

ECO 1104G: Assignment 1

True / False

1. As long as two people have different opportunity costs, each can gain from trade by being able to obtain a good at a price lower than his or her opportunity cost.
 - a. True
 - b. False
2. Trade allows a country to consume outside its production possibilities frontier.
 - a. True
 - b. False
3. A marginal change is a small incremental adjustment to an existing plan of action.
 - a. True
 - b. False
4. An economy is being efficient if it is impossible to produce more of one good without producing less of another.
 - a. True
 - b. False
5. It is not possible for demand and supply to shift at the same time.
 - a. True
 - b. False
6. If the demand for a good falls when income falls, the good is called an inferior good.
 - a. True
 - b. False

Multiple Choice

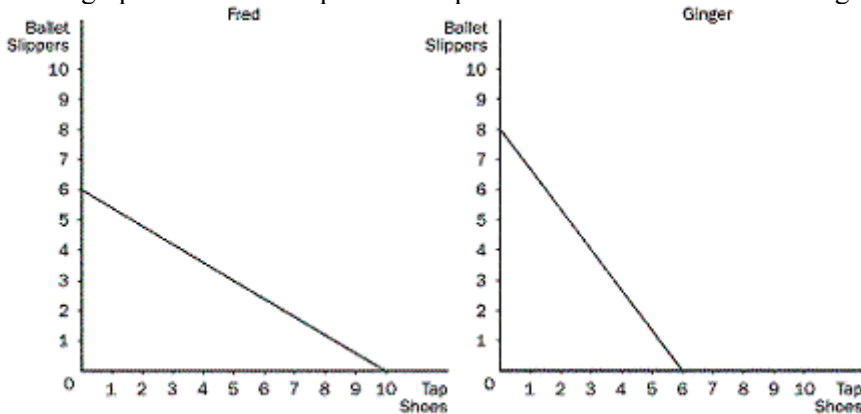
7. The average cost per seat on an airplane trip from Calgary to Edmonton is \$105. Suppose no refreshments are served and seven seats are empty. How could the airline company increase its profit?
 - a. if it charged no less than \$105 for the seven remaining seats
 - b. if it charged more than \$105 for the seven remaining seats
 - c. if it charged any ticket price above \$0 for the remaining seats
 - d. if it left the seats empty
8. What does inflation cause?
 - a. incomes to fall
 - b. productivity to increase
 - c. the government to lower taxes
 - d. the value of money to fall

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9. Why do economists make assumptions?
- a. to diminish the chance of wrong answers
 - b. to make the world easier to understand
 - c. because all scientists make assumptions
 - d. to make certain that all necessary variables are included
10. What does a point on a country's production possibilities frontier represent?
- a. a combination of two goods that an economy will never be able to produce
 - b. a combination of two goods that an economy can produce using all available resources and technology
 - c. a combination of two goods that an economy can produce using some of its resources and technology
 - d. a combination of two goods that an economy may be able to produce sometime in the future with additional resources and technology
11. When a production possibilities frontier is linear, what does it show?
- a. a truer picture of real life than a bowed-out production possibilities frontier
 - b. that resources are perfectly shiftable from the production of one good to another
 - c. an example of increasing opportunity cost
 - d. an example of decreasing opportunity cost
12. What would unemployment cause an economy to do?
- a. produce inside its production possibilities frontier
 - b. produce on its production possibilities frontier
 - c. produce outside its production possibilities frontier
 - d. cause many different scenarios on its production possibilities frontier depending on its severity

Figure 3-5

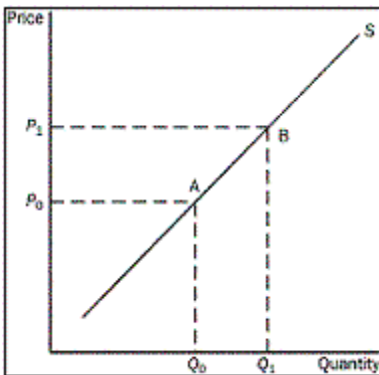
These graphs illustrate the production possibilities available for dancing shoes to Fred and Ginger with 40 hours of labour.



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13. Refer to Figure 3-5. What is the opportunity cost of one pair of tap shoes for Fred?
- a. 1/5 pair of ballet slippers
 - b. 1/3 pair of ballet slippers
 - c. 3/5 pair of ballet slippers
 - d. 5/3 pairs of ballet slippers
14. Refer to Figure 3-5. Who has a comparative advantage in each good?
- a. Ginger has a comparative advantage in tap shoes, and Fred has a comparative advantage in ballet slippers.
 - b. Ginger has a comparative advantage in both goods, and Fred has a comparative advantage in neither good.
 - c. Ginger has a comparative advantage in ballet slippers, and Fred has a comparative advantage in tap shoes.
 - d. Ginger has a comparative advantage in neither good, and Fred has a comparative advantage in both goods.

