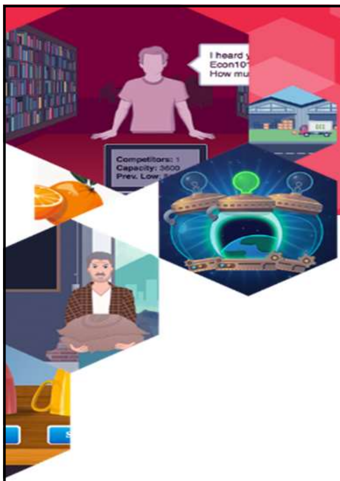

MobLab

A playground for decisions

Price Takers

Profit Maximization in the Long and Short Run

 MobLab

What's Included

Price Takers

Game Instructions — 5 min

Pre-Game Survey — 3 min

Price Takers Game — 9 min

Concept Review — 3 min

Results Discussion — 5 min

Post-Game Survey — 3 min

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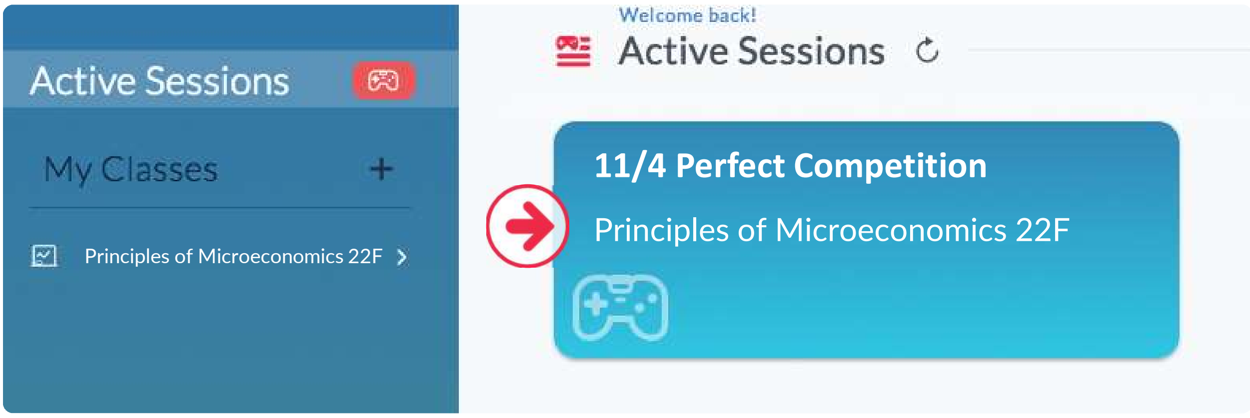
Enter the Activity



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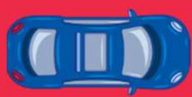

