

## Homework 3

Due on 3/2/2026, by 23:00

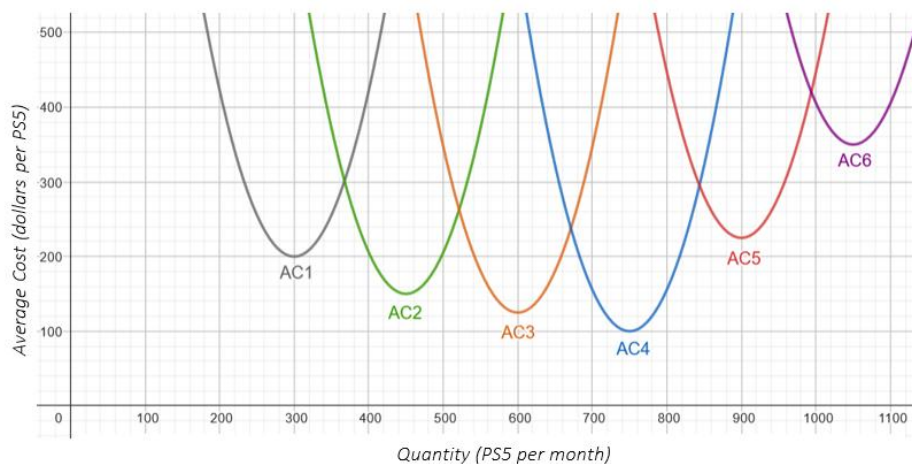
This assignment is optional but **STRONGLY RECOMMENDED**. If you do not submit the answers till the deadline, the score of your final exam will substitute for the score for this assignment. Submit only the correct letter for each task on eLearn under 'Quizzes' within 'COR2100-Economics and Society G10-11-12-13-14-15'. 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 is likely to happen, if both the demand and supply curves for good A shift to the right?
  - A. The equilibrium quantity of good A will increase.
  - B. The equilibrium quantity of good A will decrease.
  - C. The equilibrium quantity of good A will remain the same.
  - D. All of the above are possible.
2. Which of the following is most likely to be a characteristic of a Perfectly Competitive market?
  - A. Buyers can influence the market price, while sellers cannot.
  - B. Large firms can sell their products at a higher price.
  - C. Small firms can sell their products at a higher price.
  - D. Firms have no influence on price.
3. Which of the following is most likely to be a sunk cost for a company?
  - A. Employee training.
  - B. Furniture.
  - C. Utility bills.
  - D. Raw materials.
4. In a Perfectly Competitive market, firms are currently earning positive economic profits. Which of the following is most likely to happen in the long-run?
  - A. The market demand will decrease.
  - B. The market demand will increase
  - C. The market supply will decrease.
  - D. The market supply will increase.

$q$	$MC$	$VC$
1	30	30
2	26	56
3	20	76
4	24	100
5	30	130
6	42	172
7	53	225

**Table 3.1:** quantity ( $q$ ),  $MC$  and  $VC$  for a Perfectly Competitive firm.

5. Refer to table 3.1. If the market price is \$24, which of the following is most likely for this Perfectly Competitive firm, given that cost conditions do not change?
  - A. To keep operating indefinitely.
  - B. To exit the market immediately.
  - C. To exit the market in the long-run.
  - D. We need information about the fixed cost to tell.
  
6. Refer to table 3.1. If the fixed cost of the firm is \$20 and the market price is \$42, which of the following is most likely for this firm, given that cost conditions do not change?
  - A. To keep operating indefinitely.
  - B. To exit the market in the short-run.
  - C. To exit the market in the long-run.
  - D. To exit the market in the short-run and re-enter in the long-run.



**Figure 3.1:** The S-R average cost curves for 6 different scales of production for Sony's production plants.

7. According to figure 3.1, up to which level of production does Sony enjoy Economies of Scale?
  - A. Around 300 PS5.
  - B. Around 450 PS5.
  - C. Around 600 PS5.
  - D. Around 750 PS5.
  - E. Around 900 PS5.
  
8. Suppose that Sony is committed to scale AC1 in figure 3.1 and later turns out that the monthly quantity demanded is 400 PS5. Which of the following is true?
  - A. The firm will experience Constant Returns to Scale.
  - B. The firm will experience Increasing Returns to Scale.
  - C. The firm will experience Diminishing Returns to Scale.
  - D. None of the above.

9. According to figure 3.1, which of the following could explain the LAC between 300 and 600 PS5 per month?
- A. Sony can buy large quantities of semiconductors at a discount price.
  - B. Sony can hire specialized workers around the world.
  - C. Both A and B.
  - D. None of the above.
10. A firm can produce the same quantity of output using 4 alternative combinations of capital (K) and labor (L): (i) 120K and 40L; (ii) 100K and 60L; (iii) 70K and 50L; (iv) 50K and 70L. Which of the following is accurate?
- A. Combination (i) is economically less efficient than (ii).
  - B. Combination (ii) is economically less efficient than (iii).
  - C. Combination (iii) is economically less efficient than (iv).
  - D. None of the above is accurate.

*Good afternoon! "A student spends 20 minutes struggling with a single task on his homework. He works as hard as he can and finally decides to pick option C. A few days later, while checking the answer key, he realizes that the correct answer was actually B. Reading the solution, he understands why, but he feels frustrated and disappointed. Despite his hard work, he still lost all points on that task and believes his effort was wasted. A few weeks later, he encounters a similar question on the exam. This time, it takes him only a few seconds to figure out the correct answer. Now, he won't fall into the same trap again, he is experienced, he has learned from his previous mistake. After submitting his exam, he realizes that the points he lost on the homework were a small price to pay for the much more valuable exam points he gained. Now, he understands that losing those homework points wasn't such a bad deal after all. There is no better investment in life than learning from your mistakes.*

*Kosmas*