Figure 4-10

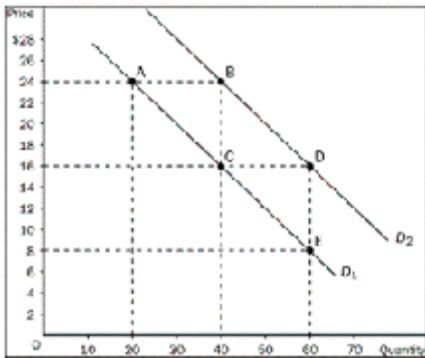


15. Refer to the Figure 4-10. What would cause the movement from point B to point A on the graph?
- a. a decrease in the price of the good
 - b. an increase in the price of the good
 - c. an increase in technology
 - d. a decrease in input prices
16. Refer to the Figure 4-10. What is the movement from point A to point B on the graph called?
- a. a decrease in supply
 - b. an increase in supply
 - c. an increase in the quantity supplied
 - d. a decrease in the quantity supplied

Subjective Short Answer

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17. Use the following demand curve to answer the following questions:
- How would point A be represented as an ordered pair?
 - What type of curve is this?
 - Does this curve show a positive or negative correlation between price and quantity?
 - Compute the slope of D_1 between points A and C.
 - What is the slope of D_1 between points C and E? Why would you NOT have to calculate this answer?
 - What is it called if we move from D_1 to D_2 ?
 - How do you know that the slope of D_2 is the same as the slope of D_1 ?



18. Which of the following statements are positive and which are normative?
- The minimum wage creates unemployment among young and unskilled workers.
 - The minimum wage ought to be abolished.
 - If the price of a product in a market decreases, other things equal, quantity demanded will increase.
 - A little bit of inflation is worse for society than a little bit of unemployment.
 - There is a tradeoff between inflation and unemployment in the short run.
 - If consumer income increases, other things equal, the demand for automobiles will increase.
 - The Canadian income distribution is not equitable.
 - Canadian workers deserve more liberal unemployment benefits.
 - If interest rates increase, investment will decrease.
 - If welfare benefits were reduced, the country would be better off.

19. The purpose of this exercise is to show you how a mathematical (economic) model can be adjusted to better represent an economic phenomenon. Consider the equation $Y = 2 \times L$, where Y is the number of apple pies that Jonathan can cook in L hours. This equation describes the process of producing apple pies.

- In a $Y-L$ graph, draw the line described by the equation $Y = 2 \times L$. What is the slope of this line? What does the slope represent? Note that the slope is the same for the first, second, and all subsequent hours. In other words, the slope is constant. Why is the constant slope of the line a limitation of your model?
- How should the slope change for higher values of L , the number of hours worked, to account for the fact that the worker might get tired?
 - How could you modify the model to capture the change in slope you identified in part b?

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20. The “two-country?two-good” model (sometimes called the 2x2 model) of comparative advantage that we have studied so far is simple, insightful, and compelling. However, its very simplicity turns out to be its weakness. In the real world, when many countries produce many goods, the simple 2x2 model is of limited use in predicting patterns of trade. To see how complex such a model can become, let us consider a 2x3 model (two countries, 1 and 2, and three goods, A, B, and C.) The following table gives the maximum amounts (units) of each good that each country can produce if all the country’s resources were used in the production of the respective good. In other words, the table describes each country’s production possibilities frontier.

	Good A (units)	Good B (units)	Good C (units)
Country 1	1	3	6
Country 2	2	4	4

- How do the production possibilities frontiers for each of the two countries look in a three-dimensional coordinate system? (Draw three axes like a corner in your room, and label them after the three goods: A, B, and C. Then, place the number of units for each good for Country 1 on its respective axis and connect the three intercepts by straight lines. Repeat for Country 2 on a separate graph.)
- Calculate the opportunity costs of good A in terms of B and C in each country and call these prices PA1 and PA2 respectively.
 - Calculate the opportunity costs of good B in terms of A and C in each country and call these prices PB1 and PB2 respectively.
 - Calculate the opportunity costs of good C in terms of A and B in each country and call these prices PC1 and PC2 respectively.
 - Based on your calculations, can you tell which country should export or import each product based on comparative advantage?

21. Suppose the equation $Q_d = (10 - 0.4D) - 0.6P$ describes an individual’s demand for iTunes content, with D being the price of the device needed to access iTunes content, in \$100s.

- Draw the individual demand curve and show a person’s quantity demanded when the price P is \$8 and the price of the device is \$600 (D=6).
- If the market price P increased by \$1 (so that the new price is P=\$9), what should be the change in the price of the device (D) that would keep the quantity demanded the same as before? Show these changes in a graph.
- For the above question (b), identify which change(s) have determined a movement along the demand curve, and which have determined a shift in the demand curve.