Price Takers

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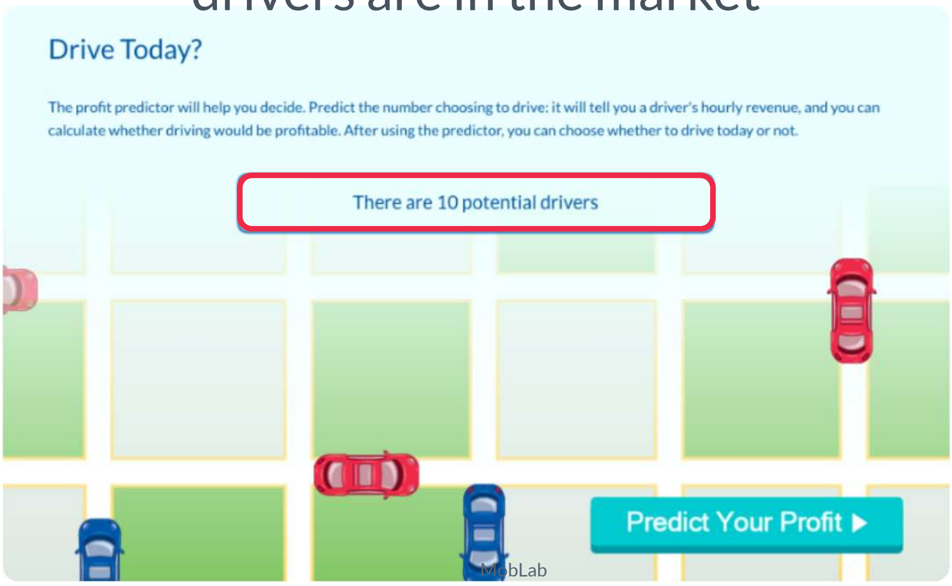
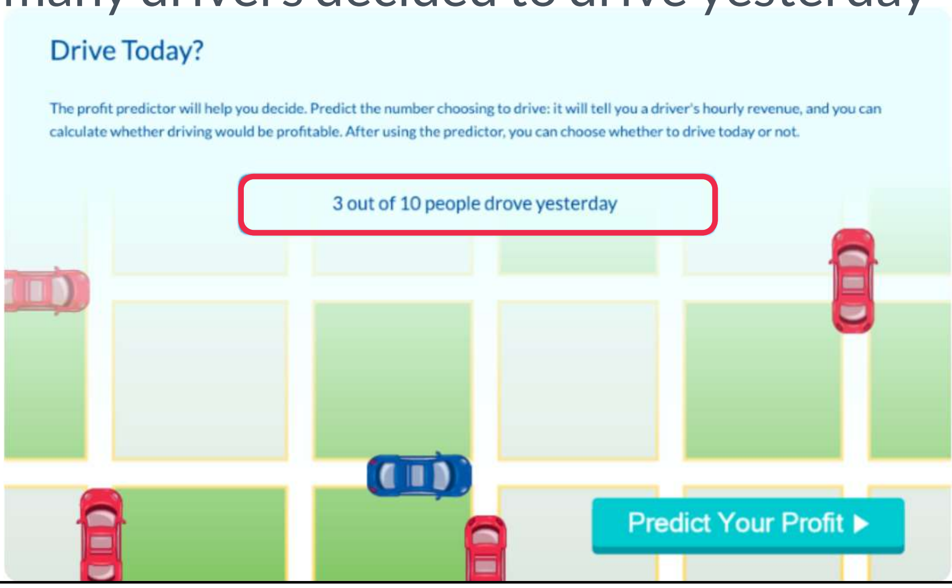
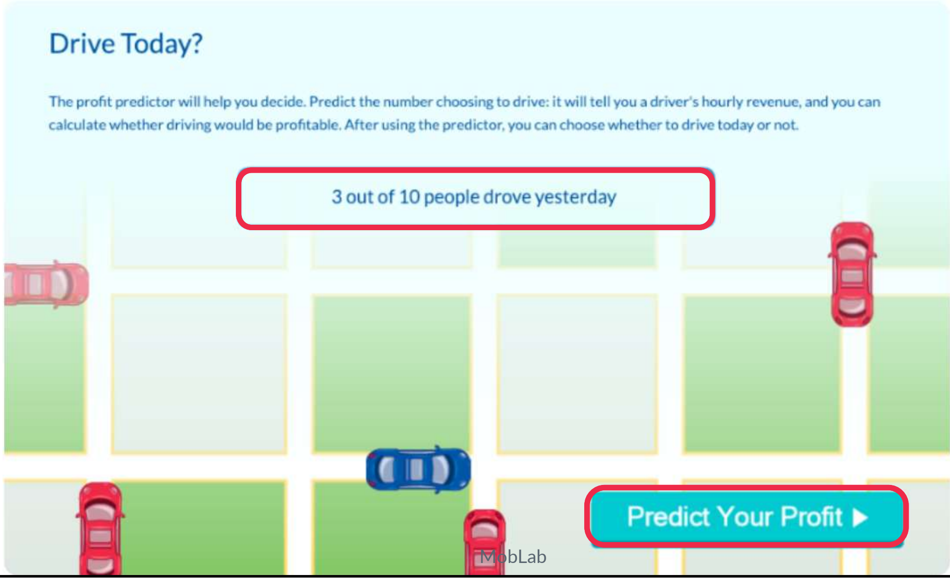
In the first round, you will be told how many drivers are in the market



