

## Homework 2

Due on 29/8/2023, by 23:00

This assignment is optional but **STRONGLY RECOMMENDED**. If you do not submit the answers till the deadline, the score of your final exam will substitute for the score for this assignment. Submit only the correct letter for each task on eLearn under 'Quizzes' within 'COR2100-Economics and Society G7-8-26-49'. Note that the actual text of questions and answers is not supposed to appear on the eLearn quiz. You have unlimited attempts. The system is programmed to credit your last attempt. Be informed that if you submit an attempt and afterwards you re-open the quiz, you must submit your answers **AGAIN**. Otherwise, the system will grade the unfinished attempt with 0 (because it is the last one) and there is **NOTHING** I can do to fix this after the fact. Late homework or homework submitted outside eLearn cannot be accepted as this would violate SMU official policy for fairness and transparency in grading. This assignment is protected by Grade Insurance™: If the assignment's average turns out to be below 75, an equal amount of bonus points will be given to every work, for the average to become 75. Direct any homework questions to your TA.

- Which of the following best explains the Law of Demand?
  - When the price of a good decreases, consumers tend to buy more of it.
  - When consumer's income increase, they tend to buy more products.
  - Consumer's tastes are affected by the prices of goods.
  - Consumer's preferences are independent of the goods' substitutes.
  - All of the above.
- In the early 2000s, an average motorcycle would cost \$8,000 and an average refrigerator \$600. Today, an average motorcycle would cost \$12,000, while an average refrigerator costs \$900. Which of the following is true for the opportunity cost of refrigerators in terms of motorcycles?
  - It has increased.
  - It has decreased.
  - It has not changed.
  - We have no sufficient information to tell.
- Suppose that the price of the good on the horizontal axis triples, while the price of the good on the vertical axis doubles. Which of the following is accurate?
  - The budget line moves closer to the origin but its slope does not change.
  - The budget line moves away from the origin but its slope does not change.
  - The budget line will become flatter (more horizontal).
  - The budget line will become steeper (more vertical).
- In recent years, there is an increase in the demand for electric cars. Which of the following could be the reason?
  - The increase in the price of petrol.
  - The increase in the price of electricity.
  - The decrease in the production cost of electric cars.
  - The decrease in the prices of electric cars.

$Q_A$	30	25	20	15	10
$P_A$	100	400	1,000	2,000	5,000

**Table 2.1:** The price and the corresponding quantity demanded for good A.

5. According to table 2.1, what is the price elasticity of demand for good A most probable to be?
  - A. A totally inelastic or vertical demand curve.
  - B. A relatively inelastic or somewhat vertical demand curve.
  - C. A relatively elastic or somewhat horizontal demand curve.
  - D. A totally elastic or horizontal demand curve.
  
6. According to table 2.1, which of the following goods is most likely to be good A?
  - A. Petrol.
  - B. Aspirin.
  - C. Pop-corn.
  - D. Cow's milk.
  
7. Which of the following would cause Netflix's demand curve to decrease?
  - A. The decrease in the price of Amazon Prime's subscription.
  - B. The decrease in the price of Netflix's subscription.
  - C. Both A and B.
  - D. None of the above.

**Scenario 2.1:** Claire takes dancing (D) and piano (P) lessons and she receives zero utility unless she does one of these activities once a month. Claire's marginal utility from the two activities is:

Times/Month	1	2	3	4	5	6	7
$MU_D$	80	64	50	35	20	10	-15
$MU_P$	45	37	33	23	12	1	-7

8. According to scenario 2.1, which of the following is more preferable for Claire?
  - A. Zero lessons of dancing or piano.
  - B. 5 dancing lessons.
  - C. 7 dancing lessons.
  - D. 7 piano lessons.
  
9. According to scenario 2.1, how much is Claire's utility if she takes 3 dancing and 3 piano lessons in one month?
  - A. Around 100.
  - B. Around 200.
  - C. Around 300.
  - D. Around 400.
  
10. According to scenario 2.1., if the cost of dancing is \$40 per lesson and the cost of piano is \$80 per lesson, how many dancing and piano lessons will Claire have in one month if she has \$900 to spend on them?
  - A. 4 dancing and 4 piano lessons.
  - B. 5 dancing and 5 piano lessons.
  - C. 6 dancing and 6 piano lessons.
  - D. 7 dancing and 7 piano lessons.

