

MIDTERM I – Practice Test

Question 1: True-False. Please explain your choice.

- a) A change in the price of carrots will cause a movement along the demand curve for substitute vegetables and a shift in the demand for carrots. T F

FALSE

- b) An increase in the number of Americans taking vacations in Mexico would be expected to increase the value of the peso. T F

TRUE

- c) The four phases of the business cycle are, in order, peak, expansion, trough, and recession. T F

FALSE

- d) There is no difference in Macroeconomics between short-run stabilization policy and long-run growth policy T F

FALSE

- e) Nominal GDP can never be equal to real GDP. T F

FALSE

- f) An increase in the number of firms causes the supply curve to shift rightward, resulting in a decrease in price and a movement down along the demand curve. T F

TRUE

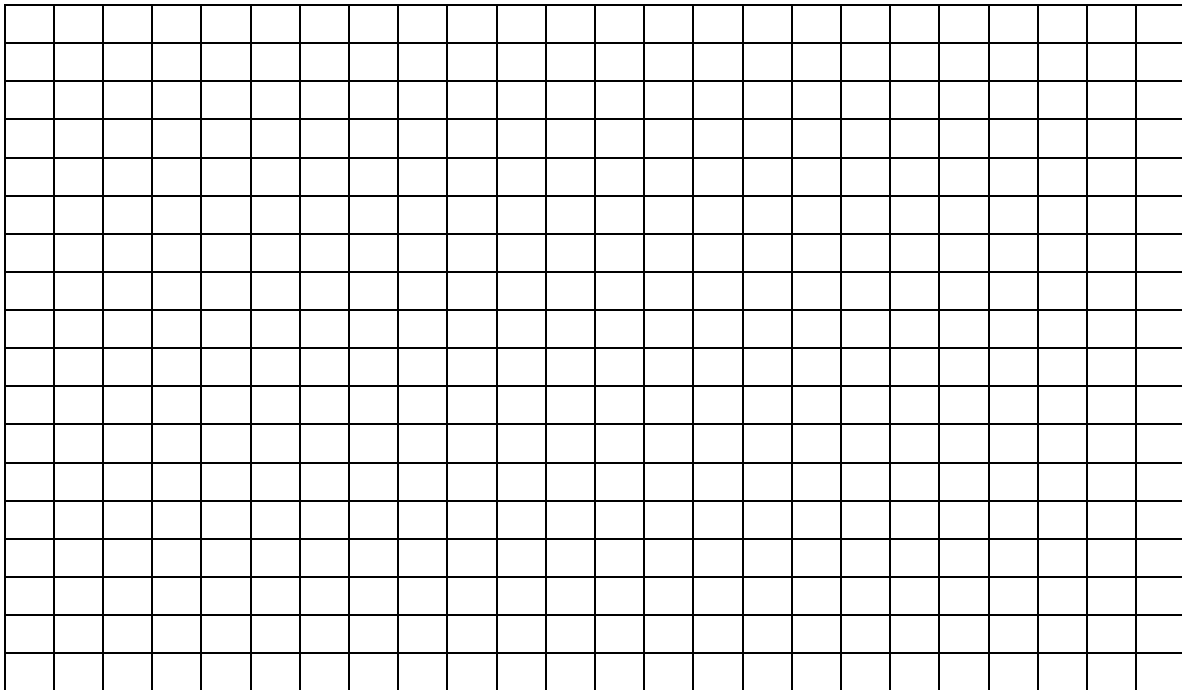
- g) An effective price ceiling causes excess demand, resulting in the need to ration. T F

