Quiz (chapters 17 & 18)

Due Mar 12 at 11:59pm **Points** 14 **Questions** 14
Available Mar 10 at 12am - Mar 12 at 11:59pm 3 days **Time Limit** 30 Minutes

Instructions

This quiz covers material from chapters 17 & 18.

The time limit is 30 minutes.

Attempt History

	Attempt	Time	Score
LATEST	Attempt 1	22 minutes	14 out of 14

ⓘ Correct answers will be available on Mar 13 at 12am.

Score for this quiz: **14** out of 14
Submitted Mar 10 at 12:36pm
This attempt took 22 minutes.

Question 1 — 1 / 1 pts

In general, *game theory* is the study of

- (●) how people behave in strategic situations.
- ( ) how people behave when the possible actions of other people are irrelevant.
- ( ) oligopolistic markets.

all types of markets, including competitive markets, monopolistic markets, and oligopolistic markets.

Question 2

1 / 1 pts

Table 17-6

Imagine a small town in which only two residents, Kunal and Naj, own wells that produce safe drinking water. Each week Kunal and Naj work together to decide how many gallons of water to pump, to bring the water to town, and to sell it at whatever price the market will bear. Assume Kunal and Naj can pump as much water as they want without cost so that the marginal cost of water equals zero.

The weekly town demand schedule and total revenue schedule for water are shown in the table below.

Weekly Quantity (in gallons)	**Price**	**Weekly Total Revenue (and Total Profit)**
0	$12	$ 0
25	11	275
50	10	500
75	9	675
100	8	800
125	7	875
150	6	900
175	5	875
200	4	800

225	3	675
250	2	500
275	1	275
300	0	0

Refer to Table 17-6. Suppose the town enacts new antitrust laws that prohibit Kunal and Naj from operating as a monopolist. What will the new price of water be once the Nash equilibrium is reached?

- $3
- $4
- $5
- $6

Question 3

1 / 1 pts

Table 17-6
Imagine a small town in which only two residents, Kunal and Naj, own wells that produce safe drinking water. Each week Kunal and Naj work together to decide how many gallons of water to pump, to bring the water to town, and to sell it at whatever price the market will bear. Assume Kunal and Naj can pump as much water as they want without cost so that the marginal cost of water equals zero.

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175	5	875
200	4	800
225	3	675
250	2	500
275	1	275
300	0	0

Refer to Table 17-6. Suppose the town enacts new antitrust laws that prohibit Kunal and Naj from operating as a monopolist. What will quantity of water will each of them produce once the Nash equilibrium is reached?

- Each will produce 50 gallons, for a total of 100 gallons.
- Each will produce 75 gallons, for a total of 150 gallons.
- Each will produce 100 gallons, for a total of 200 gallons.
- Each will produce 125 gallons, for a total of 250 gallons.

Question 4

1 / 1 pts

Table 17-6

Imagine a small town in which only two residents, Kunal and Naj, own wells that produce safe drinking water. Each week Kunal and Naj work together to decide how many gallons of water to pump, to bring the water to town, and to sell it at whatever price the market will bear. Assume Kunal and Naj can pump as much water as they want without cost so that the marginal cost of water equals zero.

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150	6	900
175	5	875
200	4	800
225	3	675
250	2	500
275	1	275

300	0	0

Refer to Table 17-6. Suppose the town enacts new antitrust laws that prohibit Kunal and Naj from operating as a monopolist. Once the Nash equilibrium is reached, how much profit will each producer earn?

- ◉ $400.00
- ○ $437.50
- ○ $450.00
- ○ $800.00

Question 5

1 / 1 pts

Table 17-17
This table shows a game played between two firms, Firm A and Firm B. In this game each firm must decide how much output (*Q*) to produce: 2 units or 3 units. The profit for each firm is given in the table as (Profit for Firm A, Profit for Firm B).

