

PROBLEM SET #1 (2 % of grade; 10 points possible)

DUE: At Wed or Thurs section, week of September 9 via Gradescope, no later than 8 pm on Thursday Sept 12

Problem sets lose 5 points if they are 0 minutes – 24 hours late after the start of section. No problem sets accepted more than 24 hours after section begins. **Problem sets must be uploaded and submitted by 8 pm. No problem sets accepted after gradescope window closes.** Your submitted work must be your own: Problem sets that are identical (in whole or in part) to another student’s problem set will receive a zero. Essay must be submitted twice: hard copy attached to this problem set and electronically via bCourses.

Add/Drop deadline is 11:59 pm on Wednesday September 18. We will try but you may not receive any graded work before the add/drop deadline. Look at old midterms on the course website and the work expected on problem sets (such as this one) to inform your decision about whether to drop or continue on.

IMPORTANT: Place your answers in the area indicated. Problem set answers (other than essay) must be on this sheet to be graded.

1. (2 points total; 1 point per part) Positive vs. Normative, Sources of Disagreement

You are an education policy analyst. (That’s one type of job you can get with an economics degree. Any job with the title ‘analyst’ is likely a job that an econ major is well prepared for.) A client asks you if a policy that will decrease class sizes in grades K-6 is a good plan.

A. Is your client’s question a positive or normative question? (Circle one) **positive** **normative**

In this space, explain why.

At a minimum, there is one key piece of information you need to have in order to answer your client’s question. What is that one piece of information? Why do you need it?

B. Refer to the four causes of disagreement discussed in article #1 by Fritz Machlup, “Why Economists Disagree.” First, list the 4 causes, followed by a one phrase or sentence definition of each.

1.
2.
3.
4.

Your client disagrees with your assessment of whether the class size reduction policy is a good plan. Which of those four possible causes of disagreement might help explain why you and your client disagree? Explain.

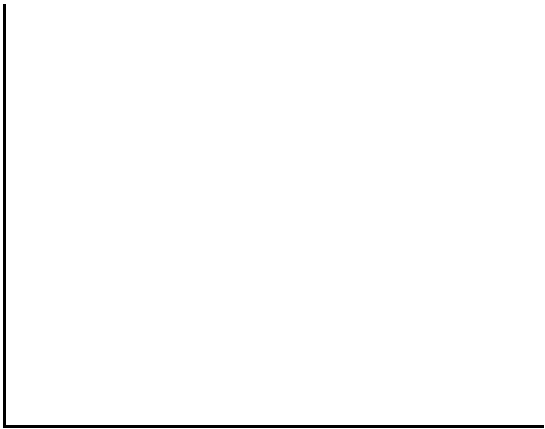
2. (2 points total, ½ point for each part) Production Possibilities Frontier, Growth

Suppose the data below describe the current production possibilities for an economy that produces two goods: tourism and manufactured goods.

Quantities that can be produced per month with the currently available resources						
manufactured goods	6000	5900	5700	5400	5200	4100
tourism	0	100	200	300	350	500
Label point	A	B	C	D	E	F

a. Does this economy exhibit increasing opportunity costs? Yes No (Circle one)
 Explain your answer


b. Plot the PPF. Put manufactured goods on the vertical axis; tourism on the horizontal axis. Label the points. Be sure each axis is to scale. Scales can differ between axes.



c. "Your PPF slopes down because of tradeoffs." Explain that sentence in words that make sense to someone not taking economics.

"Your PPF is non-linear because of the law of increasing opportunity costs." Explain that sentence in words that make sense to someone not taking economics.

d. An economic advisor suggests that the government offer tax incentives to increase the amount of tourism in the economy. What is one cost of shifting resources from the production of manufactured goods to the production of tourism?



Berkeley econ faculty Cecile Gaubert & Benjamin Faber studied the tradeoffs between tourism and manufacturing in Mexico. Their work was published this summer: Faber and Gaubert. 2019. "Tourism and Economic Development: Evidence from Mexico's Coastline." *American Economic Review*, 109 (6): 2245-93. You can access the article: <https://www.aeaweb.org/articles?id=10.1257/aer.20161434> They found that contrary to this simple analysis, increasing tourism led to an **increase** in manufacturing. Read the article or speculate: What is one assumption that is made in the simple analysis, is critical to the usual conclusion, but that might not be true in reality?



3. (2 points total; ½ point per part) Comparative Advantage and Gains from Trade

Chris and Robin are a married couple. They both use pronouns “they/them/theirs.” Both Chris and Robin are able to produce two goods: home production (meals, laundry, housekeeping, child raising) and market production (working for a wage).

- In one week, Chris can produce 4,400 market production units or 2,200 home production units or a mix of the two.
- In one week, Robin can produce 5,000 market production units or 2,000 home production units or a mix of the two.

For both Chris and Robin, their individual trade-offs between MU and HU are constant, regardless of how they allocate their time.

Currently, Chris and Robin pretty evenly share both home and work responsibilities. Chris produces 2,400 ~~consumption~~ **market production** units and 1,000 homemaking units per week while Robin produces 2,500 ~~consumption~~ **market production** units and 1,000 homemaking units per week.

a. Fill in the table at the right, showing the opportunity costs for Jordan and for Chris. Show your work here or in the table.

