please provide a numerical \$ figure) is collected from the tariff? 関税収入? (\$で) $2 \text{ times } 80 = \$160$

6) What is net gain or loss to the country overall? Please provide a specific \$ figure. 国のネットロス? (\$で) The answer is \$55. Area 13 minus area 6 and minus 8. We may need to discuss this in detail. So, see you next week!

Write answers here:

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____