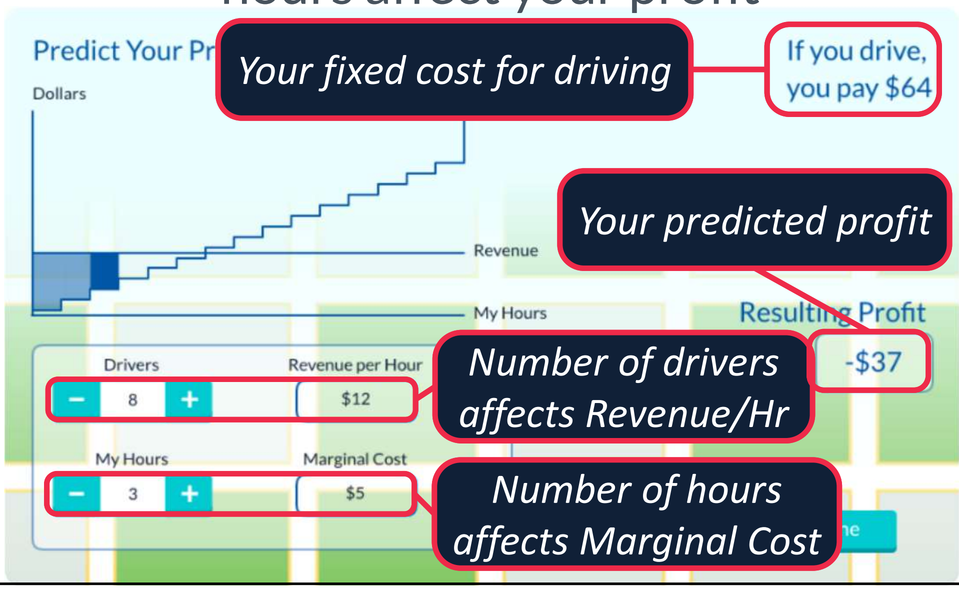
In the following rounds, you will be told how many drivers decided to drive yesterday



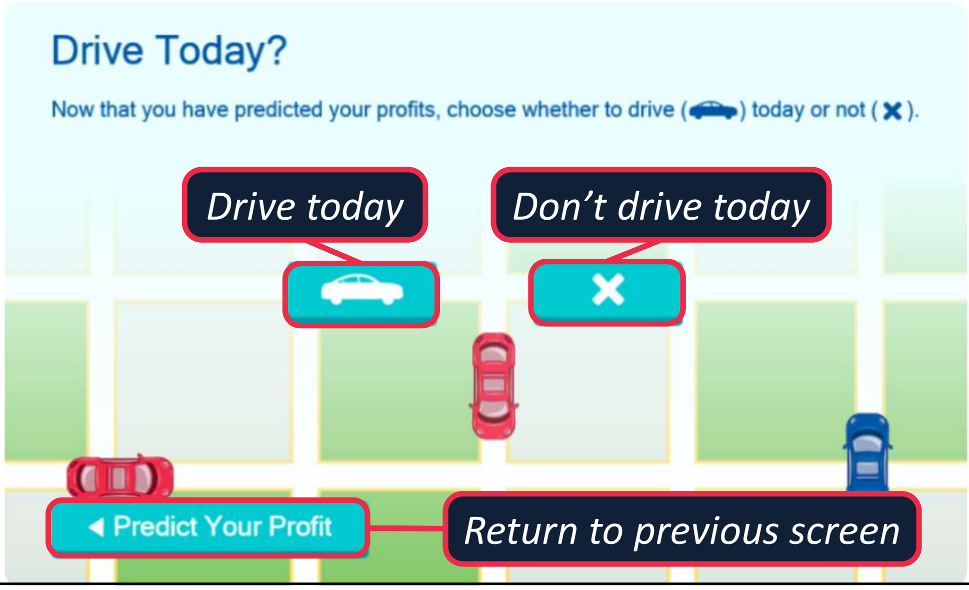
Use profit predictor to help you make the decision to drive or not



