

Eco1104 Introduction to Microeconomics

Section C

Final Exam

December 8, 2013

1. You have 3 hours to finish this exam, please use your time wisely.
2. There are 90 multiple choice questions and 10 T/F questions. Make sure your exam copy is complete.
3. Please ensure that you have properly **filled in your personal information** on the scantron sheet. Pencil in the required information and blacken the cells (little ovals). If you are unsure how to complete the sheet, please ask your exam supervisor.
4. Please write down your answers for T/F questions on the corresponding space given on the exam paper, **don't forget to provide explanation if you think the statement is false.**
5. Only the scantron sheet and the last page of the exam paper will be collected from you, **please don't forget to fill in your name and student number on the exam paper.**
6. Please turn off your cell phone during the exam. Good luck!

Part I Multiple Choices Questions ((subtotal 90 points, 1 point for each question))

Identify the letter of the choice that best completes the statement or answers the question.

1. ✓ Mike and Sandy are two woodworkers who both make tables and chairs. In one month, Mike can make 4 tables or 20 chairs, where Sandy can make 6 tables or 18 chairs. Given this, we know that the opportunity cost of 1 chair for

- (a) Mike is 1/5 table and 1/3 table for Sandy.
- b. Mike is 5 tables and 3 tables for Sandy.
- c. Mike is 1/3 table and 1/5 table for Sandy.
- d. Mike is 3 tables and 5 tables for Sandy.

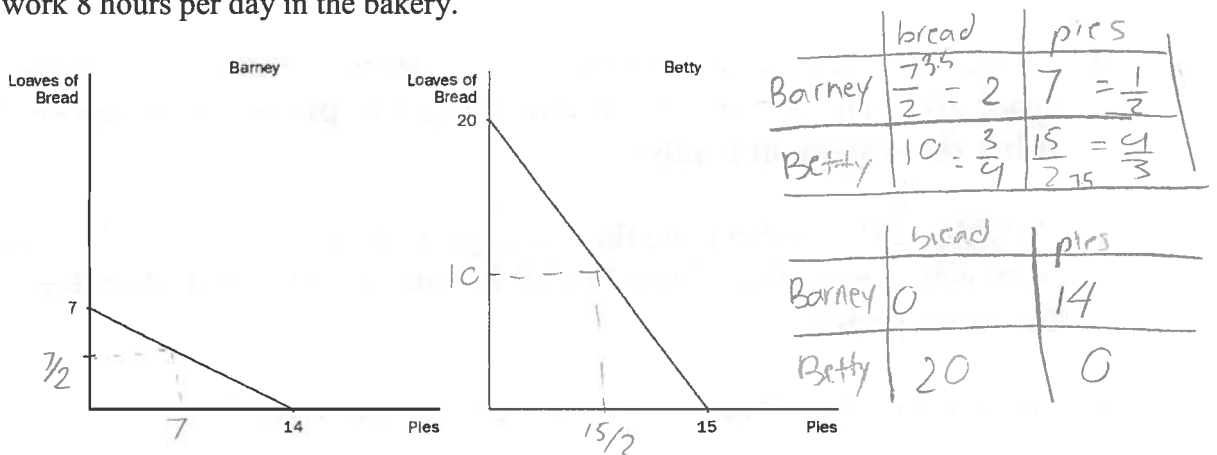
	tables	chairs
Mike	4 = 5	20 = $\frac{1}{5}$
Sandy	6 = 3	18 = $\frac{1}{3}$

2. ✓ Consider the tragic typhoon that has recently hit the Philippines very hard. What might we expect to occur to the production possibilities frontier between now and the next few years? The two goods for this frontier are capital goods and consumption goods.

- a. It would become steeper, as scarcity is a greater problem than it was before the storm hit.
- (b) It would contract inwards, as the capital stock of the economy is gravely damaged.
- ~~c~~ It would become less curved than it was, as the law of increasing opportunity costs no longer applies.
- ~~d~~ The prices of both types of goods would rise.

Figure 3-1

Figure 3-1 shows the production possibilities frontier for Barney and Betty when they work 8 hours per day in the bakery.



3. ✓ Refer to Figure 3-1, which represents two production possibilities frontiers for two producers of pies and bread. Barney has an absolute advantage in:

- a. both goods and Betty has an absolute advantage in neither good.
- b. loaves of bread and Betty has an absolute advantage in pies.
- (c) neither good and Betty has an absolute advantage in both goods.
- d. pies and Betty has an absolute advantage in loaves of bread.

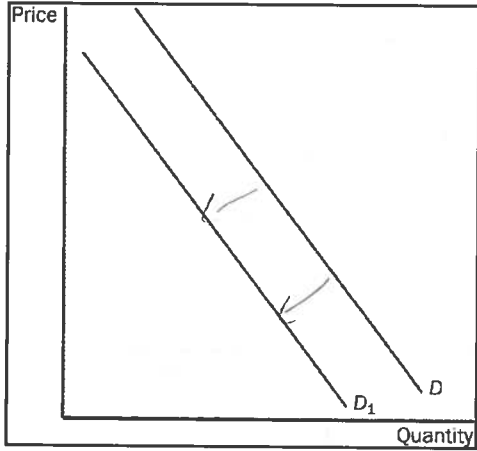
4. ✓ Refer again to Figure 3-1. If Barney and Betty both specialize in the good in which they have a comparative advantage, total production of bread will be:

- a. 7 and total production of pies will be 15.
- (b) 20 and total production of pies will be 14.
- c. 27 and total production of pies will be 29.
- d. 40 and total production of pies will be 22.

5. ✓ Why do production possibilities frontiers have a negative slope?

- (a) Because of scarcity, which implies that tradeoffs exist.
- ~~b~~ Because of increasing opportunity costs as we transform production of one good into production of the other.
- ~~c~~ Because an economy's resources are not equally well suited between the production of both goods.
- ~~d~~ Because of the gains from specialization and trade.

Figure 4-1



6. Refer to Figure 4-1. The movement from curve D to curve D1 could be caused by:

- a. an increase in price.
- b. a decrease in the price of a complement good.
- c. an improvement in technology.
- d. a decrease in the price of a substitute good.

