

wrong 26,27,40

47/50 ✓

Version 333

THE UNIVERSITY OF WESTERN ONTARIO
LONDON CANADA

aaronbaer2
@gmail.com

Michael Parkin

ECONOMICS 020-002/004

October 13, 2007

MIDTERM 1

Aaron Baer
250399666

INSTRUCTIONS:

1. The examination begins at **4:00 p.m.** and ends at **6:00 p.m.**
2. Check that your examination paper contains 19 pages.
3. Use a **BLACK PENCIL** to complete your Scantron Form.

Print your **NAME** and complete your **SIGNATURE**.

Enter your **STUDENT NUMBER**.

Enter your **SECTION NUMBER**, which is either 002 or 004.

4. Calculators may be used.
5. Please hand in Scantron forms only.

NOTE: QUESTIONS ARE PRINTED AT THE BACK OF EACH PAGE

Handwritten scribble

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

✓ ✓ 1) Choices are in the social interest if they bring the greatest possible benefit to

- A) all living things.
- B) children and the elderly.
- C) the government.
- ✓ D) society as a whole.
- E) third-world countries.

✓ ✓ 2) During the next hour John can choose one of the following three activities: playing basketball, watching television, or reading a book. The opportunity cost of reading a book

- A) depends on how much the book cost when it was purchased.
- B) is watching television if John prefers playing basketball to watching television.
- ✓ C) is playing basketball *and* watching television.
- D) depends on how much John enjoys the book.
- E) is playing basketball if John prefers that to watching television.

highest valued alternative

✓ ✓ 3) The big tradeoff is between

- A) equality and efficiency.
- B) taxes and transfers.
- ✓ C) current consumption and a higher future standard of living.
- D) guns and butter.
- E) output and inflation.

✓ ✓ 4) Model *A* is superior to model *B* if

- A) it contains fewer unrealistic assumptions than model *B*.
- B) it is scientifically "elegant."
- ✓ C) it contains more real world detail than model *B*.
- D) its predictions correspond more closely to the facts than the predictions of model *B*.
- E) it is preferred by a majority of researchers in a public opinion poll.

✓ ✓ 5) Which one of the following concepts is *not* illustrated by a production possibilities frontier?

- A) attainable and unattainable points
- B) opportunity cost
- ✓ C) monetary exchange
- D) scarcity
- E) the tradeoff between producing one good versus another



Use the figure below to answer the following question.

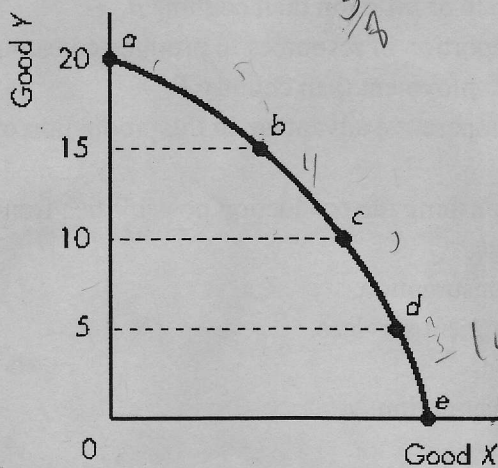


Figure 1

OP cost X
is greater
from shoe

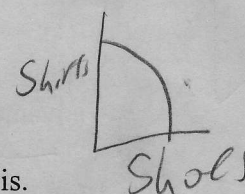
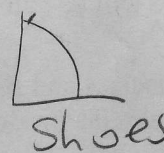
6) Refer to the production possibilities frontier in Figure 1. For which of the following movements is the opportunity cost of Y the greatest?

- A) e to d
- B) d to c
- C) b to a
- D) c to b
- E) The opportunity cost is the same in each case.

7) A graph with the quantity of shoes on the X axis and the quantity of shirts on the Y axis shows the PPF for shoes and shirts. As you move up toward the left along the production possibilities frontier, the marginal cost of producing a

- A) a shirt decreases.
- B) a shirt increases.
- C) a shoe increases.
- D) a shoe is negative.
- E) shoe or a shirt is equal at the midpoint between the vertical and horizontal axis.

