# Unit 3.5 Profit Maximization

AP Microeconomics Homework — 15 Questions

## 题库 Questions

### 1. 题库 Unit 4 Perfectly Competitive Q76

The most profitable level of output for any firm operating in the short run is the level of output at which

(A) marginal revenue exceeds marginal cost by the highest amount
(B) marginal revenue equals marginal cost
(C) price exceeds average cost by the highest amount
(D) price equals average cost
(E) price equals marginal cost

### 2. 题库 Unit 4 Perfectly Competitive Q9

A perfectly competitive firm, earning economic profits, produces and sells 100 units of output at a price of $20 per unit. If its marginal cost of increasing output to a rate of 101 units is $18, which of the following statements is correct?

(A) The total revenue from selling 101 units is the same as the total revenue from selling 100 units.
(B) The total profit from selling 101 units is $2 greater than the total profit from selling 100 units.
(C) The total cost of producing 101 units is $2 greater than the total cost of producing 100 units.
(D) The firm should decrease output to maximize profit.
(E) The firm is not maximizing profit because price exceeds marginal cost.

### 3. 题库 Unit 4 Perfectly Competitive Q23

At a firm's current rate of output, the marginal cost is $65, the average variable cost is $35, the average fixed cost is $30, and the product price is $65. Which of the following statements is true for the firm?

(A) Economic profits are zero because marginal revenue equals marginal cost.
(B) Economic profits are negative because total revenue is less than total cost.
(C) Economic profits are positive because total revenue is greater than total cost.
(D) Economic profits are negative because marginal cost exceeds average variable cost.
(E) Economic profits are zero because price equals average total cost.

### 4. 题库 Unit 4 Perfectly Competitive Q97

For a perfectly competitive firm producing the profit-maximizing quantity, the average total cost is $10 and the average variable cost is $8. If the market price for its product is $10, which of the following is true for the firm?

(A) It is sustaining a loss and should shut down.
(B) It is earning zero economic profit and will remain in business.
(C) Its accounting profits exceed implicit costs.
(D) It will temporarily shut down until the price rises above average total cost.
(E) It should increase output to increase economic profit.

### 5. 题库 Unit 4 Perfectly Competitive Q118

Catering, Inc., which provides catering services in a perfectly competitive market, was maximizing profits at the market price of $22 per meal. The market price has recently increased to $28 per meal. Which of the following short-run adjustments will increase profits for Catering, Inc.?

(A) Increasing output until the marginal cost equals the new price
(B) Increasing output until the average total cost equals the new price
(C) Decreasing output because of the increase in market price
(D) Increasing price above $28 per meal
(E) Keeping output the same because the firm is already maximizing profits

### 6. 题库 Unit 4 Perfectly Competitive Q59

If total revenue is increasing as output increases, marginal revenue is always

(A) equal to average revenue
(B) less than average revenue
(C) increasing
(D) decreasing
(E) greater than zero

### 7. 题库 Unit 4 Perfectly Competitive Q86

At the current output level, a firm finds that it has the potential to increase its profit by expanding output. If P = price, MR = marginal revenue, and MC = marginal cost, which of the following must hold at the current output for this firm?

(A) P = MR < MC
(B) P = MR = MC
(C) MR = MC
(D) MR > MC
(E) MR < MC

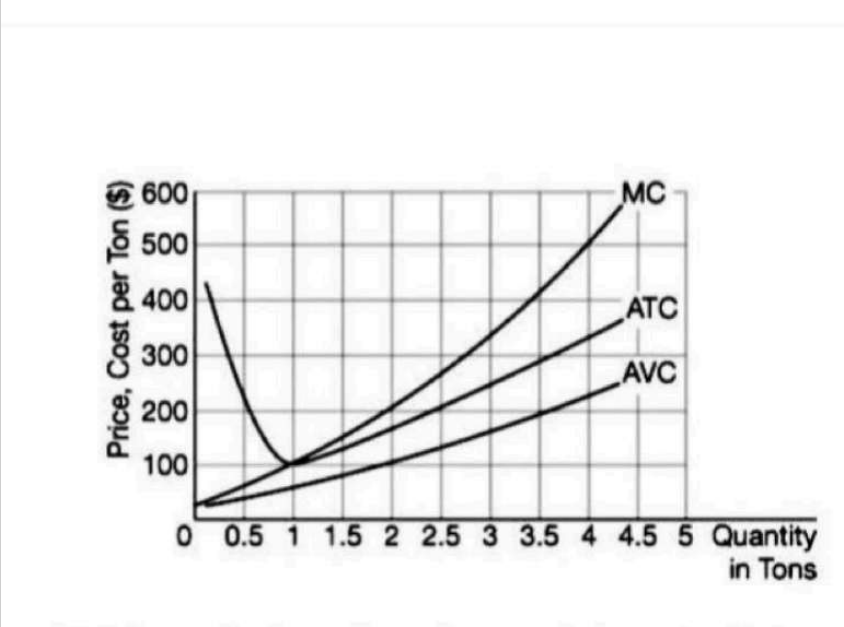
### 8. 题库 Unit 4 Perfectly Competitive Q100