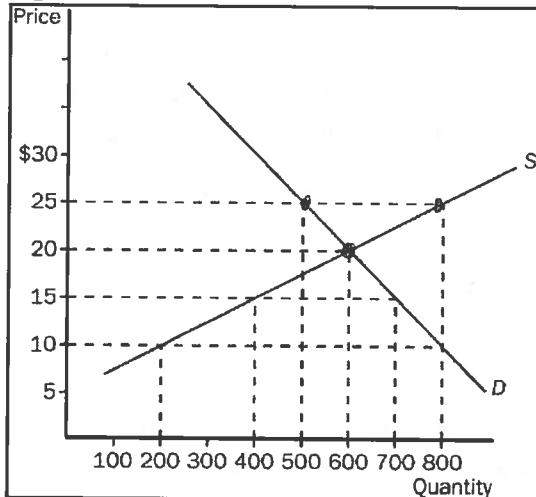
7. Forest fires in the western states of the USA would be expected to cause the price of lumber to rise in the following 6 months. As a result, which of the following would we expect to occur?

- a. A leftward shift in the demand curve for lumber.
- b. A rightward shift in the demand curve for lumber.
- c. A movement up the demand curve for lumber.
- d. A return to the initial point of equilibrium in the lumber market.

expectations price ↑



Figure 4-2



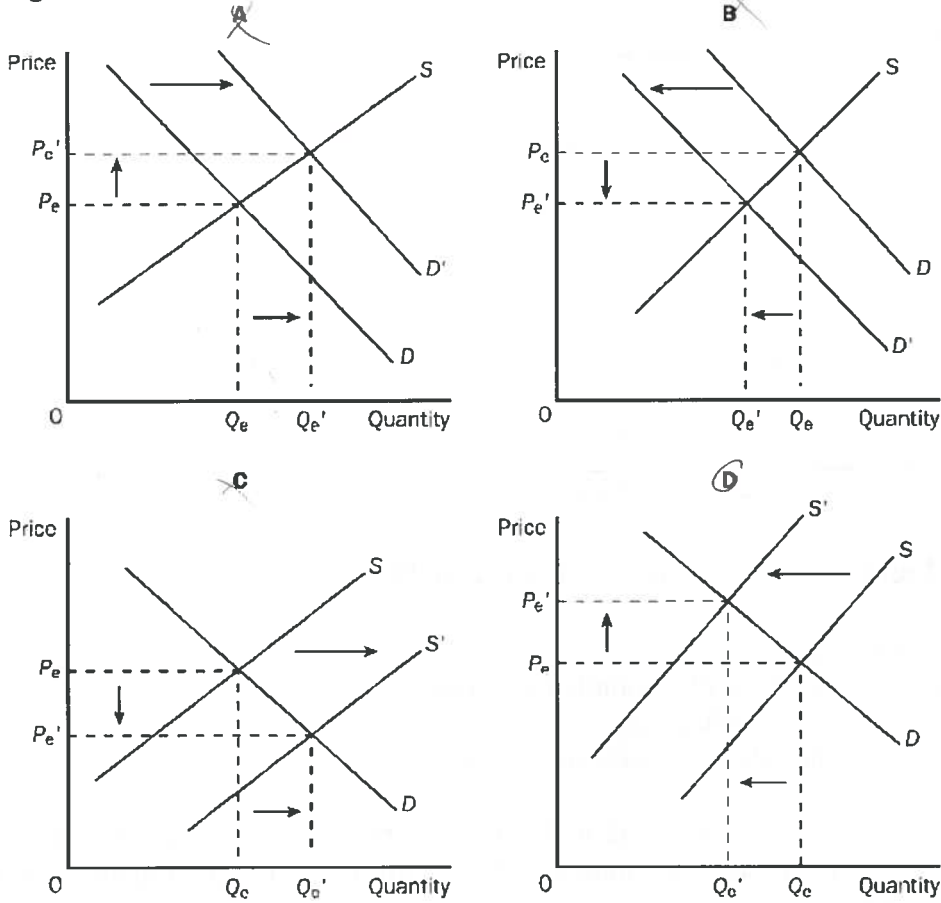
8. Refer to Figure 4-2. In this market, equilibrium price and quantity would be:

- a. \$15; 400 units.
- b. \$20; 600 units.
- c. \$25; 500 units.
- d. \$25; 800 units.

9. Refer to Figure 4-2. If the price is \$25, there would be a:

- a. surplus of 300, and price would fall.
- b. surplus of 200, and price would fall.
- c. shortage of 200, and price would rise.
- d. shortage of 300, and price would rise.

Figure 4-3



10. Refer to Figure 4-3. Which of the four graphs represents the market for peanut butter after a major hurricane hits the peanut-growing south?

- a. A
- b. B
- c. C
- (d) D



11. Refer to Figure 4-3. Which of the four graphs represents the market for a product such as a portable phone and computer tablet whose production process experienced a technological advance?

- a. A
- b. B
- (c) C
- d. D



12. What would happen to the equilibrium price and quantity of coffee if the wages of coffee-bean pickers fell and (simultaneously) the price of tea fell?