Shoe decrease
Shirt increase



8) If allocative efficiency is achieved, then for each good produced marginal

- A) cost is at its minimum and marginal benefit can have any value.
- B) benefit equals marginal cost.
- C) benefit is at its maximum and marginal cost is at its minimum.
- D) benefit is at its maximum and marginal cost can have any value.
- E) benefit exceeds marginal cost by as much as possible.

- 9) If country *A* is accumulating capital at a faster rate than country *B*, then country *A*
- A) will have a production possibilities frontier that is shifting out faster than country *B*'s.
 - B) will have a higher rate of inflation than country *B*.
 - C) is using a larger proportion of resources to produce consumption goods.
 - D) will have more unemployment than country *B*.
 - E) will soon have a comparative advantage in the production of most goods.

- 10) The opportunity cost of pushing the production possibilities frontier outward is
- A) technological change.
 - B) the gain in future consumption.
 - C) a decrease in government services.
 - D) capital accumulation.
 - E) reduced current consumption.

Use the information below to answer the following question.

Fact 1

Agnes can produce either 1 unit of *X* or 1 unit of *Y* in an hour, while Brenda can produce either 2 units of *X* or 4 units of *Y* in an hour.

$X \rightarrow 1$

$X \rightarrow 2$

- 11) Complete the following sentence. Given Fact 1,
- A) there will be gains from exchange only if Agnes specializes in the production of *Y* and Brenda in *X*.
 - B) there will be no gains from exchange because Agnes has an absolute advantage.
 - C) there will be gains from exchange only if Agnes becomes faster at producing *X*.
 - D) there will be gains from exchange, no matter what Brenda and Agnes specialize in, as long as they specialize.
 - E) there will be gains from exchange if Agnes specializes in the production of *X* and Brenda in *Y*.

- 12) If individuals *A* and *B* can both produce only goods *X* and *Y* and *A* does *not* have a comparative advantage in the production of either *X* or *Y*, then we know

- A) *A* must have lower opportunity costs of production in both goods.
- B) *B* has an absolute advantage in the production of *X* and *Y*.
- C) *B* has a comparative advantage in the production of both *X* and *Y*.
- D) the gains from trade will be large but only in one direction.
- E) *A* and *B* have the same opportunity cost of producing *X*, and *A* and *B* have the same opportunity cost of producing *Y*.

B or E ??

2 4

- 13) Learning-by-doing is the basis of
- A) economic coordination.
 - B) dynamic comparative advantage.
 - C) research and development.
 - D) absolute advantage.
 - E) increasing opportunity costs.

Use the table below to answer the following question.

Table 1

Year	Coffee Price	Tea Price	Cola Price
2005	\$1.25	\$1.10	\$0.80
2006	\$1.50	\$1.00	\$1.00
2007	\$1.25	\$1.20	\$1.00

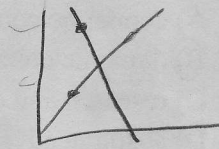
- 14) Consider Table 1. In 2007, the opportunity cost of coffee in terms of cola is
- A) 0.67.
 - B) 1.00.
 - C) 1.25.
 - D) 1.56.
 - E) not determinable without more information.

- 15) If an increase in the price of good *A* causes the demand curve for good *B* to shift to the left, then
- A) *A* and *B* are complements in production.
 - B) *A* and *B* are substitutes.
 - C) *B* is a normal good.
 - D) *B* is an inferior good.
 - E) *A* and *B* are complements.

- 16) A decrease in quantity demanded is represented by a
- A) movement upward and to the left along the demand curve.
 - B) rightward shift of the demand curve.
 - C) leftward shift of the demand curve.
 - D) rightward shift of the supply curve.
 - E) movement downward and to the right along the demand curve.

- 17) If the number of suppliers of good *Y* increases, then
- A) the supply curve of good *Y* will shift to the right.
 - B) the supply curve of good *Y* will shift to the left.
 - C) a movement downward along the supply curve of good *Y* will occur.
 - D) the supply curve of good *Y* will remain unchanged.
 - E) a movement upward along the supply curve of good *Y* will occur.

