



## Homework 2

Due on 24/1/2023, 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 G9-10-11-12'. 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.

- 1. Suppose that the price of the good on the vertical axis halves, while the price of the good on the horizontal axis remains constant. Which of the following is accurate?
  - A. The budget line will become flatter (more horizontal).
  - B. The budget line will become steeper (more vertical).
  - C. The budget line moves closer to the origin but its slope does not change.
  - D. The budget line moves away from the origin but its slope does not change.
- 2. Twenty years ago, an average car would cost \$30.000 and an average mobile phone \$400. Today, an average car costs \$25.000, while an average mobile phone costs \$200. Which of the following is true for the opportunity cost of mobile phones in terms of cars?
  - A. It has increased.
  - B. It has decreased.
  - C. It has not changed.
  - D. We have no sufficient information to tell.
- 3. Which of the following is an example of the Law of Demand?
  - A. An increase in the price of ovens decreases the demand for ovens.
  - B. An increase in consumers' income increases the demand for cars.
  - C. An increase in the price of CDs decreases the quantity demanded for CD-players.
  - D. An increase in the price of smartwatches decreases the quantity demanded for smartwatches.
  - E. None of the above.

**Scenario 2.1:** Christopher derives utility from playing tennis (T) and eating at his favorite restaurant (R) and he receives zero utility unless he does one of these hobbies once a month. The marginal utility Christopher receives from the two hobbies are:

Times/Month	1	2	3	4	5	6	7
$MU_T$	50	43	35	24	10	-2	-15
$MU_R$	60	53	44	34	22	14	5

- 4. According to scenario 2.1, how much is Christopher's utility if he plays tennis 5 times and visits his favorite restaurant 3 times in one month?
  - A. Around 10.
  - B. Around 45.
  - C. Around 150.
  - D. Around 270.
  - E. Around 320.
  - F. Around 350.
  - G. Around 400.
- 5. According to scenario 2.1., if the cost of playing tennis is \$20 each time and the cost of eating at his favorite restaurant is \$40 per lunch, how many tennis matches and lunches at his favorite restaurant will Christopher have in one month if he spends \$500 on them?
  - A. 1 match and 3 lunches.
  - B. 2 matches and 4 lunches.
  - C. 3 matches and 5 lunches.
  - D. 4 matches and 6 lunches.
  - E. 5 matches and 7 lunches.
  - F. 6 matches and 7 lunches.
  - G. 7 matches and 7 lunches
- 6. According to scenario 2.1., if the cost of playing tennis is \$20 each time and the cost of eating at his favorite restaurant is \$40 per lunch, how many tennis matches and lunches at his favorite restaurant will Christopher have in one month if he spends \$160 on them?
  - A. 6 matches and 1 lunch.
  - B. 4 matches and 2 lunches.
  - C. 2 matches and 3 lunches.
  - D. 0 matches and 4 lunches.
- 7. According to scenario 2.1., if the cost of playing tennis is \$20 each time, the cost of eating at his favorite restaurant is \$40 per lunch, how much total utility will Christopher receive in one month if he spends \$160 on them?
  - A. Around 200.
  - B. Around 230.
  - C. Around 260.
  - D. Around 290.
  - E. Around 320.
- 8. Which of the following would decrease the demand for ice-cream?
  - A. An increase in the price of frozen yogurt.
  - B. An extended period of low temperature.
  - C. Both A and B.
  - D. None of the above.

Inc	\$3.000	\$5.000	\$8.000	\$10.000
$Q_A$	100		45	20

**Table 2.1:** Monthly income of a representative consumer and the corresponding quantity demanded for good A.

- 9. According to table 2.1, which of the following is most likely to be true for good A?
  - A. It is a normal good.
  - B. It is an inferior good.
  - C. It is a Giffen good.
  - D. It is a luxury good.
- 10. Melody has \$200 to spend on cinema or theater and she decides to watch 5 movies and 5 performances. At this combination, her marginal utility from cinema is 100 and her marginal utility from theater is 150. If the price of a cinema ticket is \$10 and the price of a theater ticket is \$30, which of the following would you suggest Melody to do?
  - A. To watch more cinema and less theater.
  - B. To watch less cinema and more theater.
  - C. To watch more cinema and more theater.
  - D. To watch less cinema and less theater.
  - E. To not change her consumption.
- 11. Which of the following pair of demand shifts is most likely to happen simultaneously?
  - A. Outward shifts of the demand curves of both iPhone and Apple Airpods.
  - B. Inward shifts of the demand curves of both coffee and tea.
  - C. Outward shift of desks' demand curve and inward shift of office chairs' demand curve.
  - D. All of the above.
  - E. None of the above.
- 12. Suppose that the demand curve of desktops shifts to the right. Which of the following is most likely to have caused this shift?
  - A. An increase in the price of laptops.
  - B. An increase in the price of monitors.
  - C. A decrease in consumers' income.
  - D. A decrease in semiconductors' cost.
- 13. Suppose that the price of petrol increases by 100% because of the war in Ukraine. Which of the following is more likely to occur?
  - A. The demand for cars will increase.
  - B. The demand for cars will decrease.
  - C. The demand for cars will not be affected.
- 14. Suppose that the price elasticity of demand for Cheerios cereal is -2. What will happen to the quantity demanded for Cheerios, if their price halves?
  - A. It will halve.
  - B. It will double.
  - C. It will quadruple.
  - D. It will remain constant.

$Q_A$	25	50	<i>75</i>	100
$P_B$	\$25	\$20	<i>\$15</i>	\$10

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

- 15. According to table 2.2, what is the cross-price elasticity of demand for good A, when the price of good B increases from \$15 to \$20?
  - A. Around -2.
  - B. Around -1.5.
  - C. Around -1.
  - D. Around 1.
  - E. Around 1.5.
  - F. Around 2.
- 16. According to table 2.2, which of the following is true for goods A and B?
  - A. They are normal.
  - B. They are inferior.
  - C. They are complements.
  - D. They are substitutes.
- 17. Suppose that the price elasticity of demand for potato chips is -0.45. What should a potato chips retailer do to increase her/his revenue?
  - A. Increase potato chips' price.
  - B. Decrease potato chips' price.
  - C. None of A and B will increase revenue.
  - D. Both A and B will increase revenue.
- 18. Suppose that when soda is measured in liters, its price elasticity of demand is -1.37. Given that 1 liter is approximately equivalent to 0.26 gallons, what will the price elasticity of demand for soda be when we measure it in gallons?
  - A. -1.37/0.26.
  - B. -1.37×0.26.
  - C. -1.37.
  - D. We cannot tell with the information given.
- 19. Which of the following goods is expected to have less impact on government's revenue from taxation, if an excise tax is imposed on that good?
  - A. Coca cola.
  - B. Gas.
  - C. Cigarettes.
  - D. Oranges.
  - E. Potato chips.

- 20. Many economists argue that bread is a Giffen good. If this claim holds, which of the following is most likely to happen to bread's demand curve, if Singapore's government passes a new law, which forces bakers to increase its price by 5%?
  - A. The demand curve of bread will become steeper.
  - B. The demand curve of bread will become flatter.
  - C. The demand curve of bread will shift inwards.
  - D. The demand curve of bread will shift outwards.

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 answer it 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. 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. Do not allow this to happen to you. 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.