



**MobLab**  
A playground for decisions



# Price Takers

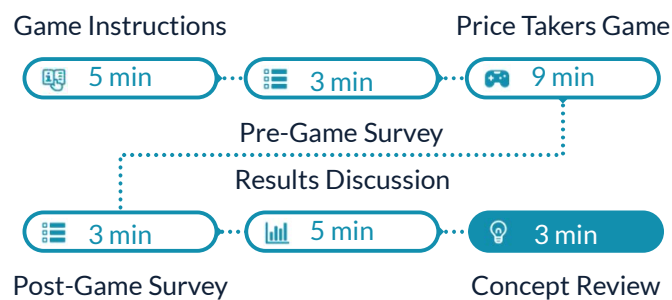
## Profit Maximization in the Long and Short Run



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## What's Included

### Price Takers




## Enter the Activity

The screenshot shows a mobile application interface. On the left is a dark blue sidebar with the following items: 'Active Sessions' with a red game controller icon, 'My Classes' with a plus sign, and 'Principles of Microeconomics 22F' with a checkmark and a right-pointing arrow. The main content area is light blue and features a 'Welcome back!' message, a hamburger menu icon, and the text 'Active Sessions' with a refresh icon. Below this is a large blue rounded rectangle containing the text '11/4 Perfect Competition' and 'Principles of Microeconomics 22F', along with a white game controller icon. A red circle with a white arrow points to this card.




# Price Takers






# Game Instructions

## Price Takers




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You are one of ten potential drivers for a rideshare service in the area

*Hourly Revenue depends on how many drivers choose to drive*

*Revenue depends on how many hours you choose to drive*



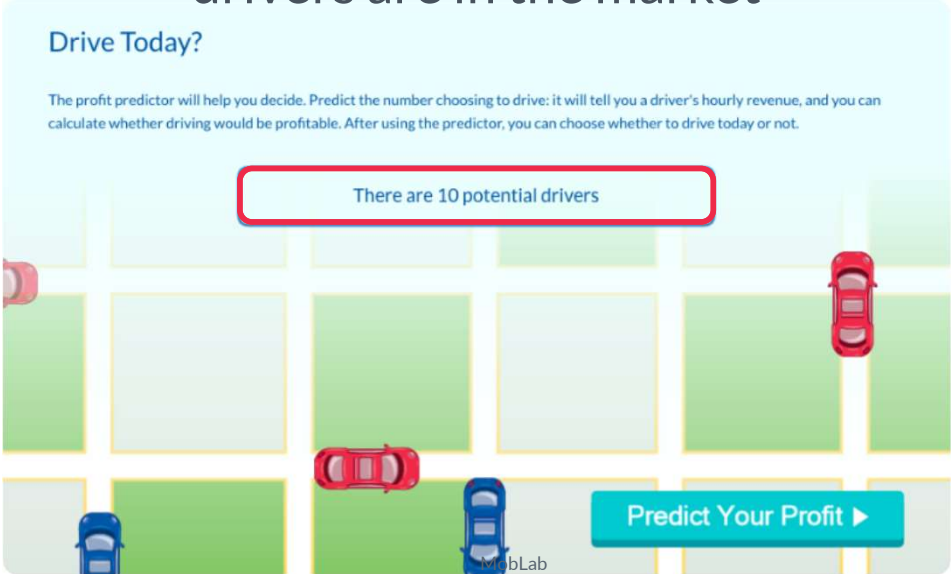
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 In the first round, you will be told how many drivers are in the market



**Drive Today?**


The profit predictor will help you decide. Predict the number choosing to drive: it will tell you a driver's hourly revenue, and you can calculate whether driving would be profitable. After using the predictor, you can choose whether to drive today or not.

