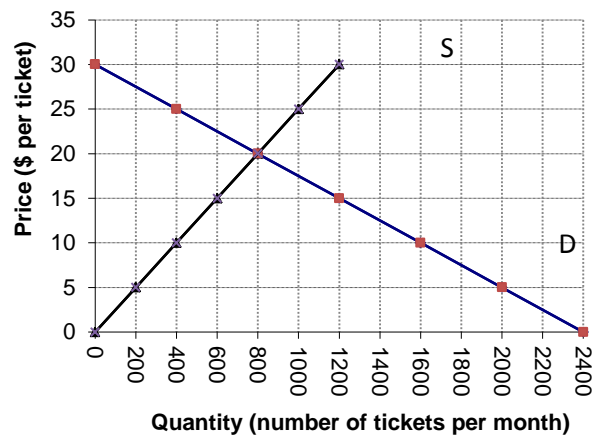


Instructions: Answer all of the following 33 questions (each worth 3 points). Using pencil, mark your answers on the answer sheet provided. Mark the test version number in the "date" space of the answer sheet (the version number is found at the bottom of this page). Print your name and student number clearly on the answer sheet. Fill in the bubbles corresponding to your student number, leaving the top box blank (or inserting a dash there) and filling in the "0" bubble in the top row.

Keep this copy of the test - turn in only the answer sheet.

No calculators are allowed in the exam and your answers to the test should consist entirely of your own work. Cheating will result in an "F" grade for the entire class and as much public humiliation as is permissible by law.

Answers will be posted on the class web site as soon as possible. GOOD LUCK!



1. The graph above shows the demand and supply for tickets to watch Warren Miller Ski movies in Bozeman. At equilibrium, producer surplus is _____ per month.

- a. $\frac{1}{2} * 800 * \$10 = \$4,000$
- b. $\frac{1}{2} * 800 * \$20 = \$8,000$
- c. $\frac{1}{2} * 800 * \$30 = \$12,000$
- d. $\$20 * 800 = \$16,000$
- e. Unknown, since the price of tickets is unknown

2. Ceteris paribus, an increase in the price of Snickers candy bars could be caused by

- a. a decrease in the demand for Snickers candy bars
- b. an increase in the supply of Snickers candy bars
- c. an increase in the demand for Snickers candy bars
- d. a decrease in consumer incomes, assuming that Snickers candy bars are a normal good
- e. a decrease in consumer tastes and preferences for Snickers candy bars

3. Soup at The Garage restaurant and soup at the Co-op Deli are substitute goods. Ceteris paribus, if the price of soup at The Garage falls, what can we expect to happen?
- the demand for soup at The Garage will increase
 - the demand for soup at the Co-op will decrease
 - the demand for soup at the Co-op will increase
 - the supply of soup at The Garage will decrease
 - a and b are both true

Price (per hot dog)	Quantity of Hot Dogs demanded (per month)	Price (per serving of chili)
3	20	3
3	40	2
4	10	3
4	30	2

4. The table above shows demand data for hot dogs at Dog Eat Dog restaurant. At different times, Dog Eat Dog's owner charged different prices for chili at the restaurant. According to these data, the quantity of hot dogs demanded
- is negatively related to the price of chili
 - is positively related to the price of chili
 - is unrelated to the price of chili
 - is negatively related to the price of hot dogs
 - both a and d are true

Quantity	Marginal Benefit (\$)
1	400
2	375
3	350
4	300
5	275

5. Wayne is a famous hockey player. He is interested in obtaining one or more new pairs of skates to wow his fans and potential sponsors. His marginal willingness to pay (i.e., marginal benefit) for pairs of skates is detailed in the table above. What is Wayne's total willingness to pay for **three pairs of skates**?
- \$350
 - $\$(400+375+350) = \1125
 - \$375
 - $\$(375-350) = \25
 - not enough information since the price of skates is not given

Country	Production per month
Spain	800 million units of grapes or 200 million units of olives
Portugal	600 million units of grapes or 200 million units of olives

6. The table above shows the production possibilities for two countries, Spain and Portugal, which produce grapes and olives. Based on this information and assuming constant opportunity costs for simplicity, the opportunity cost of producing one unit of grapes in Portugal is