TRUE

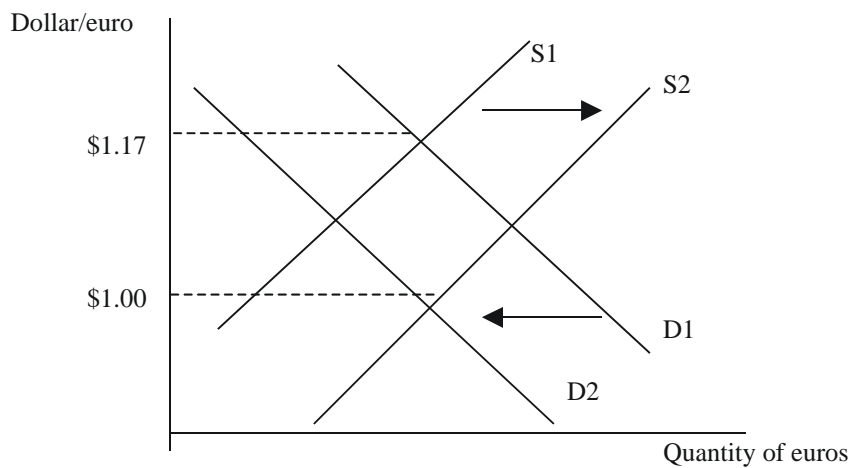
Question 2:

As a result of the phenomenal performance of the U.S. stock market in the late 1990s European investors invested heavily in U.S. stocks. At the same time U.S. investors predominantly invested at home, rather than abroad.

Using supply/demand analysis, show graphically why the value of the euro relative to the dollar declined after it was first introduced in 1999. Explain your graphs.



Answer:



As a result of the phenomenal performance of the U.S. stock market during the late 1990s, European investors invested heavily in U.S. stocks. To buy U.S. stocks, they had to supply of euros increased (a shift from S1 to S2 on the graph). Conversely, U.S. investors lowered their investments in European stocks--they reduced their demand for euro to decrease (a shift from D1 to D2 on the graph). Both forces (the increase in the supply of euros and the decrease in the demand for euros) lowered the value of the euro relative to the dollar, especially during the late 1990s.

Question 3:

Why might per capita GDP comparisons between countries be misleading? What do economists do to avoid some of the problems?

Answer:

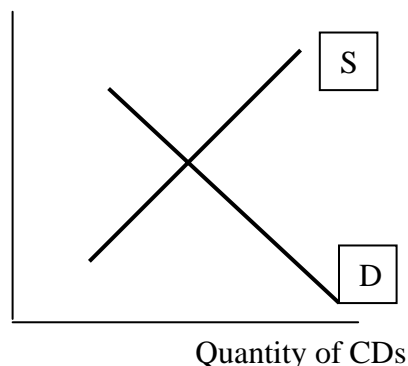
Comparing per capita GDP between countries can be misleading for two main reasons. First, prices and incomes vary from country to country. So, for example, while a per capita GDP of \$5000 might be considered quite low in the U.S., it is likely to be quite high in many African countries where prices are much lower. The other reason is because, in many countries, most economic activities occur “off the books” and do not show up as part of the GDP per capita figures (such as subsistence farming). When there is a lot of underground economic activities, the reported GDP per capita figures significantly understate the true income per capita.

Economists calculate per capita GDP adjusted for purchasing power parity, which adjusts for the different relative prices among countries before making comparisons.

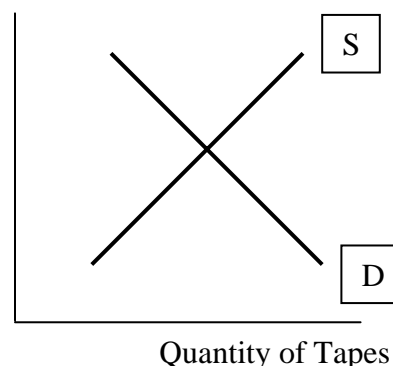
Question 4:

The two accompanying diagrams show supply and demand curves for two substitute commodities: Tapes and CDs (Compact Discs).

Price of CDs



Price of Tapes



- a) On the right hand diagram, show what happens when the rising raw material prices make it costlier to produce tapes. Explain!

Supply shifts to the left, price of tape rises.

- b) On the left hand diagram, show what happens to the market for CDs. Explain!