		Firm B	
		Q=2	*Q=3*
Firm A	*Q=2*	(10, 10)	(8, 12)
	Q=3	(12, 8)	(6, 6)

Refer to Table 17-17. In this game,

- ◉ neither player has a dominant strategy.
- ○ both players have a dominant strategy.

Firm A has a dominant strategy, but Firm B does not have a dominant strategy.

Firm B has a dominant strategy, but Firm A does not have a dominant strategy.

Question 6

1 / 1 pts

Table 17-17
This table shows a game played between two firms, Firm A and Firm B. In this game each firm must decide how much output (Q) to produce: 2 units or 3 units. The profit for each firm is given in the table as (Profit for Firm A, Profit for Firm B).

		Firm B	
		Q=2	*Q=3*
Firm A	*Q=2*	(10, 10)	(8, 12)
	Q=3	(12, 8)	(6, 6)

Refer to Table 17-17. Which of the following outcomes represent the Nash equilibrium in this game?

Q=2 for Firm A and Q=3 for Firm B.

Q=3 for Firm A and Q=2 for Firm B.

There is no Nash equilibrium in this game since neither player has a dominant strategy.

- Both a and b are correct.

Question 7

1 / 1 pts

Table 17-18
This table shows a game played between two firms, Firm A and Firm B. In this game each firm must decide how much output (Q) to produce: 10 units or 12 units. The profit for each firm is given in the table as (Profit for Firm A, Profit for Firm B).

		Firm B	
		Q=10	*Q=12*
Firm A	*Q=10*	(48, 48)	(20, 60)
	Q=12	(60, 20)	(38, 38)

Refer to Table 17-18. The Nash equilibrium for this game is

- 10 units of output for Firm A and 10 units of output for Firm B.
- 10 units of output for Firm A and 12 units of output for Firm B.
- 12 units of output for Firm A and 10 units of output for Firm B.
- 12 units of output for Firm A and 12 units of output for Firm B.

Question 8

1 / 1 pts

Table 17-20
Nadia and Maddie are two college roommates who both prefer a clean common space in their dorm room, but neither enjoys cleaning. The roommates must each make a decision

to either clean or not clean the dorm room's common space. The payoff table for this situation is provided below, where the higher a player's payoff number, the better off that player is. The payoffs in each cell are shown as (payoff for Nadia, payoff for Maddie).

		Maddie	
		Clean	*Don't Clean*
Nadia	*Clean*	(30, 30)	(7, 50)
	Don't Clean	(50, 7)	(10, 10)

Refer to Table 17-20. What is Maddie's dominant strategy?

- Maddie has no dominant strategy.
- Maddie should always choose Clean.
- Maddie should always choose Don't Clean.
- Maddie has two dominant strategies, Clean and Don't Clean, depending on the choice Nadia makes.

Question 9

1 / 1 pts

Table 17-20

Nadia and Maddie are two college roommates who both prefer a clean common space in their dorm room, but neither enjoys cleaning. The roommates must each make a decision to either clean or not clean the dorm room's common space. The payoff table for this situation is provided below, where the higher a player's payoff number, the better off that player is. The payoffs in each cell are shown as (payoff for Nadia, payoff for Maddie).

Maddie

		Clean	*Don't Clean*
Nadia	*Clean*	(30, 30)	(7, 50)
	Don't Clean	(50, 7)	(10, 10)

Refer to Table 17-20. What is the Nash Equilibrium in this dorm room cleaning game?

- Nadia: Clean
  Maddie: Clean
- Nadia: Don't Clean
  Maddie: Clean
- Nadia: Clean
  Maddie: Don't Clean
- Nadia: Don't Clean
  Maddie: Don't Clean

