Econ 2016: Principles of Microeconomics

Homework 2 (Total score: 20 Points)

Due Date: Aug 29th, 12:40 PM

1. Multiple Choice

B 1. (2 points) In a two-person economy, if Abby can produce candles at a lower opportunity cost than Rebecca. Abby definitely has _____ in producing candles relative to Rebecca.

A. an absolute advantage

B. a comparative advantage

C. both a comparative advantage and an absolute advantage

D. More information is needed to determine the answer.

B 2. (2 points) If a PPF has a negative slope and is bowed out, we experience _____ opportunity costs as we continue to move down and to the right along the curve.

A. negative B. increasing C. decreasing D. constant

B 3. (2 points) On a production possibility frontier, economic growth is represented by

A. a shift of the PPF down and to the left.

B. a shift of the PPF up and to the right.

C. a movement down and to the right along the existing PPF.

D. a movement up and to the left along the existing PPF.

2. Short Answer Questions (14 points):

- Alex and Tony own a food truck together that serves only two items, street tacos and Cuban sandwiches. Some customers purchase both goods together; therefore, they will always produce both goods. Alex and Tony can sell all the street tacos and Cuban sandwiches that they are able to produce, and will split the revenue equally. Please read the table and answer following questions.

Table 1: Output Per Hour

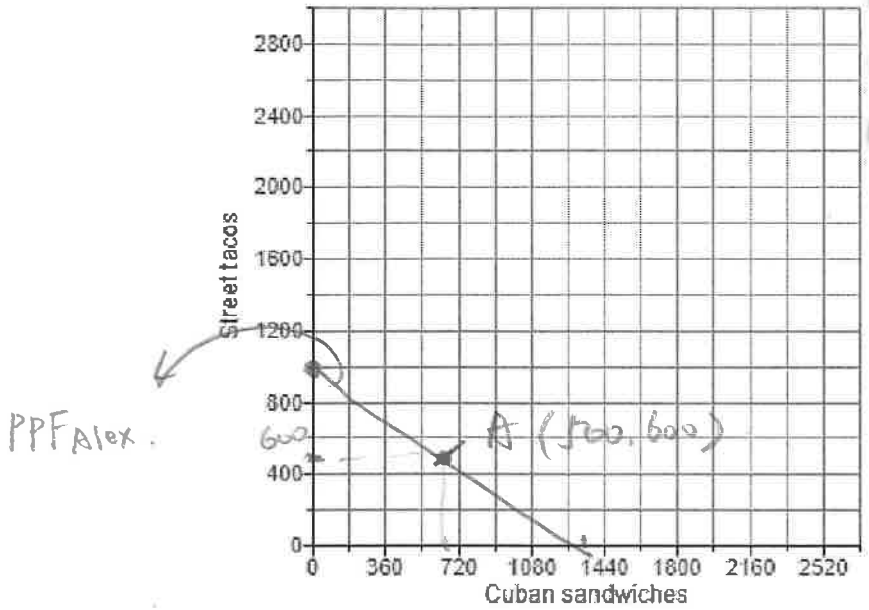
	Street tacos	Cuban sandwiches
Alex	50	70
Tony	20	60

1. Alex's opportunity cost of producing one taco is 1.4 cuban sandwiches. (Keep one decimal places.) (2 points)

2. Tony's opportunity cost of producing one taco is 3.0 cuban sandwiches. (Keep one decimal places.) (2 points)

3. Tony has a comparative advantage in the production of Cuban sandwiches. (1 points)

Figure 1: Question 2.5



4. Alex has a comparative advantage in the production of street tacos. (1 points)

5. Assume that Alex works 20 hours per week in the business. Further assume that Alex devoted half of his time (10 of the 20 hours) to making street tacos and half of his time to making Cuban sandwiches.

   (a) Please graph the possible combinations of street tacos and Cuban sandwiches that Alex could produce in a week. Label the line PPF_{Alex}. (1 points) Tip: It should be a straight line.

   (b) Please indicate how many of each good Alex actually produces in a week given the amount of time spent on each. Label the point A. (1 points)

6. Suppose that Alex spent all 20 hours of his time on street tacos and Tony spent 17 hours on Cuban sandwiches and 3 hours on street tacos. Combined they would produce a total of 1060 tacos and 1020 Cuban sandwiches. (2 points)

7. Suppose that Alex and Tony can sell all their street tacos for \$3.5 each and all their Cuban sandwiches for \$3.5 each. Suppose each of them works 20 hours per week and they decide to completely specialize. That is, Alex will spend all 20 hours on production of one good, and Tony will spend all 20 hours on production of the other good. How will they spend their time? What is their maximum joint revenue per week? (4 points)