

ECON 107

Quiz 3

This quiz will last 10 minutes.

1. (6 points) **Honor Statement:** Please read and sign the following statement:

I promise that my answers to this test are based on my own work without reference to any notes, books, or the assistance of any other person. I will also neither help others nor use a calculator or other electronic aid for calculation.

Name and Surname: _____
Student ID: _____
Signature: _____

Remark 1 *There are two versions of the quiz, in one country a can produce 30 units of F , 60 units of C . In the other it is reversed. All other countries are reversed as well, I will answer for the version where the maximum C is 30.*

2. (6 points total) There are three economies, each of which produce only food (F) and clothing (C). All of them have triangular production possibility sets and linear production possibilities frontiers. Our economy (a) can be characterized as the maximum C they can produce is 30 (when they produce no F) and the maximum F is 60 (when they produce no C).

For each of the economies below state whether country a would strictly benefit from trading with them, and why one might think they would not.

- (a) For country b the maximum C is 5000 and the maximum F is 6000.

Solution 2 *Country a has a comparative advantage in F , and thus should produce all F . Let \bar{X}_i be the maximum country i can produce of good X . Since $\frac{\bar{F}_a}{\bar{C}_a} = \frac{60}{30} = 2$ while $\frac{\bar{F}_b}{\bar{C}_b} = \frac{6000}{5000} = 1.2$ a should specialize in F while b specializes in C .*

It is completely irrelevant that country b has an absolute advantage.

- (b) For country c the maximum C is 20 and the maximum F is 40.

Solution 3 *Since $\frac{\bar{F}_a}{\bar{C}_a} = \frac{\bar{F}_c}{\bar{C}_c}$ neither has a comparative advantage, thus while they could trade it has no benefit. And again it is completely irrelevant that country a has an absolute advantage.*

3. (8 points) Explain the diamond/water paradox and how it is resolved. Be sure to explain how it is about margins and not about scarcity.

Solution 4 *The diamond/water paradox is that diamonds have a very low average value but a high price. On the other hand water has a very high average value but a very low price.*

The resolution of this paradox is that prices are generally set by marginal cost (in the long run) and the marginal cost of producing an extra diamond is very high, while for water it is essentially zero (especially if you don't know about germ theory.)

It is also true that diamonds are more "scarce" than water, but the reason they are scarce is because their marginal cost of production is very high. In reality if money is no object we could flood the world with man made diamonds, the reason we don't do that is because it costs too much—not that it is "scarce."

4. (3 points total) Standard feedback questions:
- (a) (1 point) Out of ten, my level of comprehension of the material covered this week is:

 - (b) (1 point) My favorite topic of the week was:

 - (c) (1 point) The topic I understood the least this week was: