Dr. Barry Haworth
University of Louisville
Department of Economics
Honors Economics 201-01
Fall 2017

Homework #1 (due by 9:00pm on Thursday, September 7)

Please submit your answers to this homework through the Assignment link at Blackboard. ***No credit will be given for answers submitted in class or emailed to the professor****, regardless of the excuse.* This includes unique excuses like my dog ate my homework or aliens showed up in my dorm and accidently deleted my homework, as well as more traditional excuses like "I lost my Internet". Please note that all submissions are final, again – regardless of the excuse (which includes "I accidentally hit the submit button"). When you go to Blackboard, you should see that you can save your answers, or "Save and Submit". Use the Save and Submit button to submit your answers. If you are unfamiliar with Blackboard, then it would be a good idea to visit the class page at Blackboard and check out the homework assignments as they are posted.

Please note that when Blackboard grades homework answers, more specifically – answers to the fill-in-the-blank questions – your answer must match exactly with the answer that Blackboard is looking for. Below, you'll find some instructions on how to properly format these answers. Reading this section is strongly recommended.

Homework Questions 1 and 5
Your answers for question #1 and both parts of question #5 below involve your determining the opportunity cost of producing a certain good. Formatting matters with these two answers. For this reason, **understand that your answer can be technically correct but graded as wrong because you didn't follow the directions provided below.** Given that formatting is considered part of your answer, a wrongly formatted answer is still a wrong answer.

Please note the following comments regarding formatting below.

(i) Your answer in questions 1 and 5 may be expressed as a fraction (reduced to its simplest form) or as a decimal rounded to the nearest tenth. Do not write your answer as a compound fraction or mixed number. E.g., if your answer is 6/4, then you should record that answer as 3/2 or 1.5, but do not write your answer as 6/4 or 1 1/2.

(ii) Whole number answers in questions 1 and 5 may be expressed as a whole number of as a decimal rounded to the nearest tenth. E.g., if your answer is 5, then you may record your answer as 5 or 5.0.

Homework #1 Questions

1. Country M and Country O both produce wheat and rye. The PPC for each country is provided below:

Country M	**A**	**B**	**C**	**D**
Quantity of Wheat	0	10	30	50
Quantity of Rye	30	24	12	0

Country O	**W**	**X**	**Y**	**Z**
Quantity of Wheat	0	4	20	44
Quantity of Rye	66	60	36	0

a. As Country M moves from pt. B to pt. C, the opportunity cost of producing each additional unit of wheat is _____ units of rye.

b. As Country M moves from pt. C to pt. B, the opportunity cost of producing each additional unit of rye is _____ units of wheat.

c. As Country O moves from pt. X to pt. Y, the opportunity cost of producing each additional unit of wheat is _____ units of rye.

d. As Country O moves from pt. Y to pt. X, the opportunity cost of producing each additional unit of rye is _____ units of wheat.

2. Given the information in Question 1 about these two individuals, select every correct statement (note: there may be a multiple number of correct statements below).

Note that there is no partial credit on this question – you must get it completely correct, or your answer is incorrect.

(a) Country M has a comparative advantage in producing wheat
(b) Country M has a comparative advantage in producing rye
(c) Country O has a comparative advantage in producing wheat
(d) Country O has a comparative advantage in producing rye
(e) Both Country M and Country O have a comparative advantage in producing wheat
(f) Both Country M and Country O have a comparative advantage in producing rye
(g) Neither country has a comparative advantage in producing wheat
(h) Neither country has a comparative advantage in producing rye

3. Country A and Country B both produce oranges and lemons. The PPC for each country is provided below.

Country A	**A_1**	**A_2**	**A_3**	**A_4**
Quantity of Oranges	0	10	30	50
Quantity of Lemons	125	100	50	0

Country B	**B_1**	**B_2**	**B_3**	**B_4**
Quantity of Oranges	0	4	12	20
Quantity of Lemons	100	80	40	0

Given the information above, select every correct statement (note: there may be a multiple number of correct statements below). *Note that there is no partial credit on this question – you must get it completely correct, or your answer is incorrect.*

(a) Country A has a comparative advantage in producing oranges
(b) Country A has a comparative advantage in producing lemons
(c) Country B has a comparative advantage in producing oranges
(d) Country B has a comparative advantage in producing lemons
(e) Both Country A and Country B have a comparative advantage in producing oranges
(f) Both Country A and Country B have a comparative advantage in producing lemons
(g) Neither country has a comparative advantage in producing oranges
(h) Neither country has a comparative advantage in producing lemons

Use the PPC tables for Country A and Country B above to answer the question below.
4. Assume that there is an increase in productivity within Country A that affects orange production. Which of the answers below is a correct statement (note: there may be a multiple number of correct statements below). *Note that there is no partial credit on this question – you must get it completely correct, or your answer is incorrect.*

(a) the opportunity cost of producing oranges in Country A will decrease
(b) the opportunity cost of producing lemons in Country A will increase
(c) if the increase in productivity is large enough, Country A could end up with a comparative advantage in producing both oranges and lemons
(d) if the increase in productivity is large enough, Country A could end up with a comparative advantage in producing oranges, but lose their comparative advantage in producing lemons
(e) this change in productivity will not affect Country A's comparative advantage

5. In one period, Bill can either bake 10 units of cake, or 2 units of pie. In the same time period, Ted can either bake 10 units of cake or 5 units of pie. Given this information, answer each of the following questions below.

(a) For Bill, the opportunity cost of producing each additional unit of pie is _____ units of cake.

(b) For Bill, the opportunity cost of producing each additional unit of cake is _____ units of pie.

(c) For Ted, the opportunity cost of producing each additional unit of pie is _____ units of cake.

(d) For Ted, the opportunity cost of producing each additional unit of cake is _____ units of pie.

6. The table below represents the production possibilities for automobile tires and rubber mats.

	A	**B**	**C**	**D**	**E**	**F**
Quantity of Automobile tires	0	5	10	15	20	25
Quantity of Rubber mats	30	28	24	18	10	0

Referring to the (PPC) table provided above, which of the following is a true statement about the opportunity cost associated with producing automobile tires and rubber mats in this country:
(a) This PPC reflects increasing opportunity cost
(b) This PPC reflects decreasing opportunity cost
(c) This PPC reflects constant opportunity cost
(d) This PPC reflects increasing opportunity cost with tires and decreasing opportunity cost with rubber mats
(e) This PPC reflects increasing opportunity cost with rubber mats and decreasing opportunity cost with tires

Question #7 can be answered by reading the article *Why Is Productivity So Weak? Three Theories.* This article can be found in the Course Documents section at Blackboard, in the "Homework #1 material" folder.

7. According to the article *Why Is Productivity So Weak? Three Theories*, which of the following is a possible explanation for the decrease in productivity discussed in the article (note: there may be a multiple number of correct statements below). *Note that there is no partial credit on this question – you must get it completely correct, or your answer is incorrect.*
(a) falling productivity is largely the result of negative worker expectations about the future (e.g. fear of being laid off) during recessions like the 2008 recession
(b) falling productivity since 2008 is due to decreases in capital spending by businesses
(c) falling productivity is most likely a result of what economists call "measurement error"
(d) falling productivity is the result of high business investment spending on equipment, intellectual property and structures relative to the size of the economy

8. Assume that Country X has a production possibilities curve (PPC) for wheat and rye. That PPC has wheat on the vertical axis and rye on the horizontal axis (note that the location of these two goods on the graph is something to note. Assume further that a series of events takes place.

Predict the effect of each event on the PPC of Country X by matching the event from the first list to the most likely item on the "Effect on Country X's PPC" list below. Note that it is possible to for different events to have the same effect (i.e. it's possible to have the same answer for more than one event).

Event:

1. How does an increase in unemployment affect the PPC of Country X?

2. How does a decrease in the amount of available land within Country X affect their PPC?

3. How does migration of laborers from Country W into Country X affect the PPC of Country X?

4. How does increased demand for wheat within Country X (during a period of full employment) affect the PPC of Country X?

5. How does automation (technological change) within wheat affect the PPC of Country X?

6. How does a decrease in the availability of inputs for both wheat and rye affect the PPC of Country X?

7. How does an increase in demand for rye, a change that occurs during a period when Country X is producing at points considered efficient, affect the PPC of Country X?

8. How does an increase in the capital stock within Country X affect the PPC of Country X?

9. How does a decrease in the productivity associated with producing rye affect the PPC of Country X?

Effect on Country X's PPC:

A. Movement from a point inside this PPC to a point that's on the PPC

B. Movement from a point that's on this PPC to a point inside the PPC

C. Movement between 2 points, up along the PPC (i.e. toward wheat)

D. Movement between 2 points, down along the PPC (i.e. toward rye).

E. Increase (shift outward) in the PPC that affects both goods

F. Decrease (shift inward) in the PPC that affects both goods

G. Increase (pivot outward) in the PPC that affects only wheat

H. Increase (pivot outward) in the PPC that affects only rye

I. Decrease (pivot inward) in the PPC that affects only wheat

J. Decrease (pivot inward) in the PPC that affects only rye