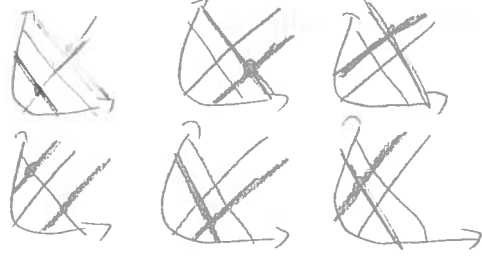
- (a) Price will fall and the effect on quantity is ambiguous.
- b. Price will rise and the effect on quantity is ambiguous.
- c. Quantity will fall and the effect on price is ambiguous.
- d. Quantity will rise and the effect on price is ambiguous.

input prices ↓ supply ↑
price substitute ↓ demand ↓

Table 4-1

Price of the Good	Aaron	Angela	Austin	Alyssa
\$0.00	20	16	10	8
0.50	18	12	6	6
1.00	14	10	2	5
1.50	12	8	0	4
2.00	6	6	0	2
2.50	0	4	0	0

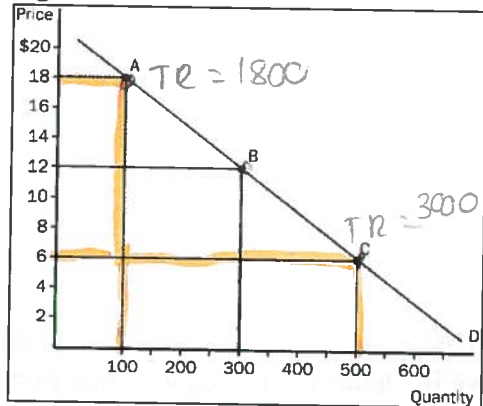
	No change	S ↑	S ↓
No change	P same Q same	P down Q up	P up Q down
b ↑	P up Q up	P amb Q up	P up Q amb
n.l.	P down	P down	P amb



13. Refer to Table 4-1. Table 4-1 shows individual demand schedules for a market. The time frame is one week. When the price of the good is \$2.00, the quantity demanded in this market is:

- a. 42 units.
- b. 31 units.
- c. 24 units.
- d. 14 units.

Figure 5-1



$$B (300, 12) \quad C (500, 6)$$

$$= \frac{(300 - 500) / [(300 + 500) / 2]}{(12 - 6) / [(12 + 6) / 2]}$$

$$= \frac{-1}{2} \div \frac{2}{3} = -\frac{1}{2} \times \frac{3}{2} = -\frac{3}{4}$$

14. Refer to Figure 5-1. The elasticity of demand from point B to point C, using the midpoint method is:

- a. 1.0
- b. 1.5
- c. 1.25
- d. 0.75

$$A (100, 18) \quad C (500, 6)$$

$$= \frac{(500 - 100) / [(500 + 100) / 2]}{(6 - 18) / [(6 + 18) / 2]}$$

$$= \frac{4}{3} \times -1 = -\frac{4}{3}$$

15. Refer to Figure 5-1. If the price decreased from \$18 to \$6, what would happen to total revenue?

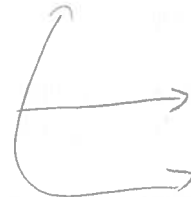
- a. Total revenue would increase by \$1200, and demand would be price elastic.
- b. Total revenue would increase by \$800, and demand would be price elastic.
- c. Total revenue would decrease by \$1200, and demand would be price inelastic.
- d. Total revenue would decrease by \$800, and demand would be price inelastic.

16. If the price elasticity of demand is equal to 1.0, which of the following statements is true?

- a. The change in price is proportionate to the change in quantity demanded. *unit elastic*
- ~~b. The % change in price is greater than the % change in quantity demanded.~~
- ~~c. The % change in price is less than the % change in quantity demanded.~~
- ~~d. If price increases, then total revenue increases.~~

17. If Ontario Hydro announces that it is able and willing to sell electricity at a fixed price without any limit, then this is an example of:

- ~~a. Infinitely inelastic supply.~~
- b. Infinitely elastic supply.
- ~~c. An unresponsive supply.~~
- ~~d. None of the above, because that event is impossible.~~

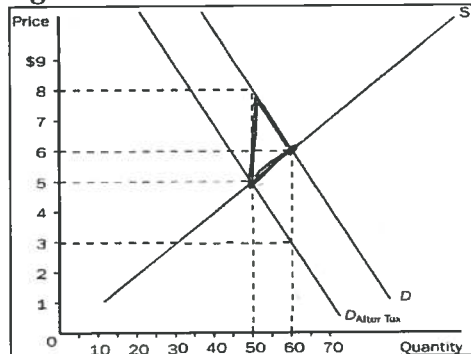


18. Which of the following factors would weigh towards making the price elasticity of demand for a good or service more elastic? *which makes it more elastic?*

- ~~a. A lesser availability of substitutes.~~
- b. A decline in the share of their incomes that consumers allocate towards the purchase of that good.
- c. The good used to be considered a necessity, but now is considered to be a luxury.
- d. None of the above.

19. When binding price ceilings are imposed to benefit buyers:
- a. Every buyer in the market benefits because of lower prices.
 - b. Some buyers will not be able to buy any of the product.
 - c. Sellers in the market will equally benefit from a price ceiling.
 - d. The quantity sellers want to sell will equal the quantity buyers want to buy.

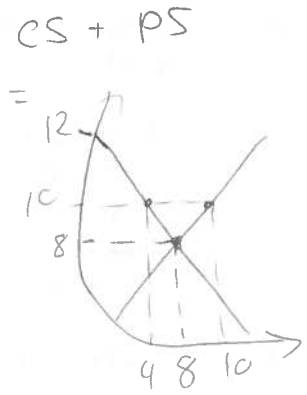
Figure 6-1



20. Refer to Figure 6-1. The government has recently imposed a tax that is collected from buyers (which resembles the HST that we have in Ontario). The equilibrium price in the market before the tax is imposed is:
- a. \$8.00
 - b. \$6.00
 - c. \$5.00
 - d. \$3.00
21. Refer to Figure 6-1. The price buyers will pay after the tax is imposed is:
- a. \$8.00
 - b. \$6.00
 - c. \$5.00
 - d. \$3.00
22. Refer to Figure 6-1. The price sellers receive after the tax is imposed is:
- a. \$8.00
 - b. \$6.00
 - c. \$5.00
 - d. \$3.00
23. Refer to Figure 6-1. The amount of the tax imposed (per unit) in this market is:
- a. \$1.00
 - b. \$1.50
 - c. \$2.50
 - d. \$3.00
24. Irrespective of whether the tax is collected from consumers or producers, the tax burden will be borne (paid) primarily by producers when:
- a. Demand is price elastic, and supply is price inelastic.
 - b. Demand is price inelastic, and supply is price elastic.
 - c. Both demand and supply are price elastic.
 - d. Both demand and supply are price inelastic.
25. Why do some economists tend to criticize minimum wage laws?
- a. Because it can lead to shortages in the labour market.
 - b. Because it can lead to surpluses in the labour market.
 - c. Because it is inflationary.
 - d. Because it can drive employers bankrupt.