- 18) A rise in the price of a good will cause
- A) a movement to the right along the supply curve.
 - B) a movement to the right along the demand curve.
 - C) the demand for a complement in production to increase.
 - D) the supply of the good to increase.
 - E) the demand for the good to decrease.



quantity ↑
quantity ↓

Use the figure below to answer the following questions.

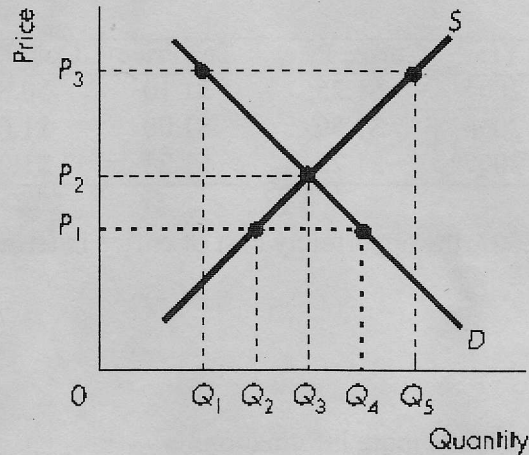


Figure 2

- 19) At price P_3 in Figure 2,
- A) there is a shortage equal to $Q_5 - Q_1$.
 - B) the equilibrium quantity is Q_5 .
 - C) there is a surplus equal to $Q_5 - Q_1$.
 - D) this market is in equilibrium.
 - E) there is a tendency for the price to rise.

surplus $Q_5 - Q_1$

- 20) At price P_1 in Figure 2,
- A) producers are unwilling to sell any goods.
 - B) a surplus exists.
 - C) producers can sell all they plan to sell.
 - D) consumers can buy all they want.
 - E) both sides of the market are able to carry out their desired transactions.

21) Suppose we observe both a decrease in the price of good A and an increase in the quantity of good A bought and sold. Which one of the following is a likely explanation?

- A) The supply of A has decreased.
- B) The demand for A has decreased.
- C) The demand for A has increased.
- D) The supply of A has increased.
- E) The law of supply is violated.

22) Good X is an inferior good. A leftward shift of the supply curve of good X could be the result of

- A) a rise in the wage rate of the workers who produce good X .
- B) a decrease in income.
- C) a change of preferences that decrease the demand for good X .
- D) a rise in the price of good X .
- E) a technological advance in the production of good X .

23) If A and B are substitutes in production and the price of A falls, the supply of B will

- A) increase, and the price of B will rise.
- B) decrease, and the price of B will fall.
- C) decrease, and the price of B will rise.
- D) shift depending on whether A and B are substitutes.
- E) increase, and the price of B will fall.

24) If we observe an increase in the equilibrium quantity, we know that

- A) either the demand for A has decreased or the supply of A has decreased or both.
- B) either the demand for A has increased or the supply of A has decreased or both.
- C) either the demand for A has increased or the supply of A has increased or both.
- D) either the demand for A has decreased or the supply of A has increased or both.
- E) any of the above could have occurred; it depends on the relative size of the effects.

Use the table below to answer the following question.

Table 2
The Market for Car-Seat Heaters

Price (\$)	Quantity Demanded	Quantity Supplied
40	500	300
50	450	350
60	400	400
70	350 <i>250</i>	450 <i>250</i>
80	300	500
90	250	550
100	200	600

25) Consider Table 2. Suppose a problem develops with car-seat heaters—they malfunction and occasionally cause serious burns. As a result, demand decreases by 100 units at each price. Simultaneously, the cost of production rises, causing supply to decrease by 200 units at each price. The new equilibrium price is \$_____ and equilibrium quantity is _____ units.

- A) 50; 450
- B) 70; 250
- C) 70; 350
- D) 70; 450
- E) 60; 300

dem ↓ 100 sup ↓ 200

70 and 250

Use the table below to answer the following question.

Table 3
Quantities demanded and supplied in equilibrium before and after a drought strikes potato farmers.