If a perfectly competitive firm wishes to maximize profits and is producing where price exceeds both marginal cost and average variable cost, then the firm is

(A) producing too little output
(B) producing where its marginal revenue is less than its marginal cost
(C) using too much of the variable input
(D) charging too high a price for its output
(E) not earning any economic profits

## Past Exam Questions

### 9. 2021 AP Micro MCQ Q47




The graph above shows the marginal cost (MC), average total cost (ATC), and average variable cost (AVC) curves for a firm. If the market price is $100 per ton, the firm will maximize profits or minimize losses by doing which of the following?

(A) Producing 0 tons and shutting down in the short run
(B) Producing 0 tons and exiting the market in the long run
(C) Producing 1 ton and earning zero economic profit
(D) Producing 1.5 tons and earning zero economic profit
(E) Producing 2 tons and earning zero economic profit

### 10. 2021 AP Micro MCQ Q49

A perfectly competitive firm finds that for the last shirt that it produces and sells, the marginal revenue is $20 and the marginal cost is $22. The firm should

(A) charge $22 to maximize profit
(B) produce more shirts to increase profit
(C) produce fewer shirts to increase profit
(D) hire more workers to increase production
(E) shut down if the average variable cost is less than $20

### 11. 2022 AP Micro MCQ Q8

If the marginal revenue of the 201st unit of output is $15 and the marginal cost of the 201st unit is $20, the total economic profit of producing 201 units will be

(A) $995
(B) $1,000
(C) $1,005
(D) $1,015
(E) $1,035

### 12. 2023 AP Micro MCQ Q23

Greencom is currently producing 20 units of output. At this level of output, Greencom's marginal revenue is $6, marginal cost is $6, and average total cost is $9. If Greencom operates in a monopolistically competitive market and sells all 20 units of output for $10 per unit, it can be concluded that Greencom

(A) is maximizing profit and earning a positive economic profit
(B) is maximizing profit but earning a negative economic profit
(C) is not maximizing profit because price exceeds marginal cost
(D) should increase output to maximize profit
(E) should decrease output to maximize profit

### 13. 2023 AP Micro MCQ Q42

The table provided shows the total variable cost and total cost of production for varying quantities of output by a typical profit-maximizing firm in a perfectly competitive market. How many units will the firm produce at a market price of $95 to maximize profits?

| Quantity of Output (units) | Total Variable Cost ($) | Total Cost ($) |
|---|---|---|
| 1 | 100 | 200 |
| 2 | 190 | 290 |
| 3 | 270 | 370 |
| 4 | 340 | 440 |
| 5 | 420 | 520 |
| 6 | 510 | 610 |
| 7 | 610 | 710 |

(A) 2 units
(B) 3 units
(C) 4 units
(D) 6 units
(E) 7 units

### 14. 2024 AP Micro MCQ Q9

Lily knits scarves for her business. The table provided outlines Lily's daily total cost and total benefit of knitting scarves. How many scarves should Lily knit each day to maximize her total net benefit?

| Number of Scarves | Total Cost ($) | Total Benefit ($) |
|---|---|---|
| 1 | 8 | 17 |
| 2 | 19 | 33 |
| 3 | 33 | 48 |
| 4 | 49 | 62 |
| 5 | 85 | 69 |

(A) 1
(B) 2
(C) 3
(D) 4
(E) 5

### 15. 2024 AP Micro MCQ Q19

The table provided shows cost and revenue information for Sigmoid, a profit-maximizing monopolist that produces and sells rocket toys.

| | |
|---|---|
| **Marginal revenue** | $10 |

| | |
|---|---|
| **Marginal cost** | $10 |
| **Price** | $30 |
| **Average variable cost** | $5 |
| **Average fixed cost** | $3 |
| **Quantity of output produced** | 10 units |

If Sigmoid's average fixed cost increases to $4 because of a change in rent, then its economic profit will

(A) remain the same
(B) decrease by $1
(C) decrease by $10
(D) decrease by $20
(E) decrease by $30