Table 7-1

PRICE	QUANTITY DEMANDED	QUANTITY SUPPLIED
\$12.00	0	12
\$10.00	4	10
\$8.00	8	8
\$6.00	12	6
\$4.00	16	4
\$2.00	20	2



26. Refer to Table 7-1. The equilibrium or market-clearing price is:

- a. \$10.00
- b. \$8.00
- c. \$6.00
- d. \$4.00

27. Refer to Table 7-1. At a price of \$10.00, total surplus would be:

- a. More than it would be at the equilibrium price.
- b. Less than it would be at the equilibrium price.
- c. The same as it would be at the equilibrium price.
- d. There is insufficient information to say.

28. Refer to Table 7-1. At the equilibrium price, consumer surplus would be:

- a. \$0
- b. \$8
- c. \$12
- d. \$16

29. Refer to Table 7-1. At the equilibrium price, total surplus would be:

- a. Zero because that is the marginal unit produced and consumed.
- b. Equitable as far as producers and consumers are concerned.
- c. Equal to producer surplus.
- d. Higher than it would be at any other level of output.

30. Suppose that the equilibrium price in the market for widgets is \$5. If a law increased the minimum legal price for widgets to \$6, producer surplus:

- a. Would necessarily increase even if the higher price resulted in a surplus of widgets.
- b. Would necessarily decrease because the higher price would create a surplus of widgets.
- c. Might increase or decrease.
- d. Would be unaffected.

$P = 5 \$$



31. Shannon buys a new CD player for her car for \$100. She receives consumer surplus of \$25 on her purchase. Her willingness to pay for that particular CD is:

- a. \$75
- b. \$100
- c. \$125
- d. There is no way to determine it without information on the supply schedule.

$$P = 100 \quad CS = WTP - P$$

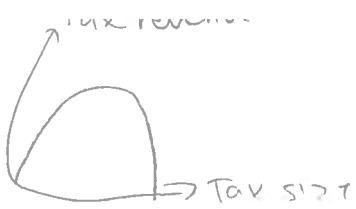
$$CS = 25 \quad 25 = W - 100$$

$$125 = W$$

32. When a tax is imposed on a good in a certain market, we know that the losses in welfare or well-being that are experienced by the buyers and sellers:

- a. typically exceed the gain in revenue that is realized by the government.
- b. are not important because the revenue that is raised is put to good use; it finances essential government services.
- c. Are equal to the change in total surplus.
- d. Do not exist because the equilibrium quantity in the market is unaffected.

$DWL > TR$



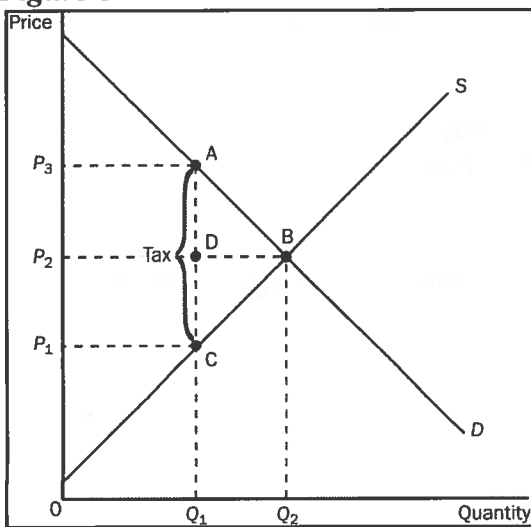
33. The basic idea behind the Laffer curve (which is a major point of 'supply-side economics'), is that:

- a. Increases in tax rates will typically bring about higher revenues to the government.
- b. Factors of production that are supplied elastically should bear the highest tax burden.
- c. Decreases in tax rates can actually bring about higher revenues to the government under certain circumstances.
- d. The deadweight losses that emerge from taxation are typically minor.

34. As the tax rate increases:

- a. It tends to distort incentives more, and the deadweight loss grows larger.
- b. The market moves closer to the level of production that maximizes social surplus.
- c. The market moves closer to the optimal or the efficient level of production.
- d. The total amount of tax revenue that is collected must rise.

Figure 8-2



35. Refer to Figure 8-2. The amount of tax revenue received by the government is equal to the area:

- a. $P_3 A C P_1$.
- b. $A B C$.
- c. $P_2 D A P_3$.
- d. $P_1 C D P_2$.

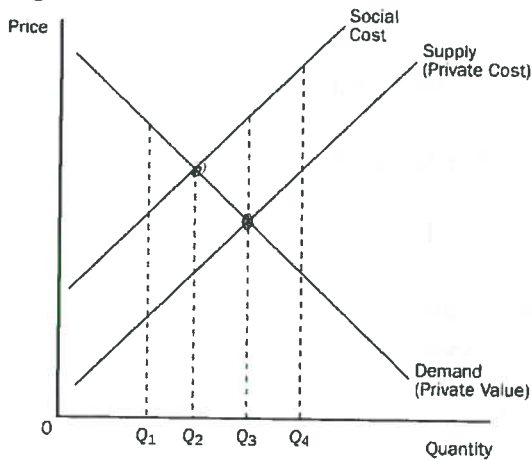
36. Taxes cause deadweight losses because:

- a. they prevent buyers and sellers from realizing some of the gains from buying and selling the units of production that otherwise would have been produced.
- b. they transfer purchasing power from the private sector to the government, and the government produces inefficiently.
- c. the incidence of taxation falls on both suppliers and demanders.
- d. they cause disequilibrium in the market.

37. When negative externalities are present in a market:

- a. Producers will be affected, but not consumers.
- b. Overproduction will occur.
- c. Demand will be too high.
- d. The free market will maximize total surplus in the absence of government intervention.