There are 10 potential drivers



Predict Your Profit ▶

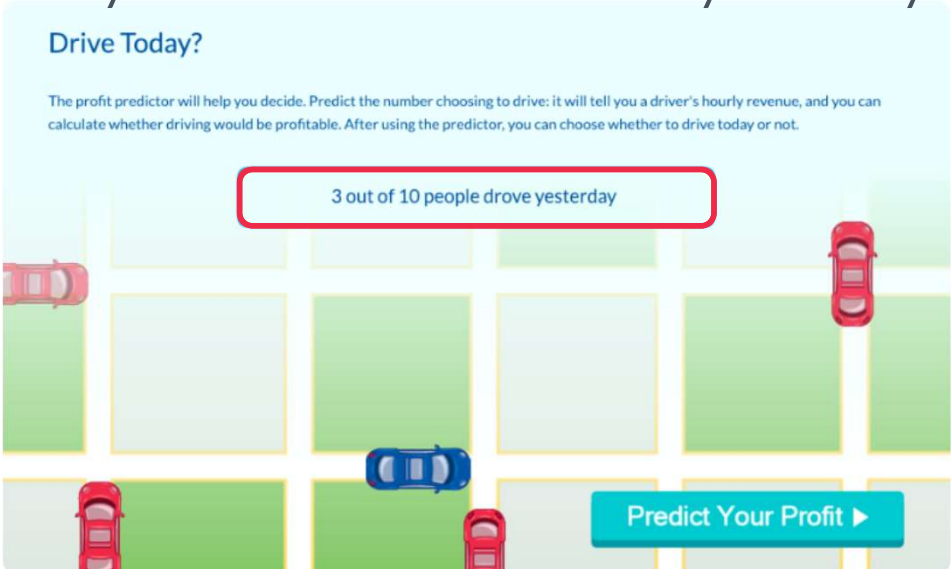
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 In the following rounds, you will be told how many drivers decided to drive yesterday


**Drive Today?**

The profit predictor will help you decide. Predict the number choosing to drive: it will tell you a driver's hourly revenue, and you can calculate whether driving would be profitable. After using the predictor, you can choose whether to drive today or not.

3 out of 10 people drove yesterday



Predict Your Profit ▶

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## Use profit predictor to help you make the decision to drive or not

**Drive Today?**

The profit predictor will help you decide. Predict the number choosing to drive: it will tell you a driver's hourly revenue, and you can calculate whether driving would be profitable. After using the predictor, you can choose whether to drive today or not.

3 out of 10 people drove yesterday

Predict Your Profit ▶

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## Explore how different numbers of drivers and hours affect your profit

**Your fixed cost for driving** — If you drive, you pay \$64

**Your predicted profit** — -\$37

**Number of drivers affects Revenue/Hr**

**Number of hours affects Marginal Cost**

Resulting Profit

Drivers	Revenue per Hour
8	\$12

My Hours	Marginal Cost
3	\$5

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## Decide whether or not you want to drive today

**Drive Today?**  
Now that you have predicted your profits, choose whether to drive (🚗) today or not (✖).

*Drive today*      *Don't drive today*

◀ Predict Your Profit      Return to previous screen

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## Choose how many hours to drive (If you didn't drive, see what you could've made)

**Choose Your Hours**

*Your fixed cost for driving*      You paid \$64 to drive.

*Your actual profit*

*Number of drivers this round*      3      \$25

*Choose the number of hours to drive*      3      \$5

Resulting Profit: \$2

submit

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Pre-Game Survey

Price Takers

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With the hours you choose, how much profit will you make?



Choose Your Hours

Dollars

MC

Revenue

My Hours

Resulting Profit

Drivers: 3

Revenue per Hour: \$25

Marginal Cost: \$5

You paid \$64 to drive.

Submit

$(3 \times \$25) - \$64 - \$9 = \$2$

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## How many drivers will enter the market?

Let's find out:

- You've been told to maximize your profits (or minimize your losses!)
- Theory predicts how many drivers there will be in a perfectly competitive market.
  - Everyone is a price taker in this market!
- How accurate will the prediction be?

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Game Time!

Price Takers

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# Post-Game Survey

## Price Takers



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### How many hours should you drive in order to maximize profit?

**Choose Your Hours**

Dollars

MC

Revenue

My Hours

You paid \$64 to drive.