Question 10

1 / 1 pts

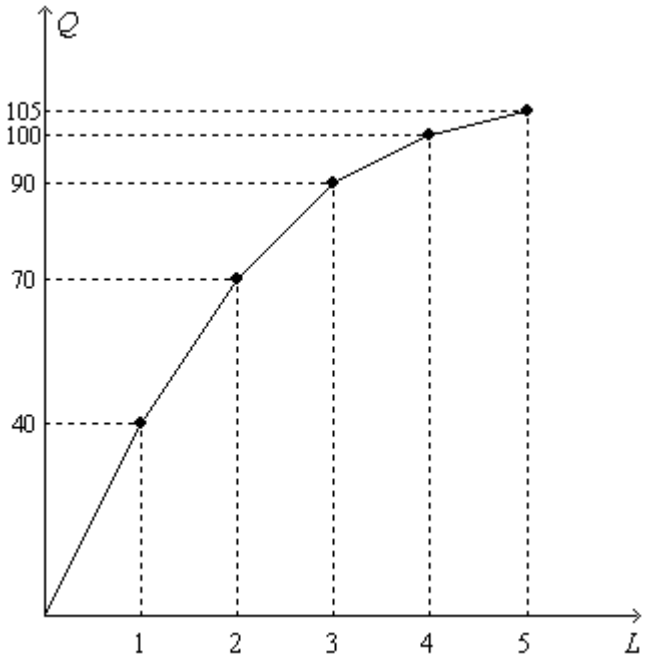
Factor markets are different from product markets in an important way because

- equilibrium is the exception, and not the rule, in factor markets.
- the demand for a factor of production is a derived demand.
- the demand for a factor of production is likely to be upward sloping, in violation of the law of demand.
- All of the above are correct.

Question 11

1 / 1 pts

Figure 18-2
The figure below shows the production function for a particular firm.



Refer to Figure 18-2. Suppose the firm pays a wage equal to $320 per unit of labor and sells its output at $15 per unit. How many units of labor should the firm hire to maximize profit?

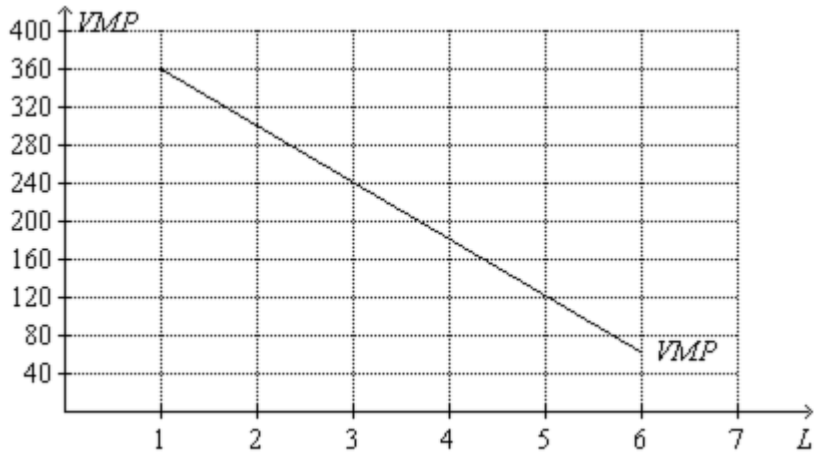
- (●) 2 units
- ( ) 3 units
- ( ) 4 units
- ( ) 5 units

Question 12

1 / 1 pts

Figure 18-5

The figure shows a particular profit-maximizing, competitive firm's value-of-marginal-product (*VMP*) curve. On the horizontal axis, *L* represents the number of workers. The time frame is daily.



Refer to Figure 18-5. The firm would choose to hire three workers if

- the market wage for a day's work is $220.
- the market wage for a day's work is $260.
- the output price is $220.
- the output price is $260.

Question 13

1 / 1 pts

Value of marginal product is defined as the additional

- output a firm would receive after hiring one more factor of production.
- cost of hiring one more factor of production.
- revenue earned from selling one more unit of product.

- [x] revenue earned from hiring one more factor of production.

Question 14

1 / 1 pts

To maximize profit, a competitive firm hires workers up to the point of intersection of the

- [ ] marginal product curve and the wage line.
- [x] value of marginal product curve and the wage line.
- [ ] value of marginal product curve and the marginal revenue curve.
- [ ] total revenue curve and the wage line.

Quiz Score: **14** out of 14