Figure 10-1



38. Refer to Figure 10-1. This market is experiencing:

- a. Government intervention.
- b. a positive externality.
- c. a negative externality
- d. None of the above are correct.

39. Refer to Figure 10-1. The equilibrium quantity without any governmental intervention would be at:

- a. Q1
- b. Q2
- c. Q3
- d. Q4

40. Refer to Figure 10-1. The optimum amount of this product from society's standpoint would be:

- a. Q1
- b. Q2
- c. Q3
- d. Q4

41. Refer to Figure 10-1. If this market currently produces Q3, total economic well-being (or total surplus) would be increased if:

- a. Production decreased to Q2.
- b. Production increased to Q4.
- c. This product was no longer produced at all.
- d. Since well-being is maximized at Q3, it cannot be increased.

42. Which of the following mechanisms suggests that the private market can be effective in dealing with externalities?

- a. Command and control policies.
- b. Pigovian taxes and subsidies.
- c. The Coase theorem.
- d. The 'invisible hand'.

43. Which of the following approaches to reducing greenhouse gas emissions do economists tend NOT to favour?

- a. Command and control regulations.
- b. Tradeable pollution permits.
- c. Corrective taxes.
- d. Spillover subsidies.

44. ✓ A free-rider is a person who:
- a. Will only purchase a product on sale.
 - b. Receives the benefit of a good but avoids paying for it.
 - c. Can produce a good at no cost.
 - d. Takes advantage of tax loop-holes to lower his taxes.
45. ✓ The Tragedy of the Commons can be corrected by:
- a. Providing more of the resource for public use.
 - b. Providing government subsidies for the resource.
 - c. Compulsory taxation.
 - d. Assigning property rights to individuals.
46. ✓ Elephants are an endangered species and cows are not because:
- a. Cows are not as valuable as elephants on the private market.
 - b. Elephants are a common resource and cows are a private good.
 - c. Cows are a common resource, and elephants are a private good.
 - d. It is legal to slaughter cows, but not elephants.
47. ✓ What trait do common resources and public goods have in common?
- a. They are both non-excludable in consumption.
 - b. They are both non-rivalrous in consumption.
 - c. They both involve a positive externality.
 - d. They both tend to be under-produced by the private sector relative to the socially optimal level of production.
48. ✓ On hot summer days, electricity-generating capacity is sometimes stretched to the limit. At these times, electric companies sometimes ask people to voluntarily cut back on their use of electricity. An economist might say that:
- a. Every electric customer has an incentive to prevent the system from overloading, so this voluntary approach is the most efficient.
 - b. It would be more efficient if the electric company raised its rates for electricity at peak times, as that would provide an incentive for conservation.
 - c. It would be more efficient to have a lottery to decide who had to cut back their use of electricity at peak times.
 - d. It would be more efficient to force everyone to cut their usage of electricity by the same amount.
49. ✓ Consider the case study called “The Collapse of the Atlantic Cod Fishery”. What is the economic interpretation of this phenomenon?
- a. A positive externality that was not remedied by a Pigovian subsidy.
 - b. A public good that was subjected to free-riding activity.
 - c. A negative externality that was not remedied by a tradable permits mechanism.
 - d. A common resource that was not protected through regulation.
50. ✓ Which of the following is not a public good?
- a. A tornado siren.
 - b. A lighthouse.
 - c. National defence.
 - d. Toll roads or bridges.
51. ✓ Economists normally assume that the goal of a firm is to:
- a. Maximize its total revenue.
 - b. Maximize its profit.
 - c. Minimize its explicit costs.
 - d. Minimize its total cost.

$$EP = TR - IC - EC$$

$$AP = TR - EC$$

52. Which of the following expressions is correct?

- a. Accounting profit = economic profit + implicit costs.
- b. Accounting profit = total revenue - implicit costs.
- c. Economic profit = accounting profit + explicit costs.
- d. Economic profit = total revenue - implicit costs.

53. The definition of marginal cost is:

- a. Value of all resources used in a production process.
- b. Marginal increment to profitability when price is constant.
- c. Amount by which total cost rises when output is increased by one unit.
- d. Amount by which output rises when labour input is increased by one unit.



54. XYZ Corporation produced 300 units of output but sold only 275 of the units it produced. The average cost of production for each unit of output produced was \$100. Each of the 275 units sold was sold for a price of \$95. What would total revenue for XYZ Corporation be?

- a. -\$3875
 - b. \$3875
 - c. \$26 125
 - d. \$28 500
- $Q_s = 300$
 $Q_d = 275 \Rightarrow P = 95$
 $ATC = 100$
 $TR = ?$
 $TR = P \times Q$
 $TR = 95 \times 275$

55. If marginal cost is below average total cost, then as the level of output rises, average total cost:

- a. Is constant.
- b. Is falling.
- c. Is rising.
- d. May rise or fall depending on the size of fixed costs.

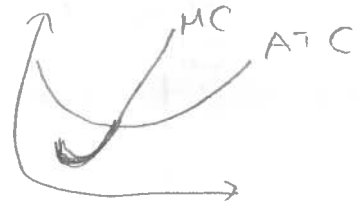


Table 13-1

Measures of Cost for ABC Inc. Widget Factory			
Quantity of Widgets	Variable Costs	Total Costs	Total Fixed Costs
0			20
1	\$ 2	22	20
2	\$ 5	\$ 25	20
3	\$ 7	\$ 27	20
4	\$11		20
5	16	\$ 36	20
6	\$21	41	\$ 20

$$AFC = \frac{TFC}{Q}$$

$$= \frac{20}{5}$$

$$= 4$$

56. Refer to Table 13-1. The average fixed cost of producing five widgets is:

- a. \$1.00
- b. \$2.00
- c. \$3.00
- d. None of the above are correct.