**Resulting Profit**

\$46

Drivers: 4

Revenue per Hour: \$21

My Hours: 11

Marginal Cost: \$21

Submit

*When marginal revenue equals marginal cost!*

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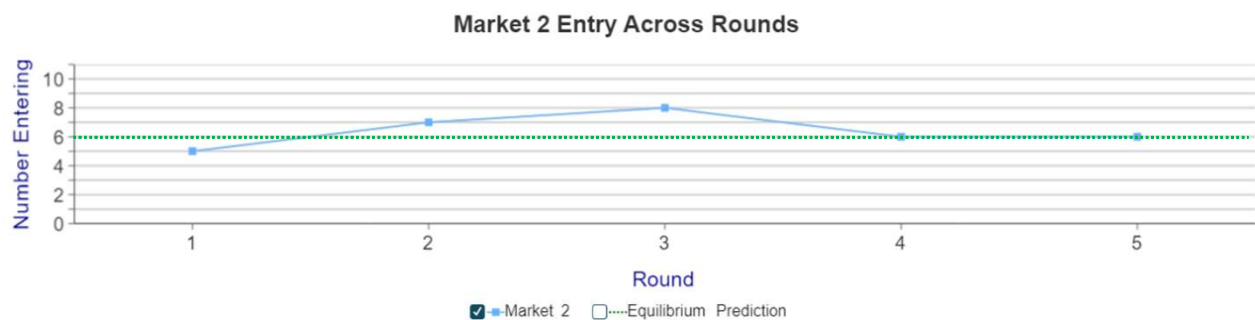
What was the long-run equilibrium number of drivers?

# of Drivers	Hours (MR = MC)	Profit
1	15	\$341
2	15	\$191
3	12	\$92
4	10	\$46
5	9	\$17
6	8	\$0
7	7	-\$15
8	6	-\$28
9	5	-\$34
10	5	-\$39

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What was the long-run equilibrium number of drivers?

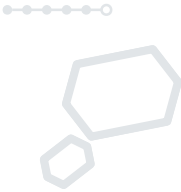


Data Source: Fall 2022 Principles of Microeconomics

*Equilibrium number of drivers: 6*

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# Results Discussion

## Price Takers



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 In the long-run the number of producers trend toward the equilibrium.

**Across-Round Summary**

Round	Average Entered	Average Profit	Modal Entrants
Equilibrium	6.0	\$0.00	6.0
Average	6.4	-\$4.62	6.6
1	5.7	\$1.92	6.0
2	7.3	-\$13.04	6.0
3	6.5	-\$6.92	8.0
4	5.8	\$0.97	6.0
5	6.9	-\$6.05	7.0

Data Source: Fall 2022 Principles of Microeconomics

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In the long-run the number of producers trend toward the equilibrium.

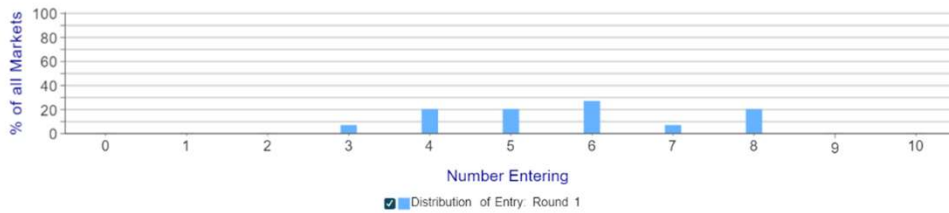
Across-Round Summary

Round	Correct Quant. Choice	Average Entered	Average Profit	Modal Entrants
Equilibrium	100%	6.0	\$0.00	6.0
Average	88%	6.4	-\$4.62	6.6
1	86%	5.7	\$1.92	6.0
2	96%	7.3	-\$13.04	6.0
3	92%	6.5	-\$6.92	8.0
4	92%	5.8	\$0.97	6.0
5	75%	6.9	-\$6.05	7.0

▼ Distribution of Entry

Data Source: Fall 2022 Principles of Microeconomics

Distribution of Entry: Round 1



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In the long-run the number of producers trend toward the equilibrium.

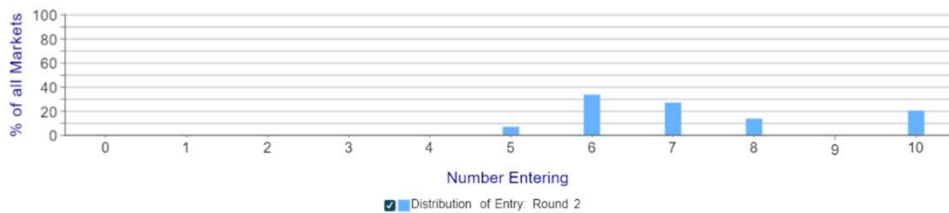
Across-Round Summary

Round	Correct Quant. Choice	Average Entered	Average Profit	Modal Entrants
Equilibrium	100%	6.0	\$0.00	6.0
Average	88%	6.4	-\$4.62	6.6
1	86%	5.7	\$1.92	6.0
2	96%	7.3	-\$13.04	6.0
3	92%	6.5	-\$6.92	8.0
4	92%	5.8	\$0.97	6.0
5	75%	6.9	-\$6.05	7.0

▼ Distribution of Entry

Data Source: Fall 2022 Principles of Microeconomics

Distribution of Entry: Round 2



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In the long-run the number of producers trend toward the equilibrium.

