HW Questions for Chapter 2: The Economic Problem: Scarcity and Choice

1. Meghan and Kate live in the beach town of Santa Cruz. They own a small business in which they make wristbands and pot holders and sell them to people on the beach. As shown in the table below, Meghan can make 16 wristbands per hour but only 4 pot holders. Kate is a bit slower and can make only 15 wristbands or 3 pot holders in an hour.

	Output per Hour	
	Wristbands	Pot Holders
Meghan	16	4
Kate	15	3

- a. For Meghan and for Kate, what is the opportunity cost of a pot holder? Who has a comparative advantage in the production of pot holders? Explain your answer.
- b. Who has a comparative advantage in the production of wristbands? Explain your answer.
- c. Assume that Meghan works 30 hours per week in the business. Assuming Meghan is in business on her own, graph the possible combinations of pot holders and wristbands that she could produce in a week. Do the same for Kate.
- d. If Meghan devoted half of her time (15 out of 30 hours) to wristbands and half of her time to pot holders, how many of each would she produce in a week? If Kate did the same, how many of each would she produce? How many wristbands and pot holders would be produced in total?
- e. Suppose that Kate spent all 30 hours of her time on wristbands and Meghan spent 25 hours on pot holders and 5 hours on wristbands. How many of each time would be produced?
- f. Suppose that Meghan and Kate can sell all their wristbands for \$1.20 each and all their pot holders for \$6 each. IF each of them worked 30 hours per week, how should they split their time between wristbands and pot holders? What is their maximum joint revenue?
- 2. The countries of Kanmar and Cova are small island counties in the South Pacific. Both produce fruit and timber. Each island has a labor force of 1,500. The following table gives production per month for each worker in each country.

	Productivity of one worker for one month	
	Baskets of Fruit	Board feet of Timber
Kanmer workers	18	6
Cova workers	48	12

a. Which country has an absolute advantage in the production of fruit? Which country has an absolute advantage in the production of timber?

- b. Which country has a comparative advantage in the production of fruit? Of Timber?
- c. Sketch the ppf's for both countries.
- d. Assuming no trading between the two, if both countries wanted to have equal numbers of feet of timber and baskets of fruit, how would they allocate workers to the two sectors?
- e. Show that specialization and trade can move both countries beyond their ppf's.