

Chapter 2: Homework Assignment

1. You can allocate your time for the next four years between studying and working at a car wash. Each semester you spend studying you can earn 15 credit hours and each semester you work at the car wash you wash 800 cars. If you have 8 semesters to allocate, label each of the following on a graph.
 - a. your production possibilities curve
 - b. a point that is unattainable
 - c. a point that is efficient
 - d. Plot and label a point on your graph that represents a decision to take a semester off from both studying and working.

2. Gilligan and Robinson are stranded on a desert island. To feed themselves each day they can either catch fish or pick fruit as specified in the table below. Use the information to determine who has each of the following.
 - a. comparative advantage in fruit picking
 - b. comparative advantage in fishing
 - c. absolute advantage in fruit picking
 - d. Absolute advantage in fishing

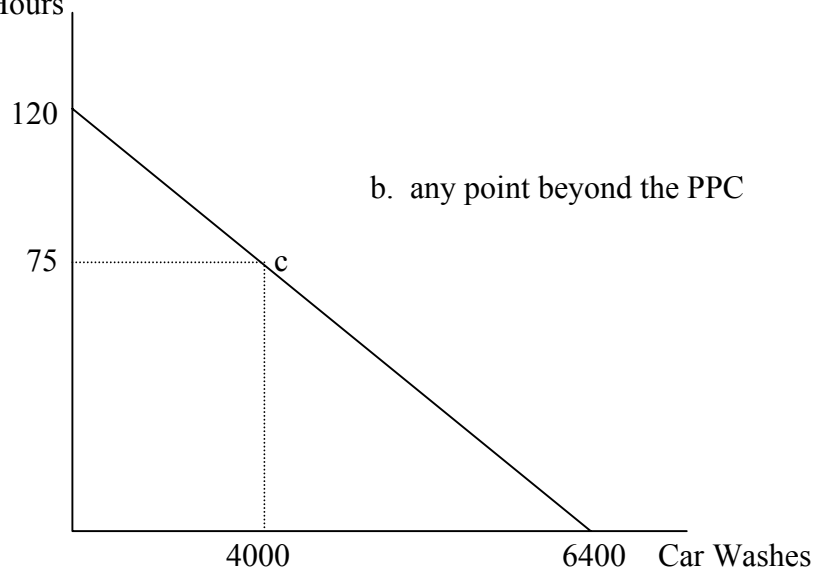
	Fruit	Fish
Gilligan	60	20
Robinson	100	150

3. Inlandia and Outlandia can both produce cars or wheat. The opportunity cost of a cars in Inlandia is 50 bushels of wheat. The opportunity cost of a car in Outlandia is 300 bushels of wheat. The most wheat Inlandia can possibly produce is 100,000 bushels and the most wheat Outlandia can possibly produce is 3 million.
 - a. Graph the production possibilities curve for each country.
 - b. Does the Low-Hanging-Fruit Principle apply in either of these two cases? How do you know?
 - c. If the two countries sign a trade agreement to specialize according to their comparative advantage, what should each country produce?

 - d. If these are the only two countries in the world that are open to trade, what are the maximum and minimum prices that can prevail on the world market for a bushel of wheat (in terms of cars)?

Key

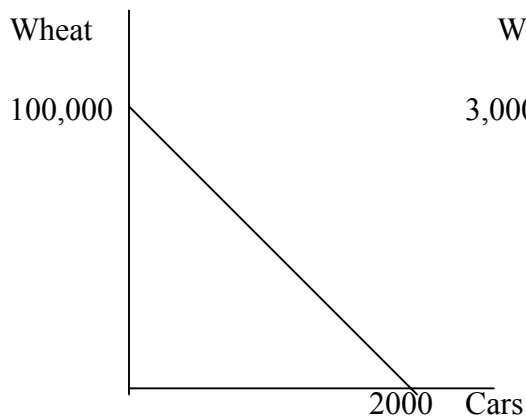
1. Credit Hours



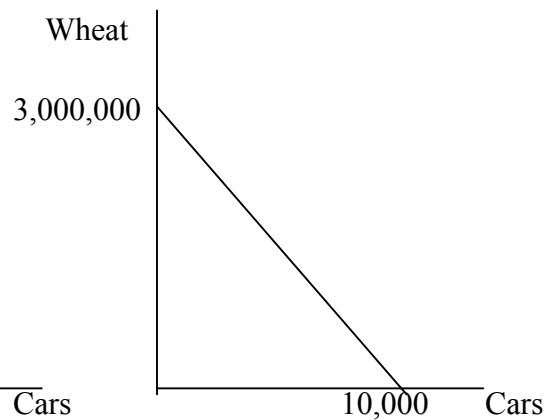
1d. Any point below the PPC that is for 7 semesters (e.g., 75 credit hours and 3,200 car washes). One semester of studying is 15 credit hours, one semester of car washes is 800 car washes).

- 2a. Gilligan has the comparative advantage in fruit picking (his opportunity cost is $1/3$ versus Robinson's 1.5).
- 2b. Robinson has the comparative advantage in fishing (his opportunity cost is $2/3$ versus Gilligan's 3).
- 2c. Robinson has an absolute advantage in fruit picking (he can gather 100 versus Gilligan's 60).
- 2d. Robinson has an absolute advantage in fishing (he can catch 150 versus Gilligan's 20).

3.a.



Inlandia



Outlandia

- 3b. No, the opportunity cost of cars (and wheat) is constant.
- 3c. Inlandia should produce cars (their opportunity cost is 50 versus Outlandia's 300) and Outlandia should produce wheat (their opportunity cost is .003 versus Inlandia's .02).
- 3d. Inlandia has an opportunity cost of .02 for wheat, Outlandia has an opportunity cost of .003 for wheat. Therefore, the price must be above .003 cars (for Outlandia to provide wheat to the world market) but below .02 cars (for Inlandia to buy wheat on the world market).