STUDENT'S NAME:_________________________________________________

STUDENT'S IDENTIFICATION NUMBER:______________________________

DAY AND TIME YOUR SECTION MEETS:______________________________

ENTER THE NUMBER 135246 UNDER "SPECIAL CODES" ON THE SCANTRON SHEET

BEFORE YOU BEGIN PLEASE MAKE SURE THAT YOUR EXAMINATION HAS BEEN DUPLICATED
AND COLLATED CORRECTLY. THERE SHOULD BE 56 MULTIPLE CHOICE QUESTIONS. THE
EXAM HAS 20 PAGES INCLUDING THIS COVER SHEET.

ANSWER ALL THE PROBLEMS ON THE SCANTRON SHEET.

BE SURE TO FILL-IN YOUR NAME (LAST NAME FIRST) AT THE TOP OF THE SCANTRON SHEET.
FILL IN YOUR STUDENT IDENTIFICATION NUMBER UNDER "IDENTIFICATION NUMBER" ON
THE SCANTRON SHEET.

WRITE YOUR TA'S NAME IN THE UPPER-RIGHT HAND CORNER OF YOUR SCANTRON SHEET.

University of Maryland Honor Pledge

The University is committed to Academic Integrity, and has a nationally recognized Honor Code,
administered by the Student Honor Council. In an effort to affirm a community of trust, the Student Honor
Council proposed and the University Senate approved Honor Pledge. The University of Maryland Honor
Pledge reads:

"I pledge on my honor that I have not given or received any unauthorized assistance on this examination (or
assignment)."

Please rewrite the exact wording of the pledge, followed by your signature in the space below:

Pledge:      _________________________________________________________________________________
                                                                 ____________________________________________________
                                                                 ____________________________________________________

Your Signature:_________________________________________
Multiple Choice
(Each question is worth 2.5 points. Please select THE BEST answer.)

1. Suppose that a decrease in the price of good X results in fewer units of good Y being sold. This implies that X and Y are
   a. complementary goods.
   b. normal goods.
   c. inferior goods.
   d. substitute goods.

Figure 1

(a) Quantity

(b) Quantity

(c) Quantity
2. **Refer to Figure 1.** In which market will the majority of the tax burden fall on the seller?  
   a. market (a)  
   b. market (b)  
   c. market (c)  
   d. All of the above are correct.

3. Which of the following illustrates the concept of a negative externality?  
   a. A college professor plays a vigorous game of racquet ball with the racquet he recently purchased.  
   b. A flood wipes out a farmer's corn crop.  
   c. A college student plays loud music on his new stereo system at 2:00 a.m.  
   d. A janitor eats a hamburger during his lunch break.

4. Suppose that Martin owns a lighthouse, and Lewis owns a nearby port. Martin's lighthouse benefits only those ships that enter Lewis's port. Which of the following statements is NOT correct?  
   a. Martin's lighthouse may be considered a private good.  
   b. Martin can reduce the free-rider problem by charging Lewis a usage fee.  
   c. Martin can exclude Lewis's port from benefiting from the lighthouse by simply turning the power off.  
   d. Martin's lighthouse would be considered a common resource.
Teacher's Helper is a small company that has a subcontract to produce instructional materials for disabled children in public school districts. The owner rents several small rooms in an office building in the suburbs for $600 a month and has leased computer equipment that costs $480 a month.

**Table 1**

<table>
<thead>
<tr>
<th>Output (Instructional Modules per Month)</th>
<th>Fixed Costs</th>
<th>Variable Costs</th>
<th>Total Cost</th>
<th>Average Fixed Cost</th>
<th>Average Variable Cost</th>
<th>Average Total Cost</th>
<th>Marginal Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1,080</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>1,080</td>
<td>400</td>
<td>1,480</td>
<td></td>
<td></td>
<td>400</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td>965</td>
<td>450</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>1,350</td>
<td>2,430</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>1,900</td>
<td></td>
<td>2,430</td>
<td></td>
<td>475</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>2,500</td>
<td>216</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
<td>4,280</td>
<td></td>
<td>700</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>4,100</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>5,400</td>
<td>135</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>7,300</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td></td>
<td>10,880</td>
<td></td>
<td>980</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

5. Refer to **Table 1**. What is the marginal cost of creating the tenth instructional module in a given month?
   a. $900
   b. $1,250
   c. $2,500
   d. $3,060

6. Refer to **Table 1**. What is the average variable cost for the month if six instructional modules are produced?
   a. $180.00
   b. $533.33
   c. $700.00
   d. $713.33

7. Refer to **Table 1**. What is the average fixed cost for the month if nine instructional modules are produced?
   a. $108.00
   b. $120.00
   c. $150.00
   d. $811.11
8. Refer to Figure 2. The elasticity of demand between point B and point C, using the midpoint method, is
   a. 0.5.
   b. 0.75.
   c. 1.0.
   d. 1.3.