The rising price of tape let's consumers buy more CDs, so the demand for CD shifts to the right.

Question 5: How is the unemployment rate calculated? Describe the three principal types of unemployment.

The unemployment rate is a percentage obtained by dividing the number of persons classified as unemployed by the number of persons in the labor force. Unemployed persons are those individuals who are out of work and actively looking for work. The labor force is the sum of those counted as unemployed and those persons counted as employed. Employed persons are those at work, full- or part-time, during the week in which the employment survey data are collected by the Department of Labor.

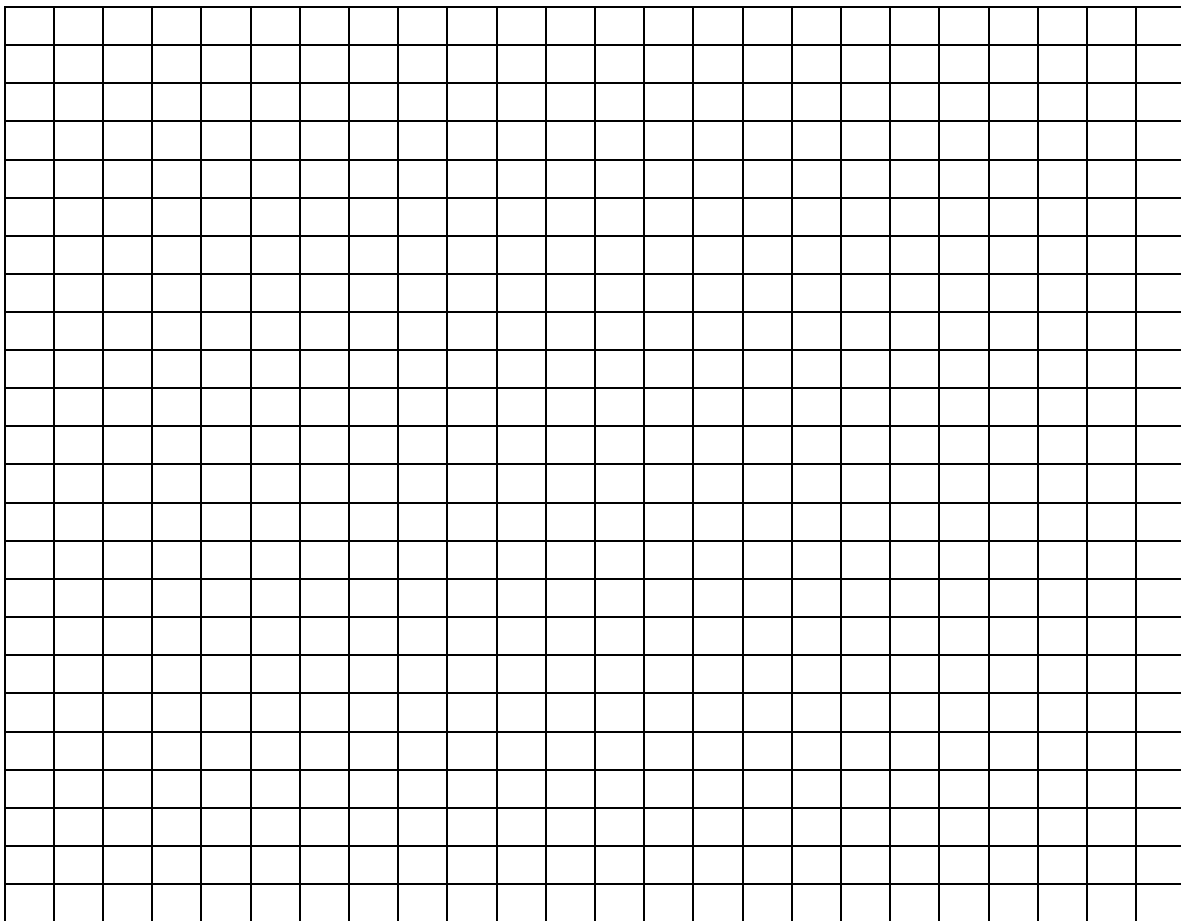
The three principal types of unemployment are frictional, structural, and cyclical unemployment. Frictional unemployment occurs when persons are between jobs. Workers may be between jobs because they have quit one job and are searching for something more suitable, or because they are moving to a different region of the country, or they are moving from a declining industry to a growing industry. Structural unemployment is sometimes referred to as long-term unemployment or technological unemployment. Structurally unemployed workers have skills that are outdated or were working in jobs that are now done by some type of automated machinery. These unemployed workers may need retraining or additional education to prepare themselves for new careers. Structural unemployment is particularly difficult for older workers who may not have sufficient time to learn new skills before they reach retirement age. Cyclical unemployment is often referred to as a recession unemployment and is a focus of macroeconomic theory. Cyclical unemployment is created when the economy is not producing at its potential level of GDP. Government aggregate demand management policies are often effective in reducing cyclical unemployment.