- 3 units of olives
- 1 unit of olives
- 1/3 unit of olives
- 3 units of grapes

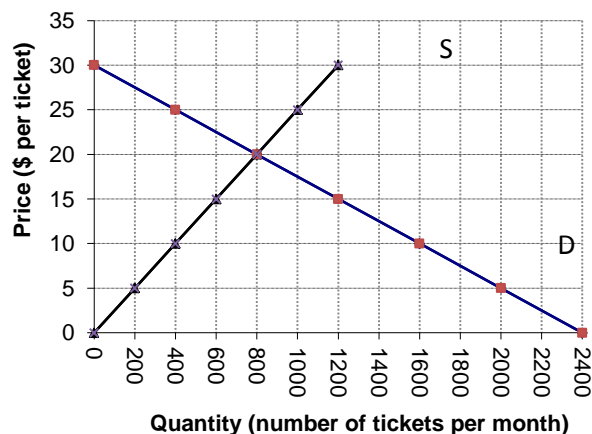
7. Netflix subscriptions and Hulu Plus subscriptions are substitutes. Ceteris paribus, if the price of Hulu Plus subscriptions falls,

- the demand for Hulu Plus subscriptions increases
- the demand for Netflix subscriptions increases
- the demand for Netflix subscriptions decreases
- the demand for Hulu Plus subscriptions decreases
- a and c are both true

Quantity Demanded Per Month	Price (\$/sandwich)	Quantity Supplied Per Month
700	4	100
600	6	300
500	8	500
400	10	700
300	12	900

8. The table above shows the demand and supply of sandwiches at Pickle Barrel restaurant. At what price would this market be in equilibrium?

- P = \$4
- P = \$6
- P = \$8
- P = \$10
- P = \$12



9. The graph above shows the demand and supply for tickets to watch Warren Miller Ski movies in Bozeman. At equilibrium, consumer surplus is _____ per month.

- a. $\frac{1}{2} * 800 * \$10 = \$4,000$
- b. $\frac{1}{2} * 800 * \$20 = \$8,000$
- c. $\frac{1}{2} * 800 * \$30 = \$12,000$
- d. $\$20 * 800 = \$16,000$
- e. Unknown, since the price of tickets is unknown

10. The price of skis in Bozeman decreased recently. Some skiers suggest that the price fell because REI, an outdoor gear store, opened for business in Bozeman. Other skiers attributed the fall in the price of skis more to the increasing trend toward snowboarding. How can we determine which skiers are right?

- a. it depends on whether the demand curve or the supply curve changed first
- b. if the equilibrium quantity of skis sold decreased, then the dominant cause must have been the opening of REI
- c. if the equilibrium quantity of skis increased, then the dominant cause must have been the trend toward snowboarding
- d. if the equilibrium quantity of skis increased, then the dominant cause must have been the opening of REI

Number of Pies	Total Benefit		Pie	Marginal Benefit
1	\$10.00		1 st	\$10.00
2	\$19.00		2 nd	?
3	\$27.00		3 rd	?
4	\$34.00		4 th	?
5	\$40.00		5 th	\$6.00

11. Marie loves pie. The left side of the table above shows Marie's total benefits (or total willingness to pay) associated with eating pie during a month. The right side of the table shows Marie's marginal benefit. Suppose that pies are priced at \$7.50. How many pies will Marie choose to buy in a month?

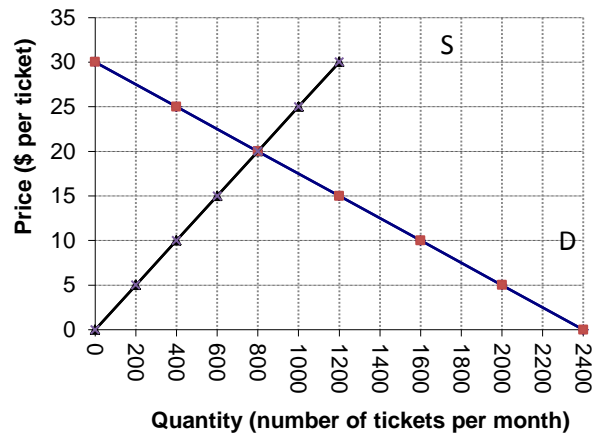
- a. 1
- b. 2
- c. 3
- d. 4
- e. 5

12. Flash drives and memory cards are substitute goods for computer users. If the price of flash drives decreases, the

- a. demand for memory cards will decrease.
- b. supply of memory cards will decrease.
- c. quantity supplied of flash drives will increase.
- d. quantity demanded of flash drives will decrease.