	Opportunity Cost of 1 market production unit (“MU”)	Opportunity Cost of 1 home production unit (“HU”)
Chris		
Robin		

b. Who has the absolute advantage in the production of market production units, MU? Chris or Robin (circle one)

Who has the absolute advantage in the production of home production units, HU? Chris or Robin (circle one)

Who has the comparative advantage in the production of market production units, MU? Chris or Robin (circle one)

Who has the comparative advantage in the production of home production units, HU? Chris or Robin (circle one)

c. Chris and Robin are adopting a baby! One of them will be the stay-at-home parent, producing only home production units. The other will continue to work, producing only market production units. If their goal is to allocate their resources efficiently (“productive efficiency”), what will they decide? In one week, how many home production units and how many market production units will they produce in total? What are the gains from trade (that is, compared with the total production when they both work, how many additional MU and how many additional HU will Chris and Robin collectively produce when they completely specialize and then trade)? (answer questions by filling in blanks)

_____ will produce home production units and _____ will produce market production units.

In total, they will produce _____ home production units and _____ market production units.

The gains from trade are _____ home production units and _____ market production units.

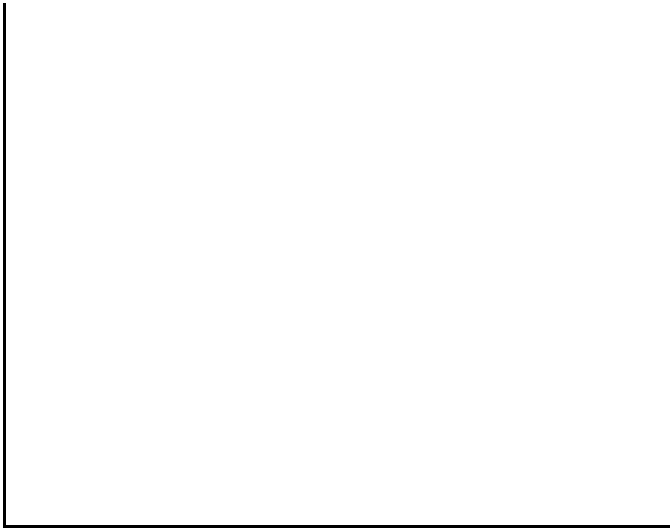
(show gains from trade computations here)

d. Should Chris and Robin specialize and trade? Explain your answer. (It’s a normative question! Remember to include the first step in answering a normative question.)

Interested in pursuing these ideas further? Check out the book *It's Not You, It's the Dishes* (originally published as *Spousonomics*): *How to Minimize Conflict and Maximize Happiness in Your Relationship*, by Paula Suchman and Jenny Anderson.

4. (1 point) International Aid

An economy that produced tourism and manufactured goods experienced a terrible natural disaster. The natural disaster destroyed a large quantity of the capital used to produce both types of output, shifting the economy's PPF inward toward the origin. Aid organizations from other economies provided large quantities of manufactured goods to the economy following the natural disaster. How does the provision of aid allow the economy to consume a combination of output beyond its PPF? Illustrate your answer with a graph.



5. (3 points total) Economic Growth.

Choose any country and any time period, current or historical. Write a one-page essay in which you address these questions:

- What is one development in that country that enhanced economic growth?
- In general, how did that development enhance growth?
- If you were a policy maker responsible for enhancing growth today in an extremely poor country such as Malawi or Burundi, would you recommend adoption of the development you discussed above? Why or why not?

Remember that in economics (as in life), the conclusions you come to will depend in part on the assumptions you make. So be sure you make the relevant assumptions explicit. Don't invoke wildly unrealistic assumptions; the assumptions you make should be reasonable.

Your essay must be your own work. To present anyone else's work as your own is theft of intellectual property: plagiarism. That means you must use quote marks " " around any words you quote exactly from any source (and then provide the source for the quote). It also means that if you get ideas from anyone else, or if you paraphrase someone else, you must again give them credit for their ideas. To do otherwise is plagiarism: the theft of intellectual property, a violation of the Code of Student Conduct and one of the worst offenses in academe. If you have questions about whether or not you've properly cited your sources, please talk with your GSI, the Head GSI, or Prof. Olney.

"Your own work" also means that essays crafted jointly on piazza or otherwise are not acceptable. That too is plagiarism.

Specifications: 400 words maximum, one page maximum. ("Works Cited" list can be on a second page and does not count against the 400 word maximum.) Double space. 10-11-12 pt font. 1" margins on all sides. Your name, date, and the word count in the top right corner. Attach your paper directly behind the problem set sheets.

Submission: Essay must be submitted twice. [1] Attach a hard copy of your essay to your problem set sheets. [2] Submit the essay electronically via bCourses, assignments tab. Electronic submission must be completed by 6 pm on the day your problem set is due (Wednesday 9/11 or Thursday 9/12). Acceptable formats: doc, docx, pdf. bCourses will check your paper using TurnItIn to ensure you have not plagiarized from published sources or previously submitted papers.

Grading: 0 - 1 - 2 - 3 points, taking into account content, following specifications, and writing quality. No submission on bCourses results in a 0 on the essay.