Question 6:

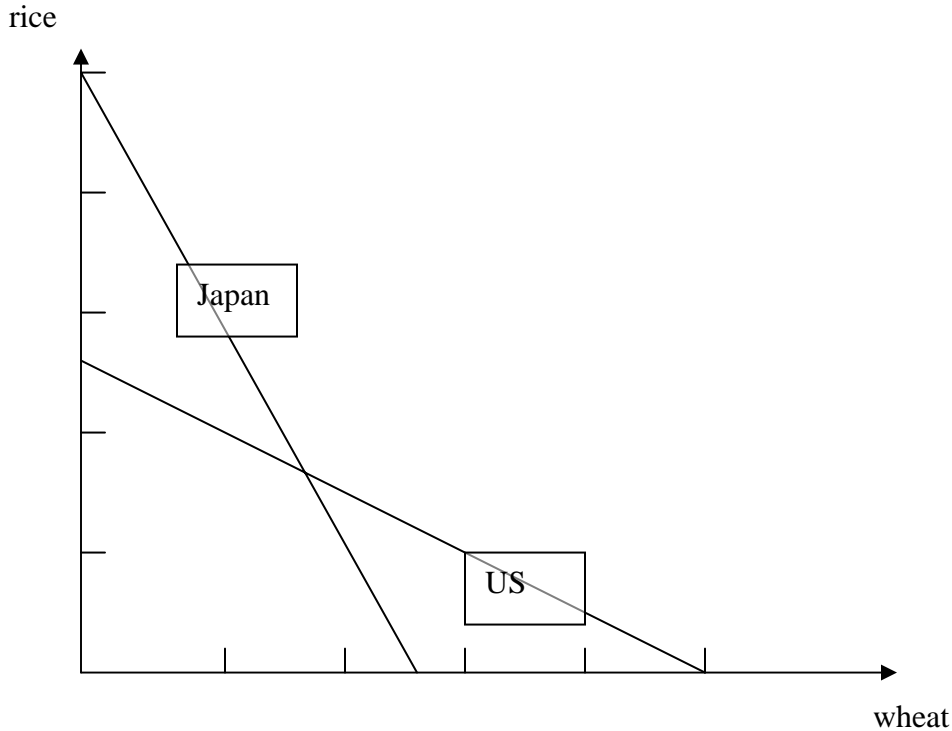
Suppose the United States and Japan have the following production possibilities tables:

Japan		United States	
Rice	Wheat	Rice	Wheat
1000	0	500	0
800	100	400	200
600	200	300	400
400	300	200	600
200	400	100	800
0	500	0	1000

- a) Draw each countries production possibilities curve.
- b) Define the concept of 'comparative advantage'.
- c) In what good does the United States have a comparative advantage? Japan?



- d) Draw each countries production possibilities curve



e) In what good does the United States have a comparative advantage? Japan?