	Potatoes		Hamburgers		Rice	
	before	after	before	after	before	after
<i>comp</i> Region 1	100	30	50 ↓	20	3	50
Region 2	10	5	4 ↑	50	50	60

26) Consider Table 3. In Region 1, potatoes and hamburgers are

- A) normal goods.
- B) unrelated goods.
- C) complements.
- D) substitutes.
- E) inferior goods.

*Supply Potatoes ↓
↓ - Price UP
↓ dem burgers ↓
if comp
dem burgers UP if sub*

27) The data in the table below show the demand schedule for bottled water by the combined 002 and 004 sections of your economics class. The demand for bottled water is elastic at prices above _____, is unit elastic at a price of _____, and is inelastic at prices below _____.

Price (cents per bottle)	Quantity Demanded (bottles of water)
1000	1
600	17
500	34
400	75
300	122
200	203
175	232
150	270
125	320
100	382
75	412
50	455
25	496

XE

10 elastic
5
0 inelastic

- A) \$1.75; \$2.00; \$3.00
- B) \$5.00; \$5.00; \$5.00
- C) \$10.00; \$5.00; \$0.25
- D) \$0.25; \$2.50; \$0.25
- E) \$2.00; \$2.00; \$1.75

infinite

Use the figure below to answer the following question.

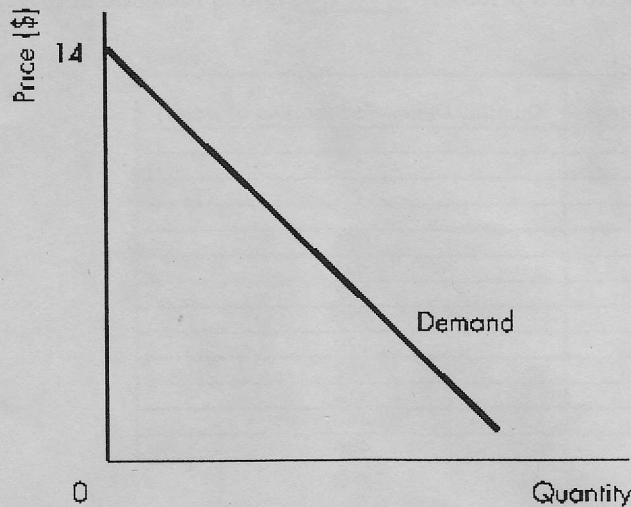


Figure 3

28) Figure 3 illustrates a linear demand curve. If the price falls from \$4 to \$3, we know

- A) total revenue will increase.
- B) the effect on total revenue can be determined only with information on the quantities.
- C) the effect on total revenue cannot be determined.
- D) total revenue will decrease.
- E) total revenue will remain unchanged.

inelastic
REV ↓
inelastic → decrease

(3)(100)

(4)(86)

1490
285790

Use the table below to answer the following question.

Table 4

	Price of Jolt	Price of Coke	Income Level	Coke Sales
2000	\$1.00/can	\$1.00/can	\$25,000	15,000 cases
2001	\$1.00/can	\$1.40/can	\$25,000	25,000 cases
2002	\$1.00/can	\$1.40/can	\$35,000	15,000 cases
2003	\$1.40/can	\$1.40/can	\$35,000	5,000 cases

29) Consider Table 4. The cross elasticity of demand for Coke with respect to the price of Jolt is

- A) 10.
- B) 1.5.
- C) 0.75.
- D) 0.40.
- E) -3.

less coke sold
↓
↑

Use the table below to answer the following question.

Table 5

Year	Quantity Demanded	Price (\$)	Income (\$)
2004	25,000	1	4,000
2005	15,000	3	4,000
2006	5,000	3	6,000

30) Consider the information in Table 5. The income elasticity of demand is

- A) -3.33.
- B) -2.5.
- C) 3.33.
- D) 1.25.
- E) 2.5.

neg
-2.5

Use the figure below to answer the following question.

