Directions: Answers to the True/False and Multiple Choice questions are not graded, but should be turned in on the scantron form. **Answers to the written work will be graded** and so, of course, need to be turned in. This is your best prep for the exam, so give it your best shot.

True/False

1) If both supply and demand both increase, then the equilibrium quantity will definitely increase.

2) By virtue of government controls, command economies can ensure productive efficiency. Market economies have no mechanism to promote such efficiency.

3) Even if two individuals go to the movies at the same time and pay the same price, they will probably not have the same opportunity cost.

4) The demand curve for Good X shifts to the right whenever there is an decrease in the price of Good X.

5) In the absence of trade, a country’s PPF determines both what it can produce and what it can consume.

6) If 2 variables are positively correlated we can say that an increase in one causes an increase in the other.

7) If a country is producing on its PPF, we can say that it is allocatively efficient.

8) An increase in production costs will shift the demand curve to the left.

9) If both supply and demand both increase, then the equilibrium price will definitely increase.

10) An economy will be allocatively efficient as long as it produces on its PPF.

11) Scarcity leads to a concave PPF.

12) A “change in quantity demanded” occurs whenever the price of a substitute good increases or decreases.

13) A price floor must be placed below the equilibrium price in order to be "effective".

14) In a market transaction, gains by one party are offset by losses to the other party.
15) When generating theories from observed data, you engage in the process of deduction.

16) "A decrease in homework should improve faculty evaluation scores." This is a positive statement.

17) An effective price floor is normally accompanied by a shortage.

18) A stable equilibrium is one that cannot be disturbed.

19) The opportunity cost of any decision is the value of the next best alternative that is not chosen.

20) Removing a tax on sugar will likely push the demand curve for candy bars out to the right.

MULTIPLE CHOICE   Select the best answer to each question.

21) In one week, the Wicked Witch can knit 15 sweaters or bake 480 cookies. The opportunity cost per sweater for the Wicked Witch is
   a. $15.
   b. 15 cookies.
   c. 480 cookies.
   d. 32 cookies.
   e. 1/32 of a cookie.

22) If there is a shortage of convenient parking spaces on campus, economists would argue that it is because
   a. there are not enough of these spaces.
   b. the price of these spaces is below equilibrium.
   c. the price of these spaces is above equilibrium.
   d. economists are simply argumentative.

23) An economic model is useful only if it
   a. includes every detail.
   b. makes no unproven assumptions.
   c. is mathematical, and is expressed in equations.
   d. makes accurate predictions.
   e. is simple enough to be understood by a child.
24) Ramon earns $20 an hour, Sam earns $30 an hour, Evan earns $40 an hour, and Tabitha earns $50 an hour. The “price of friendship” is likely highest for which person?
   a. Ramon
   b. Sam
   c. Evan
   d. Tabitha

25) If good B is a substitute for good A, then a drop in the price of B
   a. will cause the demand for B to increase
   b. increases the quantity demanded of A
   c. increases the demand for A
   d. decreases the demand for A
   e. decreases the quantity demanded of A

26) Examine the PPF in Figure A. Which of the following statements about this figure is not true?
   a. The opportunity cost of an additional unit of consumption goods decreases as you move to the right along the frontier.
   b. An economy producing at point A is more likely to experience a shrinking PPF in the future than an economy producing at point B.
   c. Both points A and B represent economies achieving productive efficiency.
   d. A move from C to A involves zero opportunity cost.

27) Accords and Sonatas are substitutes. If the price of Accords falls, which of the following will happen?
   a. The demand curve for Sonatas will shift to the left.
   b. The demand curve for Accords will shift to the right.
   c. The supply curve for Sonatas will shift to the left.
   d. The supply curve for Accords will shift to the right.
   e. None of the above.
28) If the quantity demanded for a certain product was relatively responsive to a change in price, this would be represented in a supply and demand diagram as
- a relatively steep slope for the demand curve.
- a relatively flat slope for the demand curve.
- large outward shifts in the demand curve in response to a change in price.
- small inward shifts in the demand curve in response to a change in income.

29) In Figure B, the shift in production from A to B is consistent with all but which of the following?
- an advance in biochemistry which raises corn yields per unit of land and labor
- society's preferences shifting in favor of cotton
- previously unemployed workers being put to work
- corn farmers receive new and improved equipment

![Figure B](image)

30) Studies at Cornell University indicate that chickens grow 2 percent more weight when a red mitten is placed in their cage and Vivaldi is played in the chicken coop. Estimates of the resulting chicken feed savings are about $60 million a year. How does this show up in the market for chickens?
- The price of chickens will rise as more are sold.
- The quantity of chickens sold will fall.
- The demand curve shifts to the right due to a drop in price.
- The supply curve shifts to the right.

31) If the PPF is linear
- opportunity costs change as one slides along the frontier.
- the opportunity cost of moving along the frontier is zero.
- the principle of increasing cost holds.
- specialization of inputs is present.
- none of the above is true.
32) Generally speaking, the PPF does not give us information about which of the following.
   a. Efficiency
   b. Prices
   c. Opportunity costs
   d. Input specialization

33) We observe that the price of food rises while the quantity purchased falls. This means the
   a. supply curve shifted to the left.
   b. demand curve shifted to the left.
   c. demand curve shifted to the right.
   d. supply curve shifted to the right.

34) Saccharin and aspartame are both low-calorie substitutes for sugar. If saccharin is found to be a cause of cancer,
   a. the price of aspartame will increase
   b. the price of sugar will decrease
   c. the price of saccharin will increase
   d. the demand curves for aspartame and sugar will shift leftward
   e. aspartame and sugar will be complements

35) A minimum wage that is set below the equilibrium wage rate will:
   a. lead to higher wages for some individuals.
   b. lead to lower levels of employment as employers find it more expensive to hire workers.
   c. lead to higher levels of employment as more workers are enticed into the labor market by this new wage.
   d. do nothing whatsoever.