9. Refer to Figure 2. If the price decreased from $18 to $6,
   a. total revenue would increase by $1,200 and demand is elastic between points A and C.
   b. total revenue would increase by $800 and demand is elastic between points A and C.
   c. total revenue would decrease by $1,200 and demand is inelastic between points A and C.
   d. total revenue would decrease by $800 and demand is inelastic between points A and C.
Two firms play a simultaneous advertising game described below. For COKE, each column represents a different advertising campaign and for PEPSI, each row represents a different advertising campaign. In the cells, PEPSI’s profits are listed first, then COKE’s.

<table>
<thead>
<tr>
<th>PEPSI</th>
<th>S1</th>
<th>S2</th>
<th>S3</th>
<th>S4</th>
</tr>
</thead>
<tbody>
<tr>
<td>C1</td>
<td>26,35</td>
<td>36,70</td>
<td>65,65</td>
<td>0,30</td>
</tr>
<tr>
<td>C2</td>
<td>30,55</td>
<td>50,50</td>
<td>70,36</td>
<td>16,19</td>
</tr>
<tr>
<td>C3</td>
<td>25,25</td>
<td>55,30</td>
<td>35,26</td>
<td>15,18</td>
</tr>
<tr>
<td>C4</td>
<td>18,15</td>
<td>19,16</td>
<td>30,0</td>
<td>14,14</td>
</tr>
</tbody>
</table>

Advertising Game

10. Which statement is correct?
   i) S1 is a dominated strategy for COKE.
   ii) S4 is a dominated strategy for COKE.
   iii) There are no dominated strategies for COKE.
   a. (i) and (ii)
   b. (iii)
   c. (i) only.
   d. (ii) only.

11. Which statement is correct?
   a. (C2,S1) and (C3,S2) are both Nash equilibria of the game.
   b. (C1,S2) is the ONLY Nash Equilibrium of the game.
   c. (C2,S1) is the ONLY Nash equilibrium of the game.
   d. (C3,S3) is the ONLY Nash Equilibrium of the game.
12. For maximum profit, a firm hires labor up to the point at which the wage equals
(i) the value of the marginal product of labor.
(ii) the marginal cost of an additional unit of output.
(iii) output price multiplied by the marginal product of labor.
a. (i) and (ii)
b. (i) and (iii)
c. (ii) and (iii)
d. All of the above are correct.

**Figure 3**

![Diagram of labor market with Supply and Demand curves, showing Wage $W_o$ and Quantity $Q_o$.]

13. **Refer to Figure 3.** If the government imposes a minimum wage above $W_o$, it is likely to
a. increase employment to a level above $Q_o$.
b. reduce employment to a level below $Q_o$.
c. create a condition of excess demand.
d. have no effect on employment.
14. The following chart shows the number of calculators that can be assembled per week by various numbers of workers.

<table>
<thead>
<tr>
<th>Quantity of Labor</th>
<th>Number of Calculators Per Week</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>60</td>
</tr>
<tr>
<td>2</td>
<td>160</td>
</tr>
<tr>
<td>3</td>
<td>240</td>
</tr>
<tr>
<td>4</td>
<td>280</td>
</tr>
<tr>
<td>5</td>
<td>300</td>
</tr>
</tbody>
</table>

If the price per calculator in a perfectly competitive product market is $20, how many workers would the firm employ if the weekly wage rate is $1000?

a. 1  
b. 2  
c. 3  
d. 4

15. If excess demand exists in a market we know that the actual price is

a. below equilibrium price and quantity demanded is greater than quantity supplied.  
b. above equilibrium price and quantity demanded is greater than quantity supplied.  
c. above equilibrium price and quantity supplied is greater than quantity demanded.  
d. below equilibrium price and quantity supplied is greater than quantity demanded.