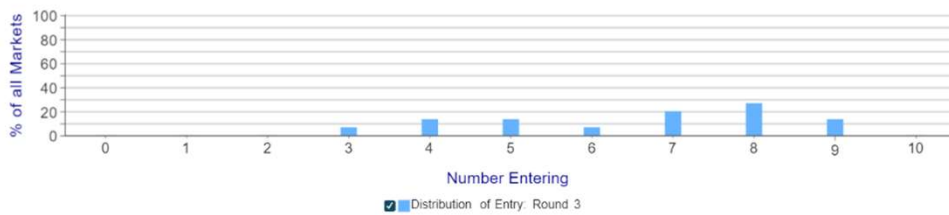
Across-Round Summary

Round	Correct Quant. Choice	Average Entered	Average Profit	Modal Entrants
Equilibrium	100%	6.0	\$0.00	6.0
Average	88%	6.4	\$-4.62	6.6
1	86%	5.7	\$1.92	6.0
2	96%	7.3	\$-13.04	6.0
3	92%	6.5	\$-6.92	8.0
4	92%	5.8	\$0.97	6.0
5	75%	6.9	\$-6.05	7.0

▼ Distribution of Entry

Data Source: Fall 2022 Principles of Microeconomics

Distribution of Entry: Round 3



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In the long-run the number of producers trend toward the equilibrium.

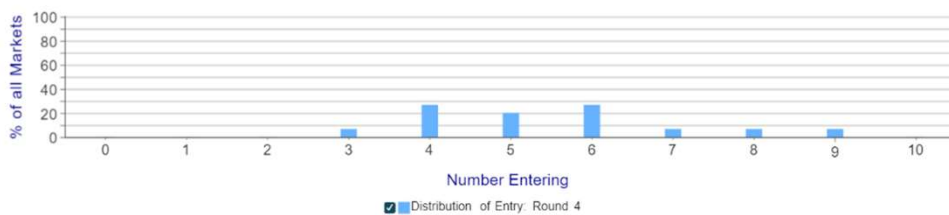
Across-Round Summary

Round	Correct Quant. Choice	Average Entered	Average Profit	Modal Entrants
Equilibrium	100%	6.0	\$0.00	6.0
Average	88%	6.4	\$-4.62	6.6
1	86%	5.7	\$1.92	6.0
2	96%	7.3	\$-13.04	6.0
3	92%	6.5	\$-6.92	8.0
4	92%	5.8	\$0.97	6.0
5	75%	6.9	\$-6.05	7.0

▼ Distribution of Entry

Data Source: Fall 2022 Principles of Microeconomics

Distribution of Entry: Round 4



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In the long-run the number of producers trend toward the equilibrium.

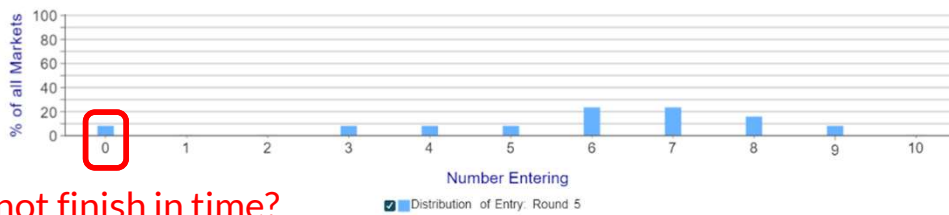
Across-Round Summary

Round	Correct Quant. Choice	Average Entered	Average Profit	Modal Entrants
Equilibrium	100%	6.0	\$0.00	6.0
Average	88%	6.4	\$-4.62	6.6
1	86%	5.7	\$1.92	6.0
2	96%	7.3	\$-13.04	6.0
3	92%	6.5	\$-6.92	8.0
4	92%	5.8	\$0.97	6.0
5	75%	6.9	\$-6.05	7.0

▼ Distribution of Entry

Data Source: Fall 2022 Principles of Microeconomics

Distribution of Entry: Round 5



Did not finish in time?