57. Refer to Table 13-1. The average total cost of producing one widget is:

- a. \$1.00
- b. \$10.00
- c. \$11.00
- d. \$22.00

$$ATC = \frac{TC}{Q}$$

$$= \frac{22}{1}$$

$$= 22$$

$$MC = 6? \quad MC = \frac{\Delta TC}{\Delta Q}$$

$$= \frac{41 - 36}{1}$$

$$= 5$$

58. Refer to Table 13-1. The marginal cost of producing the sixth widget is

- a. \$1.00
- b. \$3.50
- c. \$5.00
- d. \$6.00

59. The upward slope of the marginal cost curve is related to:

- a. The downward slope of the marginal cost curve.
- b. The downward slope of the average fixed cost curve.
- c. The upward slope of the total variable cost curve.
- d. The "U" or the "saucer" shape of the average variable cost curve.



60. Which of the following must always be true as the quantity of output increases?

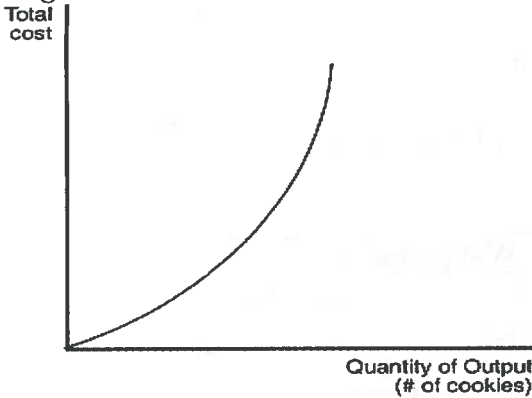
- a. Marginal cost must rise.
- b. Average total cost must rise.
- c. Average variable cost must rise.
- d. Average fixed cost must fall.



61. For a firm, what does "constant returns to scale" refer to?

- a. All of the firm's short-run average total cost curves are horizontal
- b. Short-run average total cost does not change as the quantity of output changes
- c. Long-run average total cost does not change as the quantity of output changes
- d. Long-run average total cost changes at a constant rate as the quantity of output changes

Figure 13-1

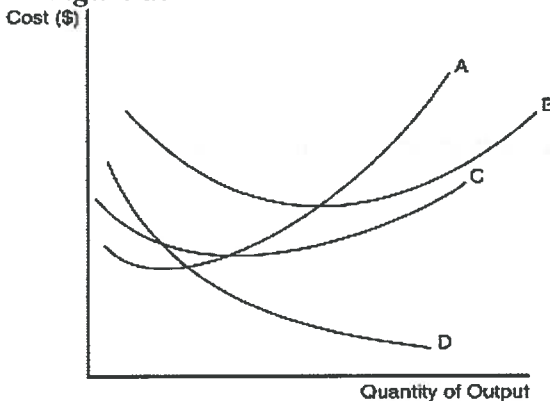


62. Figure 13-1 depicts a total cost function for a firm that produces cookies. What does the changing slope of the total cost curve reflect?

- a. decreasing average variable cost
- b. decreasing average total cost
- c. decreasing marginal product
- d. increasing fixed cost

as you make more cookies, the TC augments

Figure 13-2

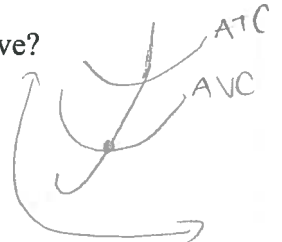


63. In Figure 13-2, which one represents the average fixed cost curve?

- a. A
- b. B
- c. C
- d. D

64. What is the significance of the lowest point on the average variable cost curve?

- a. It is the level of production where total per-unit costs are minimized.
- ~~b. It is the profit maximizing level of output.~~
- c. It is the level of output where fixed costs of production are zero.
- ~~d. It is the socially optimal level of output.~~



65. A firm in a competitive market has the following cost structure:

AVC	Output	VC	Total Cost	FC	ATC
0	0	0	\$5	5\$	0
5	1	5	\$10	5\$	10
3.5	2	7	\$12	5\$	6
10/3	3	10	\$15	5\$	5
19/4	4	19	\$24	5\$	6
7	5	35	\$40	5\$	8

P < AVC shut down P < ATC = exit

If the market price is \$4, this firm will:

- a. Produce two units in the short run and exit in the long run.
- b. Produce three units in the short run and exit in the long run.
- c. Produce four units in the short run and exit in the long run.
- d. Shut down in the short run and exit in the long run.

66. In a perfectly competitive market, which of the following characteristics gives rise to the difference between the short-run equilibrium and the long-run equilibrium?

- a. There are many buyers and many firms acting in the market
- ~~b. There is a homogenous product~~
- c. There is free entry into the industry
- ~~d. There is perfect information regarding prices and quantities~~

67. A competitive market is in long-run equilibrium. If market demand increases, we can be certain that price will:

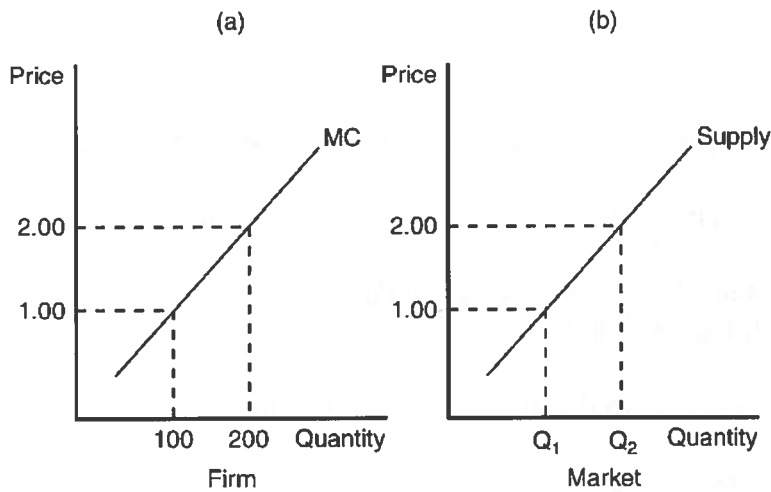
- a. Rise in the short run. Existing firms will expand output, and new firms will enter the industry. Price will then fall.
- b. Rise in the short run. Existing firms will not change their level of output, but new firms will enter the industry. Price will then fall.
- c. Rise in the short run. Existing firms will expand output, but no new firms will enter the industry. Price will then stay constant.
- d. Not rise in the short run because new firms will enter in order to maintain the price.