16. Suppose the U.S. has an absolute advantage in wheat and Japan has an absolute advantage in computers. Then we can conclude

a. The U.S. has a comparative advantage in both wheat and computers.  
b. The U.S. has a comparative advantage in wheat and Japan has a comparative advantage in computers.  
c. The U.S. has a comparative advantage in computers and Japan has a comparative advantage in wheat.  
d. There is not enough information to conclude anything about comparative advantage.
The next two questions concern the following scenario. The owner of a lawn service attempts to hire students to work for the summer. There are an equal number of two types of students – hard workers and lazy slobs. Lazy slobs cannot help being lazy, they were just born that way. Hard workers have a value marginal product of labor of $20 an hour, the value marginal product of lazy slobs is $10 an hour. Hard workers can always start their own business and earn $18 an hour. Lazy slobs do not have any income options other than working for the owner and are willing to work for any wage greater than $5. The owner cannot observe which type is which but knows that both types exist and are equally likely.

17. The above scenario is one of
   a. moral hazard.
   b. negative externalities.
   c. public goods.
   d. adverse selection.

18. Which is a likely outcome in the above scenario?
   a. The owner pays a wage of $15 an hour and both types work for him,
   b. The owner pays $18 an hour and only hard workers work for him.
   c. The owner pays $10 an hour and only lazy slobs work for him
   d. The owner pays $10 an hour and no one works for him.

19. Which of the following statements is true?
   (i) When a competitive firm sells an additional unit of output, its revenue increases by an amount less than the price.
   (ii) When a monopoly firm sells an additional unit of output, its revenue increases by an amount less than the price.
   (iii) Marginal revenue is the same as price for both competitive and monopoly firms.
   a. (ii) only
   b. (iii) only
   c. (i) and (ii)
   d. (ii) and (iii)

20. Suppose a profit-maximizing firm in a competitive market produces rubber bands. When the market price for rubber bands falls below the minimum of its average total cost, but still lies above the minimum of average variable cost, the firm
   a. will experience losses but will continue to produce rubber bands.
   b. will shut down.
   c. will be earning both economic and accounting profits.
   d. should raise the price of its product.
21. Which of the following statements regarding a competitive firm is true?
   a. Since demand is downward sloping, if a firm increases its level of output, the firm will have to charge a lower price to sell the additional output.
   b. If a firm raises its price, the firm may be able to increase its total revenue even though it will sell fewer units.
   c. By lowering its price below the market price, the firm will benefit from being able to sell more units at the lower price than it could have sold by charging the market price.
   d. For all firms, average revenue equals the price of the good.

22. Marginal cost increases as the quantity of output increases. This reflects the property of
   a. increasing total cost.
   b. diminishing total cost.
   c. increasing marginal product.
   d. diminishing marginal product.

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Price</th>
<th>Total Revenue</th>
<th>Average Revenue</th>
<th>Marginal Revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>35</td>
<td>35</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>64</td>
<td>64</td>
<td>32</td>
<td>29</td>
</tr>
<tr>
<td>3</td>
<td>29</td>
<td>29</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td>17</td>
</tr>
<tr>
<td>5</td>
<td>23</td>
<td>23</td>
<td></td>
<td>11</td>
</tr>
<tr>
<td>6</td>
<td></td>
<td>120</td>
<td></td>
<td>-1</td>
</tr>
<tr>
<td>7</td>
<td>17</td>
<td>17</td>
<td></td>
<td>-7</td>
</tr>
<tr>
<td>8</td>
<td></td>
<td></td>
<td></td>
<td>-13</td>
</tr>
<tr>
<td>9</td>
<td>99</td>
<td>99</td>
<td>11</td>
<td>-13</td>
</tr>
<tr>
<td>10</td>
<td>80</td>
<td>80</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

23. Refer to Table 2. Assume this monopolist's marginal cost is constant at $12. What quantity of output (Q) will it produce and what price (P) will it charge?
   a. Q = 4, P = $29
   b. Q = 4, P = $26
   c. Q = 5, P = $23
   d. Q = 7, P = $17

24. Marginal revenue for a monopolist is computed as
   a. average revenue divided by quantity sold.
   b. average revenue times quantity divided by price.
   c. total revenue divided by quantity sold.
   d. change in total revenue per one unit increase in quantity sold.
**Figure 4** The graph below represents the various combinations of cars and corn that Country A could produce in a given month. (On the vertical axis, corn is measured in bushels.)

25. **Refer to Figure 4.** The graph that is shown is called a
   a. supply line.
   b. opportunity line.
   c. production possibilities frontier.
   d. consumption possibilities frontier.

26. **Refer to Figure 4.** The fact that the line slopes downward reflects the fact that
   a. for Country A, it is more costly to produce a car than it is to produce a bushel of corn.
   b. Country A will produce more cars and fewer bushels of corn as time goes by.
   c. Country A faces a tradeoff between producing cars and producing corn.
   d. Country A should specialize in producing corn.