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# Concept Review

## Price Takers



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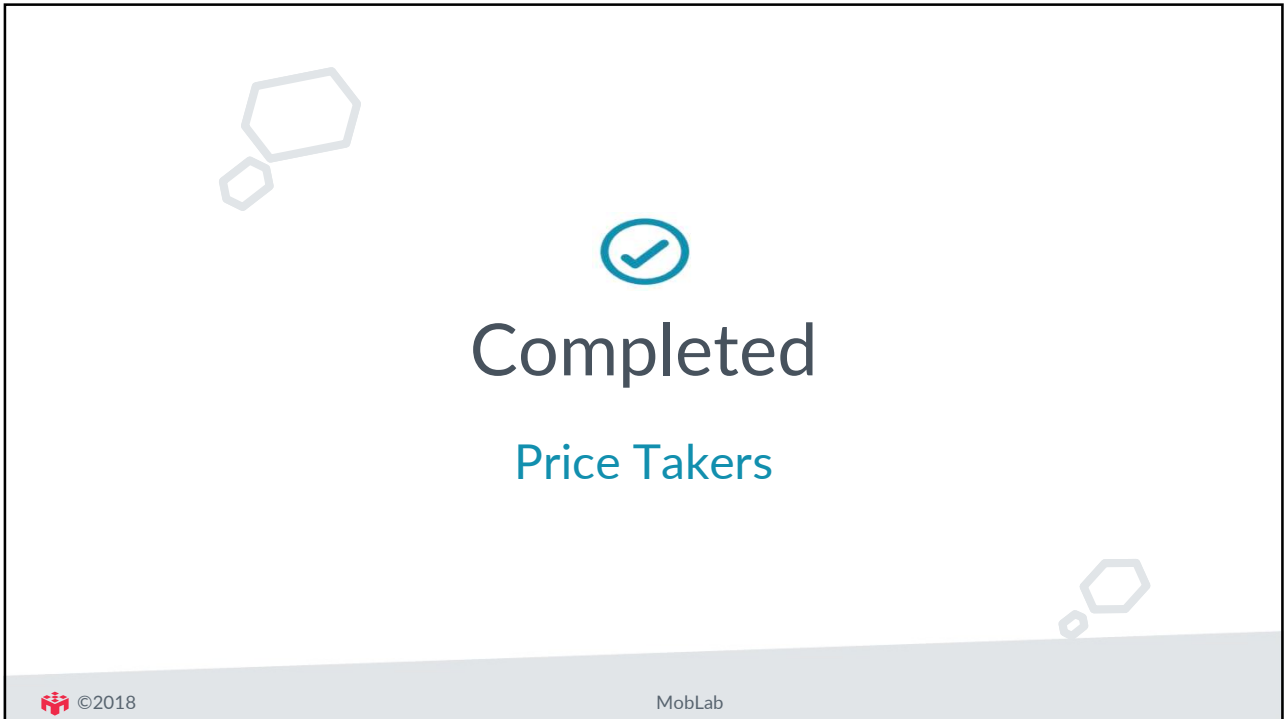
## What is the long-run equilibrium profit?

- If there is **positive** economic profit:
  - Firms have incentive to **enter** the market
- If there is **negative** economic profit:
  - Firms have incentive to **leave** the market
- If there is **zero** economic profit:
  - Firms have neither incentive to enter nor exit the market, **resulting in equilibrium**
- Drivers will still make an *accounting* profit, but make no *economic* profit



## Key Takeaways

- **Price Takers** accept the price that the market determines.
  - There are many buyers and sellers in the market.
  - Goods offered by producers are largely identical.
  - Producers may freely enter or exit the market
- For a market to be considered a *perfectly competitive market*, it must consist of **Price Takers** and have **low barriers** to entry and exit.



Completed  
Price Takers

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This slide features a white background with a grey gradient at the bottom. In the center, there is a blue checkmark icon inside a circle, followed by the word "Completed" in a large, dark grey font, and "Price Takers" in a smaller, blue font below it. There are faint, light grey thought bubble icons in the top-left and bottom-right corners. The footer contains the MobLab logo and "©2018" on the left, and "MobLab" on the right.



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A playground for decisions

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This slide has a solid red background with a light red gradient at the bottom. In the center, there is a white 3D cube logo with a checkmark on top, followed by the text "MobLab" in a large, white font, and "A playground for decisions" in a smaller, white font below it. There are faint, white thought bubble icons in the top-left and bottom-right corners. The footer contains the MobLab logo and "©2018" on the left.