68. A competitive market is in long-run equilibrium. If demand decreases, we can be certain that price will:

- ~~a. Fall in the short run. All firms will shut down and some of them will exit the industry. Price will then rise.~~
- b. Fall in the short run. No firms will shut down, but some of them will exit the industry. Price will then rise.
- c. Fall in the short run. All, some, or no firms will shut down, and some of them will exit the industry. Price will then rise.
- ~~d. Not fall in the short run because firms will exit to maintain the price.~~

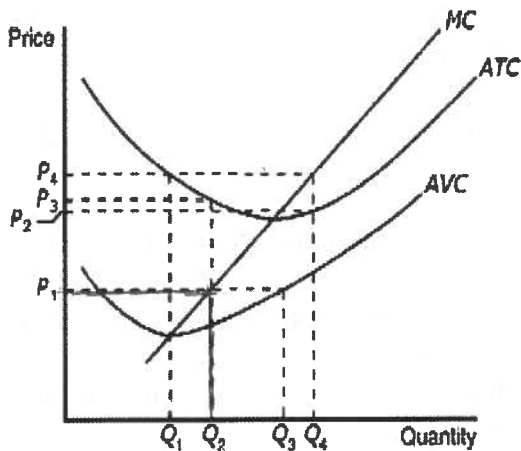
Figure 14-1

In the figure below, panel (a) depicts the marginal cost of a firm in a competitive market, and panel (b) depicts the market supply curve for a market with a fixed number of identical firms.



69. Refer to Figure 14-1, which depicts a typical firm and the corresponding market in a competitive industry. If there are 200 identical firms in this market, what level of output will be supplied to the market when price is \$1.00?
- a. 2,000 units
 - b. 5,000 units
 - c. 10,000 units
 - d. 20,000 units
70. Refer to Figure 14-1. What is the shutdown price?
- a. \$1.00
 - b. \$1.50
 - c. \$2.00
 - d. It cannot be determined from the information provided.

Figure 14-2



71. Refer to Figure 14-2. When market price is P_1 , which area represents a profit-maximizing firm's total revenue?
- a. $P_1 \times Q_2$
 - b. $P_1 \times Q_3$
 - c. $P_2 \times Q_2$
 - d. $P_3 \times Q_2$

72. Refer to Figure 14-2. When a profit-maximizing firm is earning profits, what can identify those profits?

- a. $P \times Q$
- b. $(MC - AVC) \times Q$
- c. $(P - ATC) \times Q$
- d. $(P - AVC) \times Q$

73. New firms have an incentive to enter a competitive market when-ever:

- a. economic profits are positive.
- b. accounting profits are positive.
- c. average variables costs are minimized.
- d. marginal revenue is equal to marginal cost.

enter if $P > ATC$

74. Consider a perfectly competitive market. One consideration that applies to the analysis in the long run, but not to the analysis in the short run, is:

- a. Changes in the price of the product.
- b. Changes in firms' profits.
- c. Entry and exit of firms.
- d. All of the above are correct.

75. When calculating economic profit, total costs will include all of the below except:

- a. Opportunity costs.
- b. Fixed costs.
- c. Variable costs.
- d. External costs.

$EP =$

76. Which of the following statements has nothing to do with the "price taker" result in a competitive market?

- a. The firm will not earn a profit in the long-run.
- b. The firm can sell all of the output that it wants at the going market price.
- c. The firm's marginal revenue curve is the same as its demand curve.
- d. The firm's demand curve is infinitely elastic at the going market price.

77. In a perfectly competitive market, the process of entry and exit will end when, for firms in the market:

- a. Price is equal to average variable cost.
- b. Marginal revenue is equal to average variable cost.
- c. Economic profits are zero.
- d. All of the above are correct.

Scenario 15-1

A monopoly firm maximizes its profit by producing 500 units of output (so $Q = 500$). At that level of output, its marginal revenue is \$30, its price or average revenue is \$40, and its average total cost is \$34.

78. Refer to Scenario 15-1. At $Q = 500$, the firm's total revenue is:

- a. \$15,000
- b. \$17,500
- c. \$20,000
- d. \$22,500

$$\begin{aligned} Q &= 500 \\ MR &= 30\$ \\ P = AR &= 40\$ \\ ATC &= 34\$ \end{aligned}$$

$$\begin{aligned} P \times Q & \\ &= 40 \times 500 \\ &= 20,000 \end{aligned}$$

79. Refer to Scenario 15-1. The firm's maximum profit is: $MR = MC$

- a. \$2,000
- b. \$3,000
- c. \$4,000
- d. \$6,000

$Q = 500$ $ATC = \frac{TC}{Q}$ $P = 30$
 $MR = 30$ $34 = \frac{TC}{500}$ $Q = 500$
 $P = AR = 40$ $TR - TC$ $TC = 17,000$
 $ATC = 34$ $TC = 17,000$