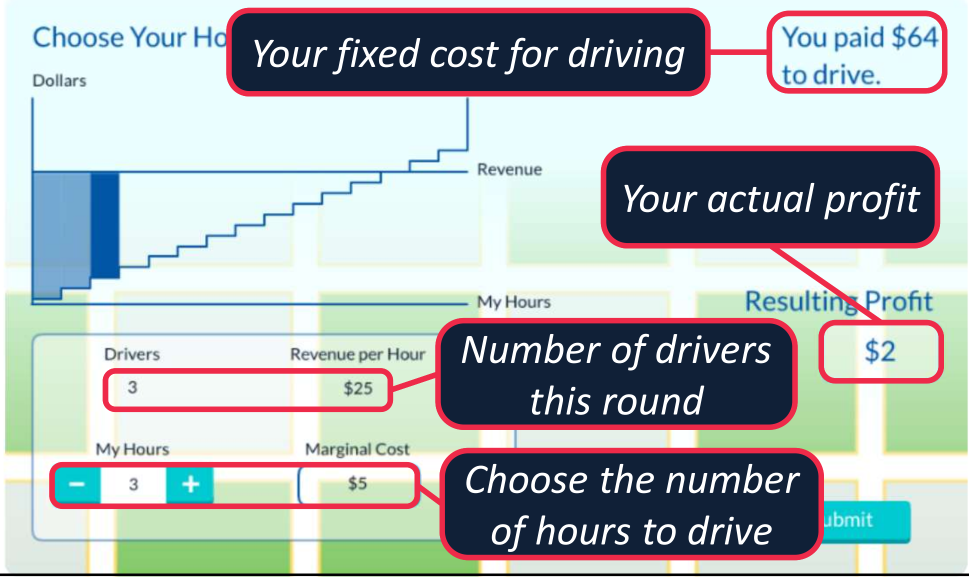
Explore how different numbers of drivers and hours affect your profit



Decide whether or not you want to drive today



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



Pre-Game Survey

Price Takers

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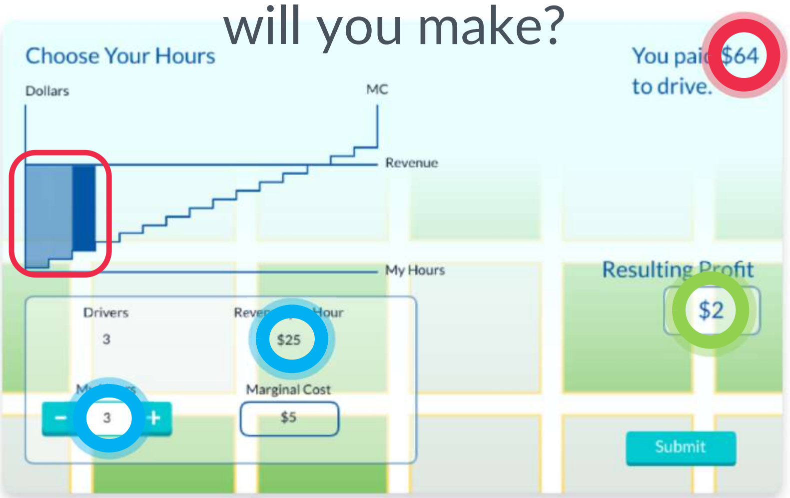
With the hours you choose, how much profit will you make?



(3 x $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?

Game Time!