11. According to scenario 2.1., if the cost of dancing is \$40 per lesson and the cost of piano is \$80 per lesson, how many dancing and piano lessons will Claire have in one month if she spends \$240 on them?
- 6 dancing and 0 piano lessons.
  - 4 dancing and 1 piano lessons.
  - 2 dancing and 2 piano lessons.
  - 0 dancing and 3 piano lessons.
12. According to scenario 2.1., if the cost of dancing is \$40 per lesson and the cost of piano is \$80 per lesson, how much utility will Claire receive in one month from these activities, if she spends \$240 on them?
- Around 150.
  - Around 300.
  - Around 450.
  - Around 600.
13. Suppose that the price elasticity of demand for cars at a given level of production is -1. What should the car manufacturer do to increase their revenue?
- Increase the price of cars.
  - Decrease the price of cars.
  - Sell more cars.
  - Sell less cars.
  - None of the above will increase their revenue.

$Q_A$	18	27	33	35
$P_B$	30	20	15	7

**Table 2.2:** The price of good B and the corresponding quantity demanded for good A.

14. According to table 2.2, what is the cross-price elasticity of demand for good A, when the price of good B decreases from \$30 to \$20?
- Around -3.
  - Around -1.5.
  - Around 0.
  - Around 1.5.
  - Around 3.
15. According to table 2.2, which of the following is true for goods A and B?
- They are normal goods.
  - They are inferior goods.
  - They are complements.
  - They are substitutes.
16. Suppose that Ian's income elasticity for cinema tickets is 3. What will happen to his quantity demanded for cinema tickets if his salary doubles?
- It will remain constant.
  - It will increase by 100%.
  - It will increase by 200%.
  - It will increase by 300%.

17. Which of the following is LESS likely to happen?
- A. An increase in the demand for smartphones causes an increase in the demand for semiconductors.
  - B. An increase in the demand of Pepsi causes an increase in the demand of Coca-Cola.
  - C. A decrease in the demand of Adidas shoes causes an increase in the demand of Nike shoes.
  - D. An increase in average income causes an increase in the demand of beef.
18. Suppose that cake's price elasticity of demand is -2, when cake's price is measured in Singapore dollars. Given that 1 Singapore dollar is approximately equivalent with 0.68 Euro, what will the price elasticity of demand for cake be, if we measure cake's price in Euro?
- A.  $-2 \times 0.68$ .
  - B.  $-2/0.68$ .
  - C. -2.
  - D.  $1/2$ .
19. Grace has \$200 to spend on comics or board games and she decides to buy 6 comics and 2 board games. At this combination, her marginal utility from comics is 60 and from board games is 120. If the price of a comic is \$20 and the price of a board game is \$40, which of the following would you suggest Grace to do?
- A. To not change her consumption.
  - B. To buy more comics and less board games.
  - C. To buy more board games and less comics.
  - D. To buy more comics and more board games.
  - E. To buy less comics and less board games.
20. What is the shape of the demand curve for a Giffen good?
- A. Upward-sloping.
  - B. Downward-sloping.
  - C. Horizontal.
  - D. Vertical.
  - E. Hyperbolic.

*Good afternoon! I always tell my students that before they ask their instructors, TAs, or their classmates any question, they should first have made some reasonable effort to find the answer on their own. The reason is because, more and more, I find students to exhibit various amounts of 'intellectual learned helplessness'. Naturally, when your brain comes across a problem, it is programmed from evolution to try and find the easiest and least costly way to overcome it (the path of least resistance). For intellectual problems, the easiest way always is to find the answer in the key or ask somebody else. This, however, trains the brain to stop thinking every time it comes across something non-trivial and get into a "seek-help-from-somewhere-else mode". When this becomes a habit, independent thinking shuts down completely, leadership abilities deteriorate, and the individual cannot function unless under supervision. I have seen this happening to even exceptionally smart individuals. Please, do not allow this to happen to you, too. If you have a question, push your brain to come up with the answer. Watch/read this part again, and even for a third, fourth, fifth time. Try to think, do your own research, or discuss it with your peers. If the problem is still above your own abilities, do not be shy to ask your instructor: "Professor, I have this question... I thought about it like this... and like that... I searched there... but it still seems that I need your help". Then, we will be glad to give you a hint to help you find the answer, but we will be gladder that you did the work and that next time your brain will be stronger and more independent. Kosmas*