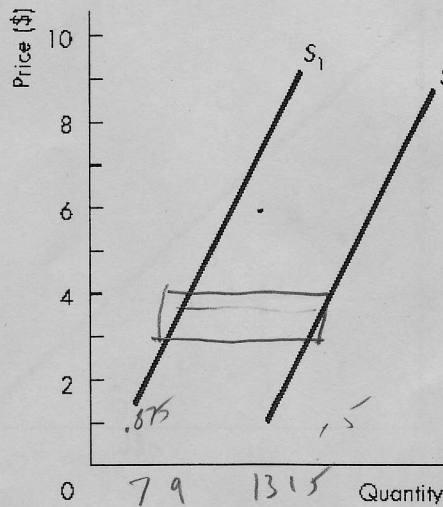


Figure 4

31) The two supply curves in Figure 4 are parallel. In the \$3 to \$4 price range,

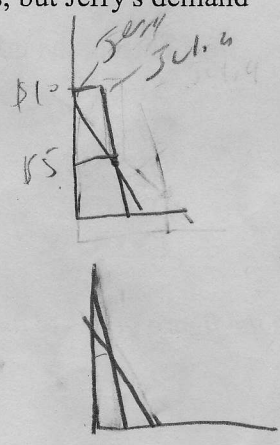
- A) S_1 is more inelastic than S_2 .
- B) S_1 is flatter than S_2 .
- C) S_1 and S_2 have the same elasticity.
- D) S_1 is more elastic than S_2 .
- E) S_1 is steeper than S_2 .

32) Market price is one method of resource allocation. In this case,

- A) everyone in the economy gets the resources.
- B) affordability to pay for the resources is less important than willingness-to-pay.
- C) willingness-to-pay is not an issue.
- D) only those who show interest would get the resources.
- E) only those who are willing and able to pay would get the resources.

33) Currently Jerry and Julia are consuming the same amount of strawberries, but Jerry's demand curve is much more elastic than Julia's. Which statement is true?

- A) Jerry's producer surplus is greater than Julia's producer surplus.
- B) Julia's consumer surplus equals Jerry's.
- C) Julia's consumer surplus exceeds Jerry's. *I think I'm right*
- D) Jerry's consumer surplus exceeds Julia's.
- E) Julia's producer surplus is greater than Jerry's producer surplus.



Use the figure below to answer the following question.

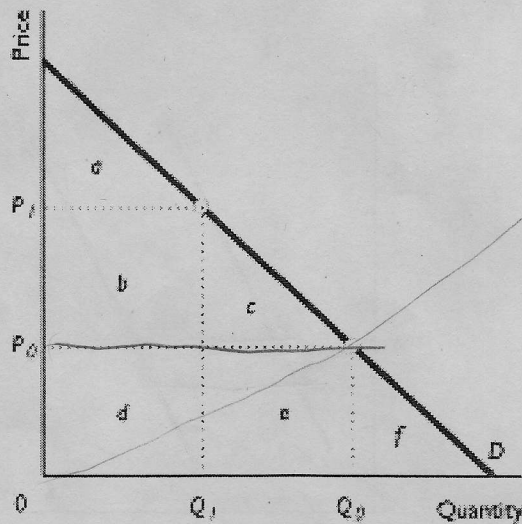


Figure 5

34) Refer to Figure 5. If the price is P_0 , consumer surplus is

- A) a .
- B) b plus c .
- C) d plus e .
- D) a plus b plus c .
- E) a plus b plus c plus d plus e .

Use the table below to answer the following question.

Table 6

Quantity	Marginal Cost (\$)
1	2
2	3
3	4
4	5

35) Table 6 gives information on the marginal cost for the XYZ firm. If XYZ sells the first unit at a price of \$6, what is its total producer surplus on that unit?

- A) \$12
- B) \$4
- C) \$7
- D) \$6
- E) \$9

Use the figure below to answer the following question.