13. Tacos and nachos are substitute goods for consumers. A rise in the price of nachos will _____ the demand for tacos. As a result, the equilibrium quantity of tacos will _____.

- a. increase; increase
- b. increase; decrease
- c. decrease; decrease
- d. decrease; increase



14. The graph above shows the demand and supply for tickets to watch Warren Miller Ski movies in Bozeman. Suppose that the price of tickets is initially \$10 each. At this price ___ tickets would be sold per month. As the market adjusts to equilibrium, the quantity of tickets sold will ___ and the price will ____.

- a. 1600; fall; fall
- b. 800; fall; fall
- c. 400; fall; rise
- d. 400; rise; rise
- e. 1600; rise; fall

Quantity	Marginal Benefit (\$)
1	400
2	375
3	350
4	300
5	275

15. Wayne is a famous hockey player. He is interested in obtaining one or more new pairs of skates to wow his fans and potential sponsors. His marginal willingness to pay (i.e., marginal benefit) for pairs of skates is detailed in the table above. If the local hockey shop has their skates on sale for \$285 per pair, how many will Wayne want to purchase?

- a. 1
- b. 2
- c. 3
- d. 4
- e. 5

16. For some people, Macaroni & Cheese is an inferior good. Ceteris paribus, if these people's incomes decrease, you predict that the

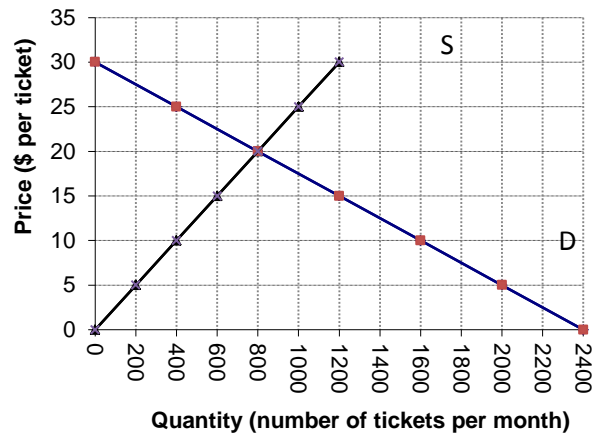
- a. demand Macaroni & Cheese will decrease and the price of Macaroni & Cheese will fall.
- b. demand for Macaroni & Cheese will increase and the price Macaroni & Cheese will fall.
- c. demand for Macaroni & Cheese will decrease and the price of Macaroni & Cheese will rise.
- d. demand for Macaroni & Cheese will increase and the price of Macaroni & Cheese will rise.

17. Cuts in the US defense budget have decreased the demand for FBI agents. At the same time, shows like "24" that depict the groovy-cool lives of counter-terrorist agents have encouraged more people to pursue careers as FBI agents. What can we clearly predict about the labor market for FBI agents as a result of these two events?
- the equilibrium salaries of FBI agents will fall, but the effect on the number of FBI agents employed is unknown
 - the number of FBI agents employed will fall, but the effect on equilibrium salaries of FBI agents is unknown
 - the equilibrium salaries of FBI agents will fall, but the number of FBI agents employed will rise
 - the equilibrium salaries of FBI agents will rise, but the number of FBI agents employed will fall
 - the equilibrium salaries of FBI agents will fall, and the number of FBI agents employed will fall

18. Last year Martha could grow 20 bushels of basil or 25 bushels of cilantro on each acre of land that she farmed. This spring, she discovered a free organic fertilizer that allows her to double the amount of cilantro that she can grow on each acre, ceteris paribus. How has Martha's opportunity cost changed with this discovery?
- The opportunity cost of cilantro stays the same because the discovery will allow Martha to produce more of both goods.
 - The opportunity cost of basil stays the same because the discovery does not change the amount of basil that Martha can produce.
 - The opportunity cost of basil has increased
 - The opportunity cost of basil has decreased

Price (per hot dog)	Quantity of Hot Dogs demanded (per month)	Price (per serving of chili)
3	20	3
3	40	2
4	10	3
4	30	2