27. **Refer to Figure 4.** You may assume that the production possibility frontier is a straight line.
    Which of the following combinations of cars and corn could Country A produce in a given month?
    a. 7 cars and 40 bushels of corn
    b. 5 cars and 90 bushels of corn
    c. 3 cars and 240 bushels of corn
    d. 8 cars and 165 bushels of corn
Use the accompanying table to answer the following questions:

Table 3

<table>
<thead>
<tr>
<th></th>
<th>Labor hours needed to make one unit of</th>
<th>Amount produced in 40 hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cheese</td>
<td>Bread</td>
</tr>
<tr>
<td>England</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Spain</td>
<td>2</td>
<td>8</td>
</tr>
</tbody>
</table>

28. Refer to Table 3. If England and Spain trade based on the principle of comparative advantage, England will import
   a. bread and Spain will import cheese.
   b. bread and Spain will import bread.
   c. cheese and Spain will import bread.
   d. cheese and Spain will import cheese.

29. Refer to Table 3. The opportunity cost of 1 unit of bread is ___ in England and ___ in Spain,
   a. 1 unit of cheese, (England), 1 unit of cheese (Spain).
   b. 2 units of cheese, (England), 1 unit of cheese (Spain).
   c. 2 units of cheese, (England) 4 units of cheese (Spain).
   d. 4 units of cheese, (England) 2 units of cheese (Spain).

30. Suppose that a worker in Freedonia can produce either 6 units of corn or 2 units of wheat per year, and a worker in Sylvania can produce either 2 units of corn or 6 units of wheat per year. Each nation has 10 workers. Without trade, Freedonia produces and consumes 30 units of corn and 10 units of wheat per year. Sylvania produces and consumes 10 units of corn and 30 units of wheat. Suppose that trade is then initiated between the two countries, and Freedonia sends 30 units of corn to Sylvania in exchange for 30 units of wheat. Freedonia will now be able to consume a maximum of
   a. 30 units of corn and 30 units of wheat.
   b. 40 units of corn and 30 units of wheat.
   c. 40 units of corn and 20 units of wheat.
   d. 10 units of corn and 40 units of wheat.

31. Which of the following statements is true of a monopoly firm?
   a. A monopoly firm is a price taker and has no supply curve.
   b. A monopoly firm is a price maker and has no supply curve
   c. A monopoly firm is a price maker and has a downward-sloping supply curve.
   d. A monopoly firm is a price maker and has an upward-sloping supply curve.
32. The monopolist's profit-maximizing quantity can be found at the intersection of which two curves?
   a. Marginal cost and demand
   b. Marginal cost and marginal revenue
   c. Average total cost and marginal revenue
   d. Average variable cost and average revenue

33. Dave is the owner of Dave's Pizza Palace. Dave is a profit-maximizing owner whose firm operates in a competitive market. An additional worker costs Dave $200 and has a marginal productivity of 40 pizzas. Assuming no other variable costs, what is the marginal cost of a pizza?
   a. $200
   b. $8
   c. $5
   d. There is insufficient information available to answer this question.

34. A factory that operates in perfectly competitive markets produces its output using labor and capital. Both factors exhibit diminishing marginal productivity holding the amount of the other factor fixed. An increase in the amount of capital equipment, holding everything else constant should
   a. reduce the amount of labor the factory desires at the current wage.
   b. raise the marginal product of capital.
   c. reduce the amount the factory is willing to pay for labor.
   d. raise the marginal product of labor.

35. Consider a consumer who purchases two goods, X and Y. If the price of good Y falls, then the substitution effect by itself will
   a. cause the consumer to buy more of good Y and less of good X.
   b. cause the consumer to buy more of good X and less of good Y.
   c. not affect the amount of goods X and Y that the consumer buys.
   d. result in an upward-sloping demand for good Y if the substitution effect is positive.

36. Suppose that flu shots create a positive externality equal to $12 per shot. Further suppose that the government offers a $5 per-shot subsidy to producers. What is the relationship between the equilibrium quantity and the socially optimal quantity of flu shots produced?
   a. They are equal.
   b. The equilibrium quantity is greater than the socially optimal quantity.
   c. The equilibrium quantity is less than the socially optimal quantity.
   d. There is not enough information to answer the question.