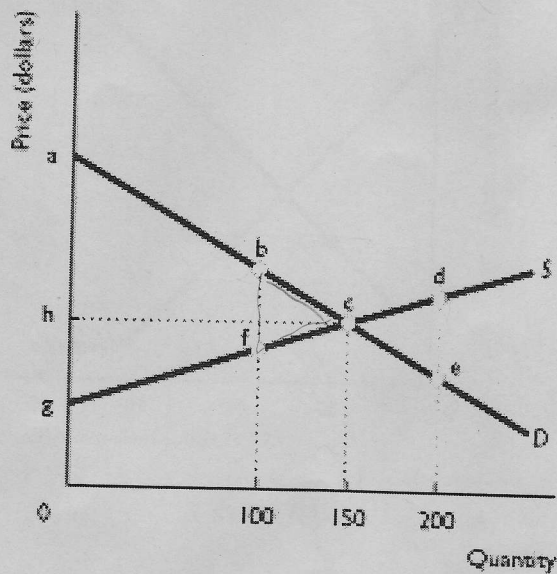


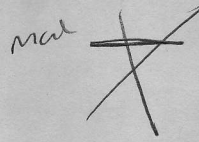
Figure 6

36) Refer to Figure 6. If the level of output is 100, the deadweight loss is area

- A) bcf.
- ~~B) dce.~~
- ~~C) hcg.~~
- ~~D) acg.~~
- ~~E) ach.~~

37) If the government imposes a maximum rent for housing that is above the equilibrium price, then you predict that

- A) the law will generate an excess demand for housing.
- B) house-seekers will observe that landlords start to decrease the standard of maintenance.
- C) the law will have no effect in the housing market.
- D) the supply curve for housing shifts leftward.
- E) the law will create a shortage of housing.



38) The short-run supply curve for rental housing is positively sloped because

- A) the current stock of buildings will be used more intensively as rents rise.
- B) new buildings will be constructed as rents rise.
- C) the cost of constructing a new building is about the same regardless of the number of buildings already in existence.
- D) the supply of housing is fixed in the short run.
- E) the cost of constructing new buildings increases as the number of buildings in existence rise.



Use the figure below to answer the following question.

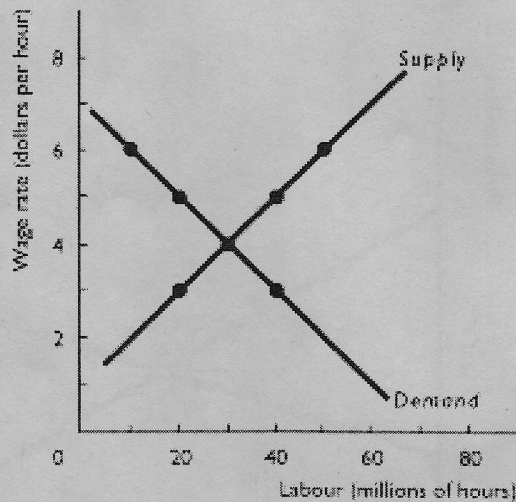


Figure 7

39) If the minimum wage is set at \$3 per hour in Figure 7, what is the level of unemployment in millions of hours?

- A) 50
- B) 20
- C) 40
- D) 0
- E) 10

Use the table below to answer the following question.

Table 7

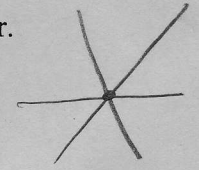
Wage (\$ per hour)	Labour Supplied (hours per week)	Labour Demanded (hours per week)
7	1,000	600
6	800	800
5	600	1,000
4	400	1,200

\$5 600

40) Table 7 gives the supply and demand for teenage labour in Lexington. There is a minimum wage set at \$6 per hour. Suppose a fast food restaurant closes and the demand for teenage labour decreases by 400 hours per week at each wage level. The result will be

X D

- A) elimination of teenage unemployment and a wage of \$4 an hour.
- B) no change in teenage unemployment since the wage must remain at \$6 an hour.
- C) elimination of teenage unemployment and a wage of \$5 an hour.
- D) a wage rate of \$6 an hour and unemployment of 400 hours a week.
- E) elimination of teenage unemployment and a wage rate of \$6 an hour.



