

Homework 5

Due on 17/2/2026, 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 G10-11-12-13-14-15'. 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** or else 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. Which of the following market structures is most likely to yield the lowest DWL? [9p]
 - A. A Monopoly.
 - B. A Cartel.
 - C. A Cournot Oligopoly.
 - D. A Monopolistically Competitive market.
2. Which of the following is most likely to be true in a Cournot duopoly? [9p]
 - A. Firms do not strategically interact.
 - B. Firms could increase their profits if they both reduced quantities.
 - C. There is no DWL in this duopoly.
 - D. Long-run profits will be zero for both firms.
 - E. All of the above.
3. Which of the following is most likely to be true for a kinked-demand Oligopoly? [9p]
 - A. Firms have pre-established some form of collusion.
 - B. Firms are willing to risk starting a price war.
 - C. A change in marginal cost will immediately affect pricing.
 - D. Rival firms have developed significant trust amongst each other.
 - E. None of the above.
4. Which of the following is most likely to be true for Monopolistically Competitive markets? [9p]
 - A. Firms can have profits in the S-R, but not in the L-R.
 - B. Firms can have profits in the L-R, but not in the S-R.
 - C. Firms can have profits both in the S-R, and in the L-R.
 - D. Firms can have profits neither in the S-R, nor in the L-R.

Scenario 5.1: Firm 1 and firm 2 share a market with demand $p = 2,000 - 10Q$, where Q denotes the total quantity sold in the market by both firms. Each firm's cost is $FC = 4,000$ and $MC = 200$.

5. According to scenario 5.1, how much is the Cournot quantity per firm? [8p]
- A. Around 30 units.
 - B. Around 60 units.
 - C. Around 90 units.
 - D. Around 120 units.
 - E. Around 150 units.
 - F. Around 180 units.
6. According to scenario 5.1, how much is the Cournot profit per firm? [8p]
- A. Zero.
 - B. Around 12,000 dollars.
 - C. Around 24,000 dollars.
 - D. Around 32,000 dollars.
 - E. Around 36,000 dollars.
 - F. Around 40,000 dollars.
 - G. Around 48,000 dollars.
7. According to scenario 5.1, how much is the collusion quantity per firm? [8p]
- A. Around 45 units.
 - B. Around 70 units.
 - C. Around 100 units.
 - D. Around 130 units.
 - E. Around 165 units.
 - F. Around 200 units.
8. According to scenario 5.1, how much is the collusion profit per firm? [8p]
- A. Zero.
 - B. Around 12,000 dollars.
 - C. Around 24,000 dollars.
 - D. Around 32,000 dollars.
 - E. Around 36,000 dollars.
 - F. Around 40,000 dollars.
 - G. Around 48,000 dollars.
9. The two firms in scenario 5.1 agree to collude but firm 2 alone decides to cheat. How much will firm 2 produce? [8p]
- A. Around 45 units.
 - B. Around 70 units.
 - C. Around 100 units.
 - D. Around 130 units.
 - E. Around 165 units.
 - F. Around 200 units.

10. The two firms in scenario 5.1 agree to collude but firm 2 alone decides to cheat. How much will the profit for firm 2 be? [8p]
- A. Zero.
 - B. Around 12,000 dollars.
 - C. Around 24,000 dollars.
 - D. Around 32,000 dollars.
 - E. Around 36,000 dollars.
 - F. Around 40,000 dollars.
 - G. Around 48,000 dollars.
11. The two firms in scenario 5.1 agree to collude but firm 2 alone decides to cheat. How much will the profit for firm 1 be, provided that it does not suspect that it will be cheated upon? [8p]
- A. Zero.
 - B. Around 6,000 dollars.
 - C. Around 13,000 dollars.
 - D. Around 20,000 dollars.
 - E. Around 26,000 dollars.
 - F. Around 33,000 dollars.
 - G. Around 40,000 dollars.
12. The two firms in scenario 5.1 agree to collude but firm 2 alone decides to cheat. How much will the profit for firm 1 be, if it knows that firm 2 is going to cheat? [8p]
- A. Zero.
 - B. Around 8,000 dollars.
 - C. Around 15,000 dollars.
 - D. Around 21,000 dollars.
 - E. Around 28,000 dollars.
 - F. Around 35,000 dollars.
 - G. Around 42,000 dollars.

Good afternoon! If you had a chance to take a red pill and automatically wake up on the morning of your graduation being able to receive the SMU Bachelor's degree without having to go through any classes and nobody would ever know about it, would you take it? What is the primary reason you enrolled in SMU, the degree or the knowledge? Have you ever really observed those around you who have already succeeded in whatever you want to succeed? What mattered more in their success: their knowledge and experiences or their titles? Why will an employer hire you: for your skillset or for your diplomas? Why will a potential client give you their business and money: just because you are a university graduate? Why will your friends appreciate your company: for your intellectual capacity or because you are an SMU alumnus? Think about all those questions. The answers may help you understand where you are heading in life. Kosmas