19. The table above shows demand data for hot dogs at Dog Eat Dog restaurant. At different times, Dog Eat Dog's owner charged different prices for chili at the restaurant. According to these data, hot dogs and chili are
- Complement goods
 - Substitute goods
 - Inferior goods
 - Normal goods
 - Unrelated goods
20. Suppose there is a surplus in the market for Hula-Hoops. Ceteris paribus, we would expect to observe ___ as the market moved to equilibrium.
- the price of Hula-Hoops rising
 - the price of Hula-Hoops falling
 - the demand for Hula-Hoops falling
 - the quantity of Hula-Hoops demanded falling
 - b and d are both correct



21. The graph above shows the demand and supply for tickets to watch Warren Miller Ski movies in Bozeman. If the cost of renting venues to show movies in Bozeman falls, a possible new equilibrium price and quantity of movies could be

- a. P = \$15; Q = 600
- b. P = \$15; Q = 1200
- c. P = \$20; Q = 800
- d. P = \$25; Q = 400
- e. P = \$25; Q = 1000

Country	Production per month
Spain	800 million units of grapes or 200 million units of olives
Portugal	600 million units of grapes or 200 million units of olives

22. The table above shows the production possibilities for two countries, Spain and Portugal, which produce grapes and olives. Based on this information and assuming constant opportunity costs for simplicity, _____ has a comparative advantage in producing grapes and _____ has a comparative advantage in producing olives.

- a. Spain; Portugal
- b. Portugal; Portugal
- c. Spain; Spain
- d. Portugal; Spain

23. Lake Powell is located in Southern Utah and Northern Arizona. It has over 2,000 miles of shoreline, warm water, and some of the most spectacular scenery in the west. The Lake Powell Marina is working to predict the demand for houseboat rentals during the upcoming vacation season. Their analyst notices that when the price of airline flights falls, the demand for houseboat rentals falls. This implies that

- a. airline flights are normal goods
- b. airline flights are substitutes for Lake Powell houseboat rentals
- c. Lake Powell houseboat rentals are normal goods
- d. airline flights are complements to Lake Powell houseboat rentals

24. You observe that the price of Bozone amber beer has fallen and the quantity sold also increased. Ceteris paribus, this could result from

- a. A decrease in the demand for Bozone amber beer.
- b. An increase in the supply of Bozone amber beer.
- c. A decrease in the supply of Bozone amber beer.
- d. An increase in the demand for Bozone amber beer.
- e. Either b or d could be the cause.

Number of Pies	Total Benefit		Pie	Marginal Benefit
1	\$10.00		1 st	\$10.00
2	\$19.00		2 nd	?
3	\$25.00		3 rd	?
4	\$32.00		4 th	?
5	\$38.00		5 th	\$6.00

25. Marie loves pie. The left side of the table above shows Marie's total benefits (or total willingness to pay) associated with eating pie during a month. The right side of the table shows Marie's marginal benefit. Suppose that pies are priced at \$8.50. How many pies will Marie choose to buy in a month?

- a. 1
- b. 2
- c. 3
- d. 4
- e. 5

26. Guarana Antarctica soda and Inca Cola are substitutes. Ceteris paribus, when the price of Inca Cola increases,

- a. the demand for Inca Cola decreases
- b. the demand for Guarana Antarctica increases
- c. the quantity of Inca Cola demanded decreases
- d. the quantity of Inca Cola demanded increases
- e. b and c are both true

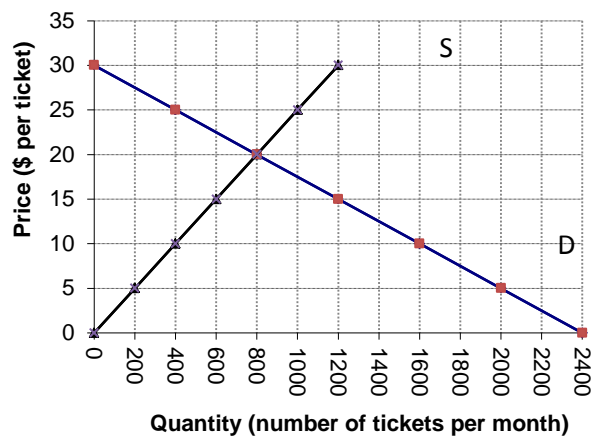
Quantity Demanded Per Month	Price (\$/sandwich)	Quantity Supplied Per Month
700	4	100
600	6	300
500	8	500
400	10	700
300	12	900

27. The table above shows the demand and supply of sandwiches at Pickle Barrel restaurant. If the price of a sandwich is \$6, there is a

- a. shortage of sandwiches and the price will rise as the market moves to equilibrium.
- b. surplus of sandwiches and the price will rise as the market moves to equilibrium.
- c. shortage of sandwiches and the price will fall as the market moves to equilibrium.
- d. surplus of sandwiches and the price will fall as the market moves to equilibrium.