37. The rate at which a consumer is willing to exchange one good for another, and maintain a constant level of satisfaction, is called the
   a. relative expenditure ratio.
   b. value of marginal product.
   c. marginal rate of substitution.
   d. relative price ratio.
38. A firm that shuts down temporarily
   a. still has to pay its variable costs, but not its fixed costs.
   b. still has to pay its fixed costs, but not its variable costs.
   c. still has to pay both its variable costs and its fixed costs.
   d. has to pay neither its variable costs nor its fixed costs.

39. When her income increased from $10,000 to $20,000, Heather's consumption of macaroni decreased from 10 pounds to 5 pounds and her consumption of soy-burgers increased from 2 pounds to 4 pounds. Using the midpoint method, we can conclude that for Heather,
   a. macaroni and soy-burgers are both normal goods with income elasticities equal to 1.
   b. macaroni is an inferior good and soy-burgers are normal goods; both have income elasticities of 1.
   c. macaroni is an inferior good with an income elasticity of -1 and soy-burgers are normal goods with an income elasticity of 1.
   d. macaroni and soy-burgers are both inferior goods with income elasticities equal to -1.

Table 4

<table>
<thead>
<tr>
<th></th>
<th>Labor Hours Needed to Make One:</th>
<th>Amount Produced in 24 Hours:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Basket</td>
<td>Birdhouse</td>
</tr>
<tr>
<td>Montana</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>Missouri</td>
<td>3</td>
<td>1.5</td>
</tr>
</tbody>
</table>

40. **Refer to Table 4.** The opportunity cost of 1 birdhouse for Montana is
   a. 1/3 basket.
   b. 1 basket.
   c. 4/3 baskets.
   d. 3 baskets

41. Suppose there is currently a tax of $50 per ticket on airline tickets. The supply curve for airline tickets slopes upward and the demand curve for airline tickets slopes downward. Sellers of tickets are required to pay the tax to the government. If the tax is reduced from $50 per ticket to $30 per ticket, then
   a. the demand curve will shift upward by $20 and the price paid by buyers will increase, but the increase will be less than $20.
   b. the demand curve will shift upward by more than $20 and the price paid by buyers will decrease by $20.
   c. the supply curve will shift downward by $20 and the price paid by buyers will decrease, but the decrease will be less than $20.
   d. the supply curve will shift downward by more than $20 and the effective price received by sellers will increase by $20.
42. Assume that your roommate is very messy. According to campus policy, you have a right to live in an uncluttered apartment. Suppose she gets a $200 benefit from being messy but imposes a $100 cost on you. The Coase theorem would suggest that an efficient solution would be for your roommate to
   a. stop her messy habits or else move out.
   b. pay you at least $100 but less than $200 to live with the clutter.
   c. continue to be messy and force you to move out.
   d. demand payment of at least $100 but no more than $200 to clean up after herself.

**Figure 5:** On the diagram below, Q represents the quantity of computers and P represents the price of computers.

![Diagram](image)

43. **Refer to Figure 5.** As a result of international trade in computers being allowed, which of the following statements is correct for the country for which the figure is drawn?
   a. Consumer surplus for domestic computer consumers decreases.
   b. The demand curve for computers by domestic computer consumers shifts upward.
   c. The losses of the domestic losers outweigh the gains of the domestic winners.
   d. Domestic computer producers sell fewer computers.

44. Turkey is an importer of goose-down pillows. The world price of these pillows is $50. Turkey imposes a $7 tariff on pillows. Turkey is a price-taker in the pillow market. As a result of the tariff, the price of goose-down pillows in Turkey
   a. remains at $50 and the quantity of goose-down pillows purchased in Turkey decreases.
   b. increases to $57 and the quantity of goose-down pillows purchased in Turkey decreases.
   c. increases to a new price between $50 and $57 and the quantity of goose-down pillows purchased in Turkey decreases.
   d. increases to a new price above $57 and the quantity of goose-down pillows purchased in Turkey remains the same.
45. Suppose that an MBA degree creates no externality because the benefits of an MBA are internalized by the student in the form of higher wages. If there are no government subsidies for MBAs, then which of the following statements is correct?
   a. The equilibrium quantity of MBAs will equal the socially optimal quantity of MBAs.
   b. The equilibrium quantity of MBAs will be greater than the socially optimal quantity of MBAs.
   c. The equilibrium quantity of MBAs will be less than the socially optimal quantity of MBAs.
   d. There is not enough information to answer the question.