41) The tax burden on consumers will be greater the more

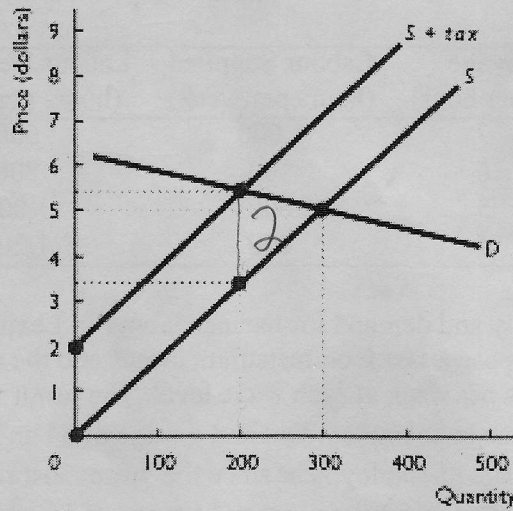
- (1) elastic is demand
- (2) inelastic is demand
- (3) elastic is supply
- (4) inelastic is supply

✓

- A) (2)
- B) (2) and (3)
- C) (1) and (3)
- D) (1) and (4)
- E) (2) and (4)

dem inelas } buyers
 Supp elast } Buy
 Sup inelas }
 Dem and elast } sellers

Use the figure below to answer the following question.



2 x 200 = 400

Figure 8

42) Consider Figure 8. Government revenue from the sales tax is

- A) \$0.
- B) \$400.
- C) \$600.
- D) \$300.
- E) \$100.

43) When farmers face a poor harvest,

- A) supply decreases, price rises, and total farm revenue increases.
- B) supply decreases, price falls, and total farm revenue increases.
- C) supply remains unchanged, price falls, and total farm revenue remains unchanged.
- D) supply increases, price falls, and total farm revenue increases.
- E) supply decreases, price rises, and total farm revenue decreases.

~~Handwritten scribbles and a small diagram with a downward arrow and the word 'de'.~~

~~Handwritten scribble with the word 'price' and 'sup'.~~

~~Handwritten scribble with 'Supd price P' and 'Revenue ↑'.~~

on me

Use the table below to answer the following questions.

Table 8
The Market for a Prohibited Good.

Price (\$)	Quantity Demanded	Quantity Supplied
5	700	100
6	600	200
7	500	300
8	400	400
9	300	500
10	200	600
11	100	700

44) Refer to Table 8. If a \$2-per-unit cost of breaking the law is imposed on buyers, the new price is \$ _____ and the new equilibrium quantity is _____ units.

- A) 7; 300
- B) 8; 300
- C) 8; 400
- D) 8; 200
- E) 9; 300

dem ↓ 200

\$7 300

45) Refer to Table 8. If a \$2-per-unit cost of breaking the law is imposed on sellers, the new price is \$ _____ and the new equilibrium quantity is _____ units.

- A) 8; 300
- B) 7; 300
- C) 8; 200
- D) 8; 400
- E) 9; 300

Supply ↓ 200

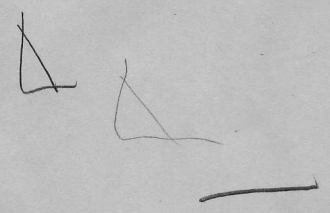
\$9 300

46) The PPF for good X and good Y is a straight line. If a tax is added to good Y, everything else remaining the same, then

- A) the buyer and the seller split the tax, but the seller pays more of the tax.
- B) the seller pays the entire tax.
- C) the buyer and the seller split the tax, but the buyer pays more of the tax.
- D) the buyer and the seller split the tax evenly.
- E) the buyer pays the entire tax.

max cost constant

price ↑ supply ↓ buyer pays



0/∞
 perf demand demand
 buyer pays

47) If a tax is applied to a good, which has a price elasticity of demand equal to zero, then the quantity bought and sold _____, the _____, the total revenue received by the supplier _____, and _____ arises.

- ✓ ✓
- A) decreases; seller pays the entire tax; decreases; a deadweight loss
 - B) decreases; buyer pays the entire tax; decreases; a deadweight loss
 - C) decreases; buyer and the seller split the tax; decreases; no deadweight loss
 - D) does not change; seller pays the entire tax; does not change; no deadweight loss
 - E) does not change; buyer pays the entire tax; does not change; no deadweight loss

Use the table below to answer the following question.

Table 9
 Demand and Supply Schedules for Cups of Coffee each day at CoolU.