The US has a comparative advantage in wheat and Japan has a comparative advantage in cloth

Opportunity cost are $\frac{1}{2}$ versus 2.

Question 7:

Below is the production possibilities table for the country of Lavaland.

% resources devoted to production of tanks	Number of tanks	% resources devoted to production of pizza	Number of pizzas	Row
0	0	100	15	A
20	4	80	14	B
40	7	60	12	C
60	9	40	9	D
80	11	20	5	E
100	12	0	0	F

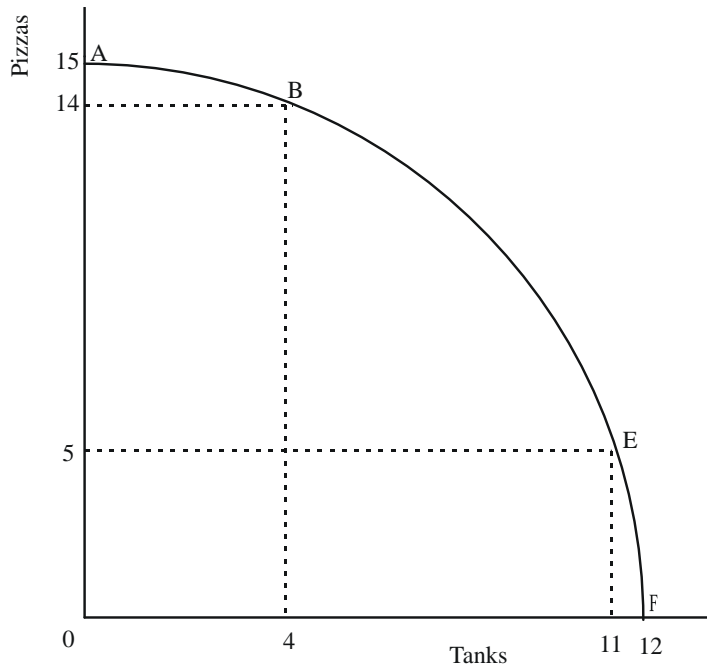
(a) Use the information in the Table to draw the production possibilities curve (PPC) for Lavaland. Put tanks on the horizontal axis.

(b) What is the cost to Lavaland of moving from point A to point B on its PPC? Of moving from point E to point F?

(c) What general economic principle is being illustrated by your answers to part (b) above? Explain.

Answer:

(a) The diagram should look like this:

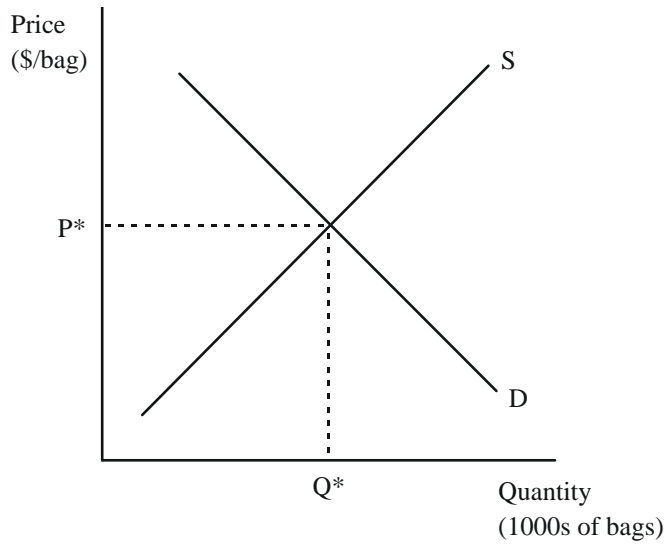


(b) The opportunity cost of moving from point A to point B is 1 pizza. The cost of moving from point E to point F is 5 pizzas.