36) Suppose Mathilda is considering producing a new product. After doing some market research she suspects that the supply curve for this good will intersect the vertical axis above the demand curve. If this is the case, which of the following will hold?
   a. The market price of this good will be quite high.
   b. A shortage of this good will occur.
   c. None of this good will be produced or sold.
   d. A surplus of this good will occur.
   e. none of the above.
37) Samsung sold more cell phones in 2010 than it sold five years earlier, but revenues are 18 percent less. Revenue = P x Q. Which graph in Figure C is consistent with this set of facts?
   a. 1  
   b. 2  
   c. 3  
   d. 4  

![Figure C](image)

38) A tax is placed on the seller of a good. The tax has the effect of shifting the
   a. demand curve to the right.  
   b. supply curve to the right.  
   c. demand curve to the left.  
   d. supply curve to the left.  
   e. either b or c.  

39) If you ignore extraneous information in order to concentrate on the problem at hand, you are engaged in the process of
   a. induction.  
   b. deduction.  
   c. reduction.  
   d. abstraction.  
   e. None of the above  

40) Steel workers in the U.S. are constantly arguing for curbs on the volume of imported steel. This in fact is to produce a
   a. leftward shift in the supply curve of American steel.  
   b. leftward shift in the demand curve of American steel.  
   c. rightward shift in the supply curve of American steel.  
   d. rightward shift in the demand curve of American steel.
Short Answer and Graphing Questions

General Directions: Please read the “Homework Advice” handout in the Handout Archive before doing these questions. All work must be excruciatingly neat. All written work must be legible, all graphs completely labeled. All written answers must be put in your own words. Answers must be coherent, cogent, complete, and concise. You should show up for class with your work completed on standard 8 1/2 x 11 paper. Pages should be stapled together and there should be no fringes. Do not staple the Scantron with the objective question answers to the rest of your work though. The Scantron machine does not like staples. Failing to comply with these instructions will cost you points.

1) For each of the following, use supply and demand diagrams to illustrate the shift that occurs in the specified market. Be sure to identify the market, label all axes and curves, show the initial and final equilibrium values for price and quantity, and use arrows to indicate the direction of the shift. (Note: all 7 of these graphs could probably be put on one or 2 sheets of paper if done neatly and carefully.) 14 points

   a) Gillette produces an advanced 3-blade razor. Schick is about to introduce a new 5 blade razor, with a convincing ad campaign claiming that it produces a superior shave. Show the effect of this introduction on the market for Gillette's 3-blade razor.

   b) In the early 1800's, able bodied seamen (ABS) were skilled sailors sought after by both merchant and naval vessels. Consider the market for able bodied seamen. With the rise of Napoleon, England expanded its navy dramatically, from 80 naval vessels to more than 400. Show the effect of this expansion on the market for able bodied seamen.

   c) In times of war, the British navy sometimes "impressed" sailors from merchant ships. In other words, British naval ships would stop merchant vessels from various countries at sea, and forcibly take British-born able bodied seamen to serve in the British Navy. (In practice, they often took any able bodied seaman who even spoke English, whether they were British or not. This was one cause of the War of 1812.) Consider the information in question again. Show the effect of the expansion of the British navy on the market for merchant able bodied seamen specifically, in other words, those serving on merchant ships.

   d) The DEA often auctions off cars seized in drug raids. The number of cars at each auction is fixed, and they are simply sold to the highest bidder. In 2004, the DEA scheduled an auction of 220 luxury cars in sunny southern Florida. On the day of the auction, a series of severe thunderstorms pelted southern Florida with high winds and heavy rains. The auction was held anyway. Show the effect of this weather on the market for these luxury cars.

   e) Nylon was invented shortly before WWII. A wonderful new fiber, nylon could be used for making a variety of products, including stockings for women, and parachutes for pilots. When WWII broke out, the government began buying up all of the supplies of nylon to make parachutes for military aviators. Show the effect of this action on the market for women's nylon stockings.

   f) Patents grant an inventor sole commercial rights to their invention for a period of time. Drug makers have received patents for a large number of drugs over time including Liptor (atorvastatin calcium), Zoloft (sertraline HCl), Zithromax (azithromycin), Nexium (esomeprazole
magnesium), etc. When that patent protection expires, competitors are free to introduce generic versions of the original drug. Consider the market for Lipitor (atorvastatin calcium), produced by Pfizer. Lipitor's patent protection expires in 2010. Show the effect of patent protection expiration on the market for Lipitor.

g) Consider the information in question (f) again. Show the effect of the loss of patent protection on the market for atorvastatin calcium.

2) Estaban has two fields on his farm near Vallencia, Spain where he can grow oranges and olives. Field 1 is 100 acres in size. It can produce 400 bushels of oranges per acre or 300 bushels of olives. Field 2 is 200 acres in size and can produce 600 bushels of oranges per acre or 800 bushels of olives per acre.
   a) Draw a separate production possibilities frontiers for each of these fields.
   b) Calculate the opportunity cost of oranges in Field 1 and the opportunity cost of oranges in Field 2.
   c) Draw an overall PPF for Estaban's farm.
   d) Suppose Estaban wishes to produce 20,000 bushels of oranges. How many acres should he devote to oranges? What is the maximum number of bushels of olives he could produce if he produces this quantity of oranges? What is the OC of another bushel of oranges at this level of orange production?
   e) Suppose Estaban now wishes to produce 120,000 bushels of oranges. How many acres should he devote to oranges? What is the maximum number of bushels of olives he could produce if he produces this quantity of oranges? What is the OC of another bushel of oranges at this level of orange production? 12 points