Price	Quantity Demanded	Quantity Supplied
\$0.70	1,200	0
\$0.80	1,100	200
\$0.90	1,000	400
\$1.00	900	600
\$1.10	800	800
\$1.20	700	1,000
\$1.30	600	1,200
\$1.40	500	1,400
\$1.50	400	1,600

same, buyer, seller, no

Shortage of 100

den ↑ 200
 sup ↓ 200

48) Table 9 gives the demand and supply schedules for coffee at CoolU. The price of a donut decreases and the demand for coffee changes by 200 cups at each price. At the same time, a drought in coffee-growing regions changes the supply of coffee by 200 cups at each price.

The university decides to place a price ceiling on a coffee at \$1.20 a cup.

As a result, a _____ cups of coffee a day occurs, and _____. The demand for coffee is _____ at the new price.

- ✓
- A) new equilibrium quantity of 800; the price ceiling is ineffective; inelastic
 - B) shortage of 100; the highest price someone is willing to pay for a cup of coffee in the black market is \$1.30; elastic
 - C) shortage of 100; the highest price someone is willing to pay for a cup of coffee in the black market is \$1.05; elastic
 - D) new equilibrium quantity of 800; a deadweight loss arises; inelastic
 - E) new equilibrium quantity of 900; the price ceiling is effective; unit elastic

49) Daphne and Miranda both produce bears stuffed with jelly beans. If we draw their PPFs with bears on the y-axis and bags of jelly beans (for stuffing the bears) on the x-axis, Daphne's PPF is steeper than Miranda's PPF at all quantities of jelly beans and the two PPFs intersect where they each produce 100 bears and 100 bags of jelly beans. If Daphne and Miranda exploit their comparative advantage and trade

- A) ~~Miranda produces more bears and Daphne produces more jelly beans.~~
- B) Daphne produces more bears and Miranda produces more jelly beans.
- C) Miranda gets jelly beans at a lower cost than before but Daphne pays more for bears.
- D) Miranda gets ~~jelly~~ bears at a lower cost than before and Daphne gets bears at a lower cost too.
- E) Both A and D are correct.

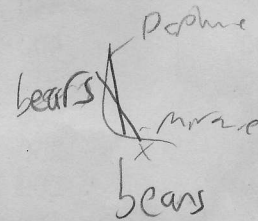
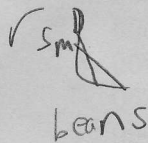
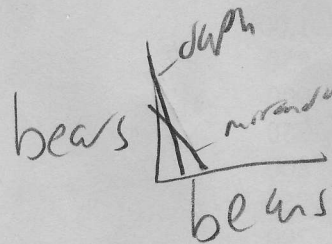
D → bears
M → bears

Japh produces bears

Mir produces bears

Mir → bears

Japh → bears



50) With rising health care costs from smoking, the government decides to make cigarettes illegal and to punish sellers with penalties that are equivalent to \$3 a pack.

The table below shows the demand and supply schedules for cigarettes when they are traded legally. With the new penalties the equilibrium quantity of cigarettes bought falls by _____ packs a week. Not happy with this outcome, the government decides to keep the penalty on sellers but also to impose and enforce a price ceiling of \$4.00 a pack. The quantity now falls by a further _____ packs a week but there is a consumer surplus on the marginal pack bought of _____.

Price (dollars)	Quantity demanded (packs per week)	Quantity supplied (packs per week)
1.00	1,000	100
1.50	950	200
2.00	900	300
2.50	850	400
3.00	800	500
3.50	750	600
4.00	700	700
4.50	650	800
5.00	600	900
5.50	550	1,000
6.00	500	1,100
6.50	450	1,200
7.00	400	1,300
7.50	350	1,400
8.00	300	1,500
8.50	250	1,600
9.00	200	1,700
9.50	150	1,800
10.00	100	1,900

- A) 500; 100; \$4
- B) 500; 100; \$6
- C) 200; 400; \$4
- D) 300; 300; \$4
- E) 200; 400; \$6



supply ↓ 6w
 before was 54 → 7w
 \$6 → 500
 equl qum → falls by 2w
 falls by 54 a pack
 100 sup, 700 dem
 at \$4
 w PC ineffect
 willing to pay \$10
 but only pay \$4

surplus → 6

2w
 400
 60