(c) In moving from A to B, Lavaland gained 4 tanks. In moving from E to F, Lavaland gained 1 tank. But the cost of attaining one tank was much more with the move from E to F than it was when the movement was from A to B. In moving from A to B each tank required the giving up of an average of 1/4 of a pizza, whereas moving from E to F one tank required giving up 5 pizzas. The increasing cost of another tank (in terms of pizzas foregone) as Lavaland moved from A to F illustrates the principle of increasing marginal opportunity cost.

Question 8:

Consider the following supply and demand diagram for Tootsie Rolls. Note that the market is currently in equilibrium, with a price of P^* and a quantity exchanged of Q^* .



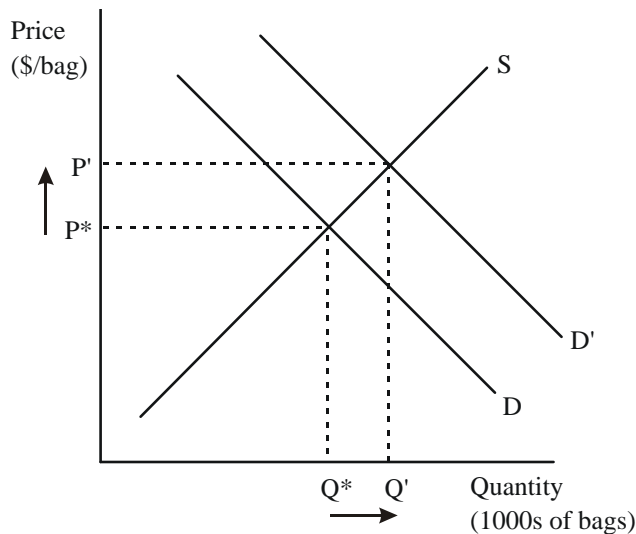
For each of the scenarios below, draw a picture that illustrates the impact on price and quantity exchanged. Explain each of your pictures by describing what is happening to the **demand** side of the market.

(a) The American Association of Chocolate Lovers designates the Tootsie Roll as its official candy.

(b) The Tootsie Roll Company computerizes their Tootsie Roll manufacturing plant, lowering unit costs of production.

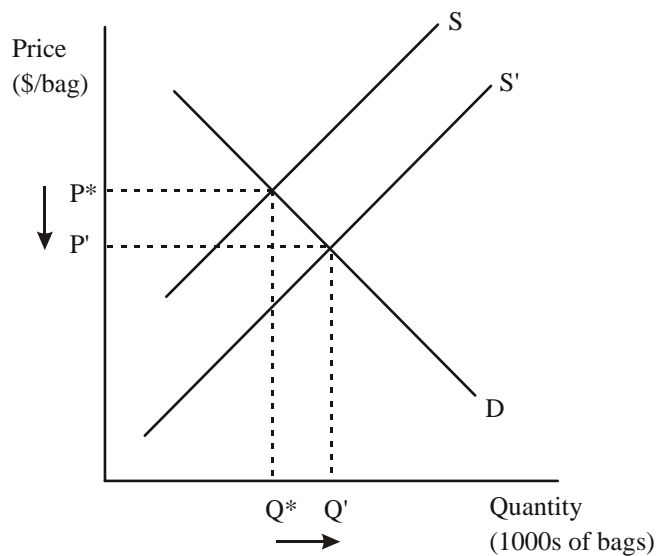
Answer:

(a) The diagram:



The designation of Tootsie Rolls as the official candy of The American Association of Chocolate Lovers results in more people buying Tootsie Rolls. This is an increase in demand, shown in the diagram as a shift of the demand curve toward the right from D to D' .

(b) The diagram:



By computerizing their manufacturing plant, the Tootsie Roll Company can make more Tootsie Rolls per hour, increasing the productivity of their plant. This increase in productivity means that, any given output level costs less to produce, so the Tootsie Roll company can charge a lower price than before and still maintain its previous profit levels. This results in an increase in supply, shown in the diagram as a shift of the supply curve downward (or toward the right) from S to S' .

From the demand side of the market, this is an increase in the quantity demanded, as shown by the movement downward along the demand curve.