46. The town of Sointenly does not have any public snow-plows. Anyone who wants his street cleared of snow must hire a private snow-plow company, which charges $75 per street. Curly, Larry and Moe all live on a dead-end street; Curly lives at the very end. Each one values snow removal at $50. At present, the snow is never cleared from the street. We can conclude that
   a. there is no way to improve upon the current situation because the cost of snow removal exceeds what each individual is willing to pay for it.
   b. Larry and Moe should wait for Curly to pay for the service because Curly will pay to have the snow cleared all the way to his house. Then Larry and Moe will get the service for free.
   c. the fee charged by the snow removal company is unfairly high.
   d. Curly, Larry and Moe could all be better off if they acted collectively.

47. Cold Duck Airlines flies between Tacoma and Portland. The company leases planes on a year-long contract at a cost that averages $600 per flight. Other costs (fuel, flight attendants, etc.) amount to $550 per flight. Currently, Cold Duck's revenues are $1,000 per flight. All prices and costs are expected to continue at their present levels. If it wants to maximize profit, Cold Duck Airlines should
   a. drop the flight immediately.
   b. continue the flight.
   c. continue flying until the lease expires and then drop the run.
   d. drop the flight now but renew the lease if conditions improve.
48. The profit-maximization problem for a monopolist differs from that of a competitive firm in which of the following ways?
   a. A competitive firm maximizes profit at the point where marginal revenue equals marginal cost; a monopolist maximizes profit at the point where marginal revenue exceeds marginal cost.
   b. A competitive firm maximizes profit at the point where average revenue equals marginal cost; a monopolist maximizes profit at the point where average revenue exceeds marginal cost.
   c. For a competitive firm, marginal revenue at the profit-maximizing level of output is equal to marginal revenue at all other levels of output; for a monopolist, marginal revenue at the profit-maximizing level of output is smaller than it is for larger levels of output.
   d. For a profit-maximizing competitive firm, thinking at the margin is much more important than it is for a profit-maximizing monopolist.

49. A and B are playing a game where A can play either Top or Bottom and B can play either Left or Right. They will choose their strategies simultaneously. The payoff matrix in this game is

   \[
   \begin{array}{c|cc}
   & \text{Left} & \text{Right} \\
   \hline
   \text{Top} & 8,8 & 12, 10 \\
   \text{Bottom} & 10, 14 & 10, 11 \\
   \end{array}
   \]

   where A's payoffs are shown first. Select the correct statement.
   a. (Top, Left) is a Nash Equilibrium.
   b. (Top, Right) is a Nash Equilibrium.
   c. (Bottom, Right) is a Nash Equilibrium.
   d. There is no Nash Equilibrium in non-random strategies to this game.
50. Below is pictured a sequential game. There are two players and each time a player gets to play, it chooses to stay in and let the other player play (up to the final move) or go out and end the game. The first number refers to Player 1’s payoff, the second to that of player 2.

The unique outcome from solving the game “back to front” gives payoffs:

a. 2 to player 1 and 0 to player 2.
b. 100 to player 1 and 2 to player 2.
c. 5 to player 1 and 3 to player 2.
d. 2 to player 1 and 100 to player 2.

Figure 6

(a) 
(b) 
(c) 
(d)
51. Refer to Figure 6. Which of the graphs in the figure reflects a decrease in the price of good X only?
   a. graph (a)
   b. graph (b)
   c. graph (c)
   d. graph (d)

52. Refer to Figure 6. Which of the graphs in the figure could reflect an increase in the price of good Y?
   a. graph (a)
   b. graph (b)
   c. graph (c)
   d. graph (d)

53. The following diagram shows a budget constraint for a particular consumer.

   ![Budget Constraint Diagram](image)

   If the price of x is $10, what is the price of y?
   a. $15
   b. $25
   c. $35
   d. $70
54. Refer to Figure 7. The line going through gg is most likely to be
   a. a marginal cost curve.
   b. a marginal revenue curve.
   c. a fixed cost curve.
   d. an average cost curve.

55. Refer to Figure 7. The horizontal line at hh is most likely to be
   a. the monopoly price when it is profit maximizing.
   b. the monopoly marginal revenue when it is profit maximizing.
   c. the monopoly fixed cost when it is profit maximizing.
   d. the monopoly average cost when it is profit maximizing.

56. The cross price elasticity between Corn Flakes and Eggo Waffles is 1.4. From this we can conclude
   a. Corn Flakes are an inferior good.
   b. Eggo Waffles are elastic.
   c. Eggo Waffles and Corn Flakes are substitutes.
   d. Eggo Waffles and Corn Flakes are complements.