Country	Production per month
Spain	800 million units of grapes or 200 million units of olives
Portugal	600 million units of grapes or 200 million units of olives

28. The table above shows the production possibilities for two countries, Spain and Portugal, which produce grapes and olives. Based on this information and assuming constant opportunity costs for simplicity, which of the following trades would be possible and would make both countries better off?
- Spain trades away 100 units of olives for 350 units of grapes from Portugal
 - Portugal trades away 300 units olives for 200 units of grapes as from Spain
 - Portugal trades away 100 units of olives for 350 units of grapes from Spain
 - Portugal trades away 100 units olives for 100 units of grapes from Spain



29. The graph above shows the demand and supply for tickets to watch Warren Miller Ski movies in Bozeman. Given this information, the maximum amount that consumers are willing to pay for the 400th ski movie per month is _____.
- \$25
 - \$30
 - $\$30 - \$25 = \$5$
 - $\$30 - \$20 = \$10$
 - Unknown, since the price of ski movies is unknown

30. In one day, John Smith, a professional assassin, can blow up three buildings or kill six bad guys. His partner Jane can blow up two buildings or kill five bad guys in one day. John and Jane can gain from specialization and trade if Jane _____ and John _____.
- kills bad guys; blows up buildings
 - kills bad guys; kills bad guys
 - blows up buildings; kills bad guys
 - blows up buildings; blows up buildings
 - none of the above, John should do everything since he is better at being an assassin than Jane is

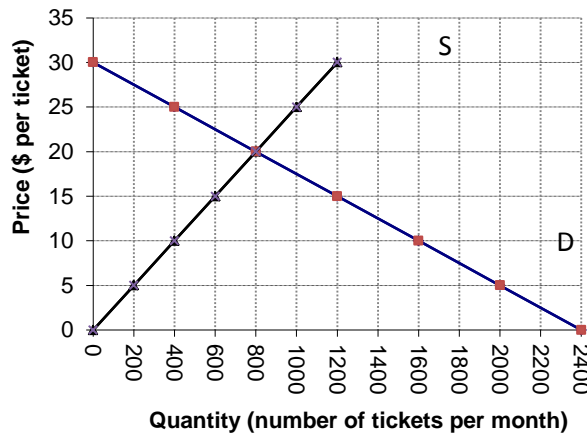
31. McGraw-Hill textbook publishers are analyzing demand for the upcoming school year. Their analyst notices that when the price of online study guides rises, the demand for traditional textbooks rises. This implies that
- textbooks are normal goods
 - textbooks are substitutes for online study guides

- c. textbooks are inferior goods
- d. textbooks are complements for online study guides
- e. the relationship between textbooks and online study guides is unclear

Quantity	Marginal Benefit (\$)
1	400
2	375
3	350
4	300
5	275

32. Wayne is a famous hockey player. He is interested in obtaining one or more new pairs of skates to wow his fans and potential sponsors. His marginal willingness to pay (i.e., marginal benefit) for pairs of skates is detailed in the table. Based on this information, how much is Wayne willing to pay for **the fourth pair** of skates?

- a. \$300
- b. \$350
- c. $\$(400+375+350+300) = \1425
- d. $\$(350-300) = \50
- e. not enough information since the price of skis is not given



33. The graph above shows the demand and supply for tickets to watch Warren Miller ski movies in Bozeman. Suppose the county commission restricts the number of tickets for Warren Miller ski movies to no more than 400 per month. The deadweight loss from this restriction would be _____ per month.

- a. $\frac{1}{2} * 400 * \$5 = \$1,000$
- b. $\frac{1}{2} * 400 * \$10 = \$2,000$
- c. $\frac{1}{2} * 400 * \$15 = \$3,000$
- d. $\frac{1}{2} * 800 * \$30 = \$12,000$
- e. $(.5 * 400 * \$5) + (.5 * 400 * \$10) + (\$15 * 400) = \$9,000$