80. Refer to Scenario 15-1. At $Q = 500$, the firm's marginal cost is

- a. Less than \$30
- b. \$30
- c. \$34
- d. Greater than \$34

$MC = \frac{\Delta TC}{\Delta Q}$
 $MC = 17,000 - TC$

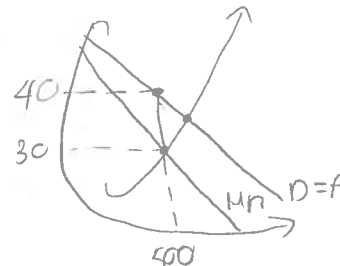
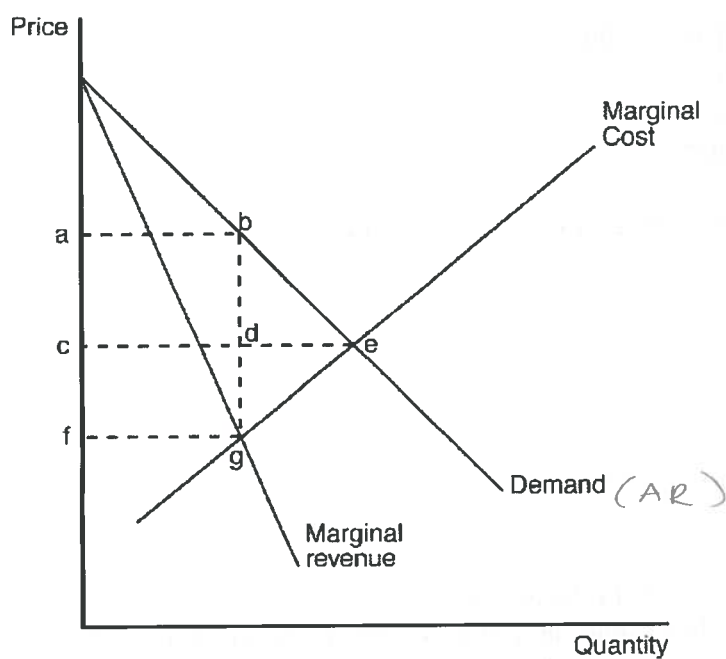


Figure 15-1

Figure 15-1 depicts the demand, marginal revenue and marginal cost curves of a profit-maximizing monopolist.



81. Refer to Figure 15-1. Which of the following areas represents the deadweight loss due to monopoly pricing?

- a. Triangle bde.
- b. Triangle bge.
- c. Rectangle acdb.
- d. Rectangle cfgd.

82. Inefficiency in the form of deadweight losses arises from a monopoly because:

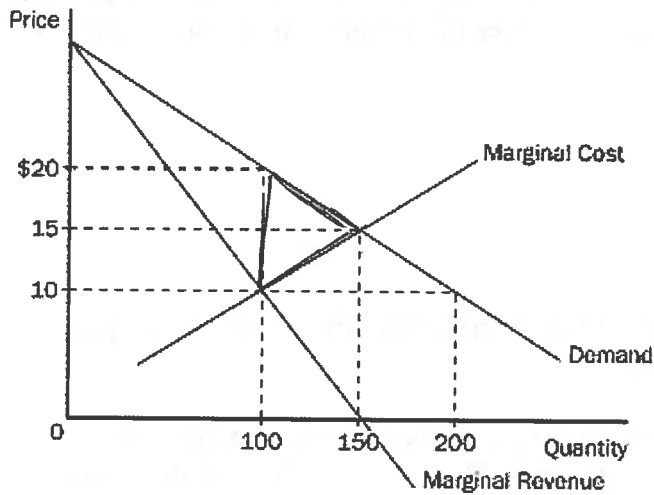
- a. The monopoly firms earn excessive profits.
- b. At the equilibrium level of output and beyond, consumers value the marginal unit more than the producer's cost of producing it.
- c. The per-unit costs of production are unduly high.
- d. All of the above are correct.

83. When we say that the monopoly firm is a price maker, we mean that:

- a. it can raise its price and still sell some units of output.
- b. it will sometimes produce at a level of output at which profits are not maximized.
- c. it can charge any price that it wants.
- d. it is not constrained to operate at a point on its demand curve.

84. In a monopoly framework, why does the marginal revenue curve lie below the demand curve?
- a. It is due to the law of demand.
 - b. In order to sell one more unit of output, the firm has to cut the price for all of the other units besides the marginal one that were selling for a higher price.
 - c. It is due to the existence of barriers to entry.
 - d. It is due to economies of scale.

Figure 15-2



85. Refer to Figure 15-2. In order to maximize total surplus, a benevolent social planner would choose which of the following outcomes?
- a. 100 units of output and a price of \$10 per unit.
 - b. 100 units of output and a price of \$20 per unit.
 - c. 150 units of output and a price of \$10 per unit.
 - d. 150 units of output and a price of \$15 per unit.
86. Refer to Figure 15-2. To maximize its profit, a monopolist would choose which of the following outcomes?
- a. 100 units of output and a price of \$10 per unit.
 - b. 100 units of output and a price of \$20 per unit.
 - c. 150 units of output and a price of \$15 per unit.
 - d. 200 units of output and a price of \$20 per unit.
87. Which of the following statements is correct?
- a. The benefits that accrue to a monopoly firm's owners are equal to the costs that are incurred by consumers of that firm's product.
 - b. The deadweight loss that arises in monopoly stems from the fact that the profit-maximizing monopoly firm produces a quantity of output that exceeds the socially-efficient quantity.
 - c. The deadweight loss caused by monopoly is similar to the deadweight loss caused by a tax on a product.
 - d. The main social problem caused by monopoly is monopoly profit.
88. The key difference between a perfectly competitive firm and a monopoly firm is the ability to have some control over:
- a. the costs of production
 - b. the level of production
 - c. inputs in the production process
 - d. the price of its output

89.

A monopolist faces the following demand curve:

$FC = 1000\$$
 $MC = 2\$$

Price	Quantity Demanded
\$8	300
7	400 = 2800
6	500 = 3000
5	600
4	700 = 2800
3	800
2	900 = 1800
1	1000

The monopolist has fixed costs of \$1000 and has a constant marginal cost of \$2 per unit. If the monopolist were able to perfectly price discriminate, how many units would it sell?

- a. 400
- b. 500**
- c. 700
- d. 900

90.

Why do most economists (but not all of them) believe that perfectly competitive markets yield favourable economic outcomes?

- ~~a.~~ Because it yields equitable economic outcomes for price and quantity.
- b.** Because price is driven down to the level of average total cost in the long run.
- ~~c.~~ Because price is no greater than marginal revenue.
- ~~d.~~ Because firms cannot earn profits in such an industry.

Price	Qd	FC	VC	TC
0	0	1000	0	1000
1	1000	1000	2	1002
2	900	1000	4	1004
3	800	1000	6	1006
4	700	1000	8	1008
5	600	1000	10	1010
6	500	1000	12	1012
7	400	1000	14	1014
8	300	1000	16	1016

$MC = \frac{\Delta TC}{Q}$
 $2 = \frac{\Delta TC}{Q}$