

ECO135 Quiz 1 Answers

Q1.

	Robinson		Friday	
	Fish	Banana	Fish	Banana
Output per day (10 hours)	10	15	6	12
Time spent for one unit of production	=10/10 = 1 hour	=10/15 =2/3 hours	=10/6 =5/3 hours	=10/12 =5/6 hours
Opportunity Cost per unit	=1/(2/3) =3/2 Bananas	=2/3/(1) =2/3 Fish	=(5/3)/(5/6) =2 Bananas	=(5/6)/(5/3) = 1/2 Fish

- a. Fill in the Table
- b. Who has the Absolute Advantage for Fish?

Robinson because he can produce one fish by using only 1 hour while Friday needs 5/3 hours.

Who has the Absolute Advantage for Banana?

Robinson because he can produce one banana by using only 2/3 (0.667) hours while Friday needs 5/6 (0.833) hours.

- c. Who has the Comparative Advantage for Fish?

Robinson because the opportunity cost of producing one fish is 3/2 (1.5) Bananas for him while it is 2 Bananas for Friday.

Who has the Comparative Advantage for Banana?

Friday because the opportunity cost of producing one banana is 1/2 (0.5) fish for him while it is 2/3 (0.667) fish for Robinson.

Note for part a. Many of you computed “time spent for one unit of production” part in a. wrong. Please check your note and learn the correct way to compute the values in the table.

Note for grading: If your explanation or logic of your answers (who has AA or CA) is not correct, even though Robinson/Friday part is correct, you do not get any point. You should show clearly

how you derived your conclusion. I do not give points for any random answers even if it is correct by chance. However, even if your initial calculation of the values in the table are wrong, if the logics for the answers for b. and c. are correct based on your wrong answers in a., you do not lose any point for b. and c. You see “ok” mark on your answer sheet in such cases.

Q2. Suppose the functional form of PPF is given as $B = -2F + 300$. Compute Marginal Rate of Transformation.

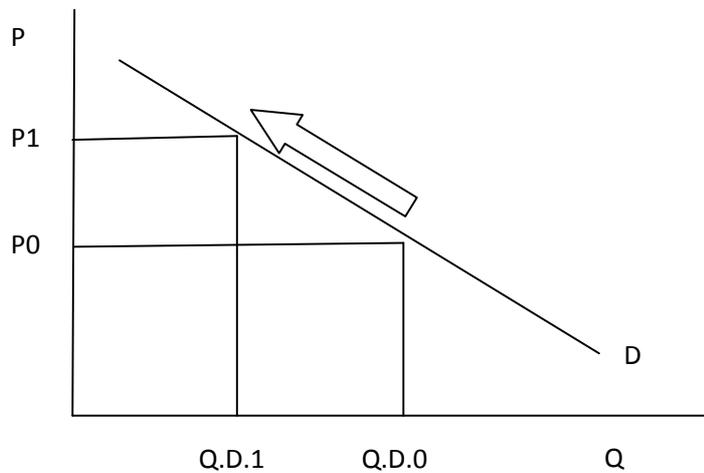
$$MRT = \left| \frac{\Delta B}{\Delta F} \right| = \left| \frac{-2}{1} \right| = 2$$

Q3. Suppose the price of beef rises. What will happen to

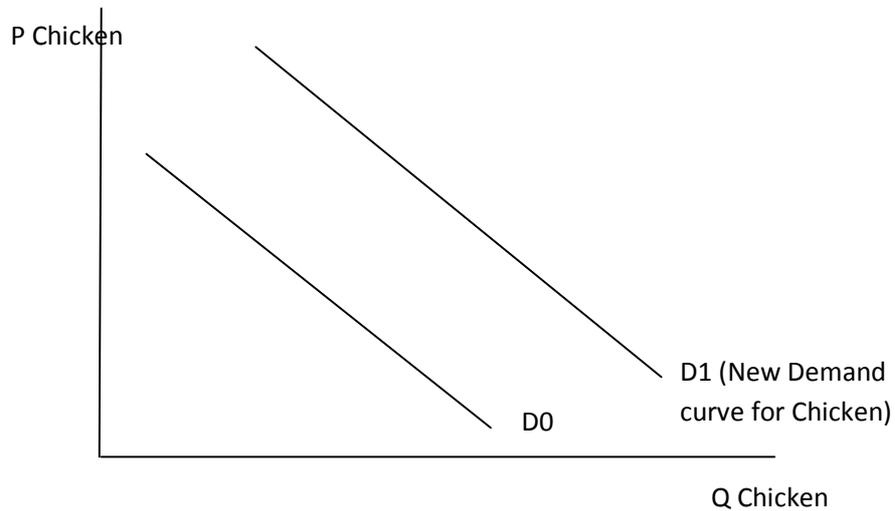
1. Quantity Demanded for beef.
2. Demand for Chicken.

Discuss the changes both with words and demand curves.

1. When the price of beef increases, the quantity demanded for beef decreases.
This change is illustrated as the “movement along the demand curve”.



2. When the price of beef increases, the demand for chicken which is the substitute to beef will increase since consumers shift their consumption from beef to chicken. This change is illustrated as the shift of the demand curve for chicken towards right.



Note: Some of you tried to draw a figure with Quantity of Chicken and Price of Beef. When you draw a figure for beef, both Q and P have to be for beef. When you draw a figure for chicken, both Q and P have to be for chicken. Do not mix them. Label each axis clearly so that you do not get confused.

Note: Please review the differences between “movement along a demand curve” and “shift in demand curve” well.