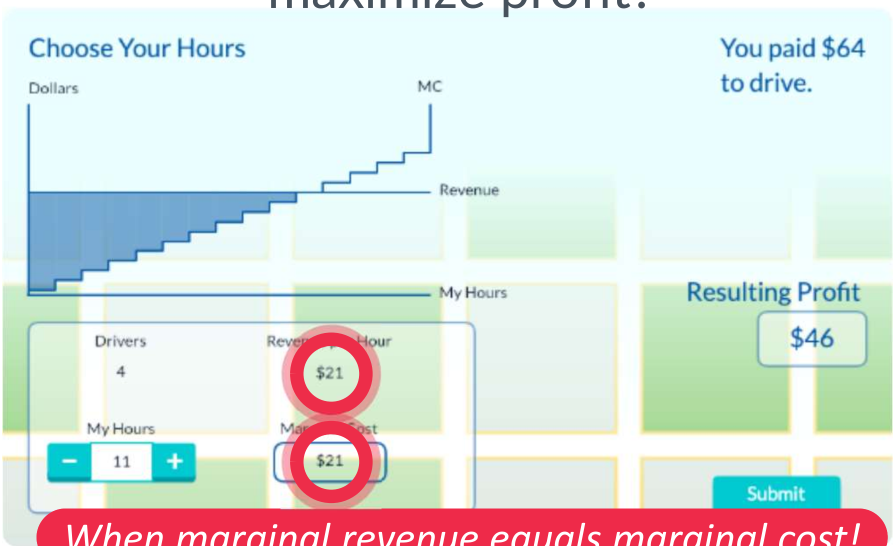
Price Takers

Post-Game Survey

Price Takers

 MobLab

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

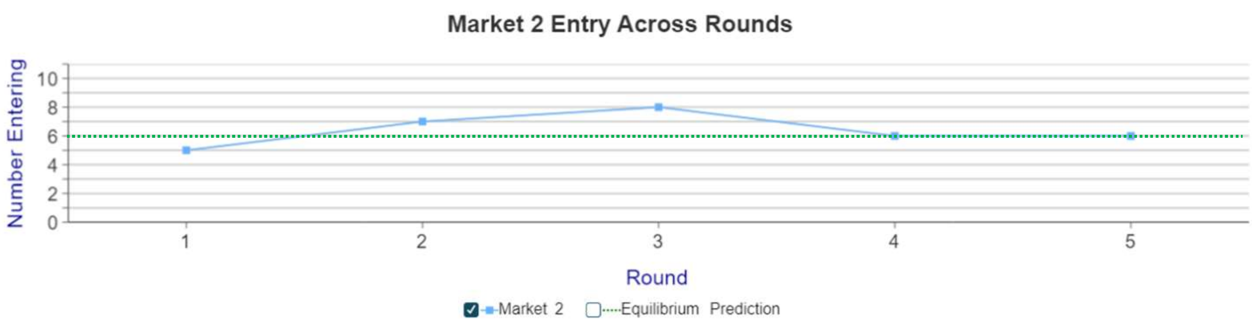


When marginal revenue equals marginal cost!

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

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.

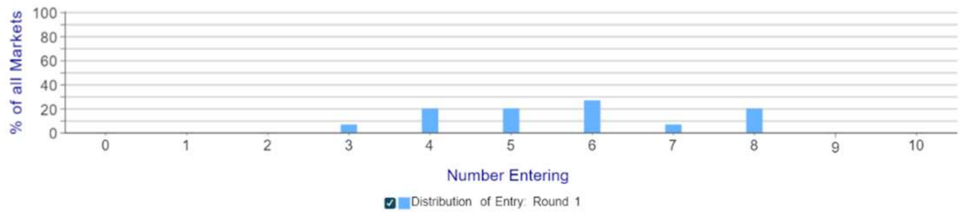
Across-Round Summary

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

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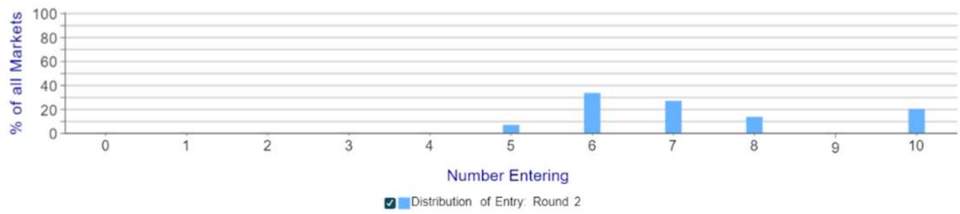
5	75%	6.9	$-6.05	7.0

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.

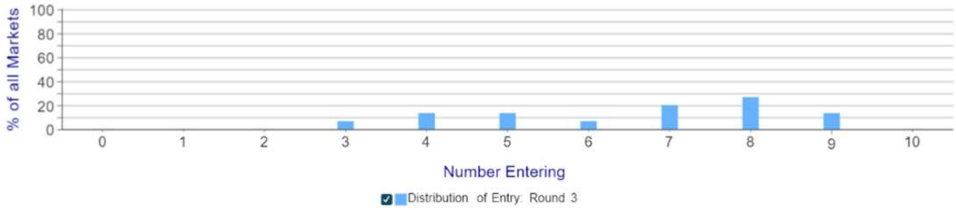
Across-Round Summary

	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

Data Source: Fall 2022 Principles of Microeconomics

▾Distribution of Entry

Distribution of Entry: Round 3



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

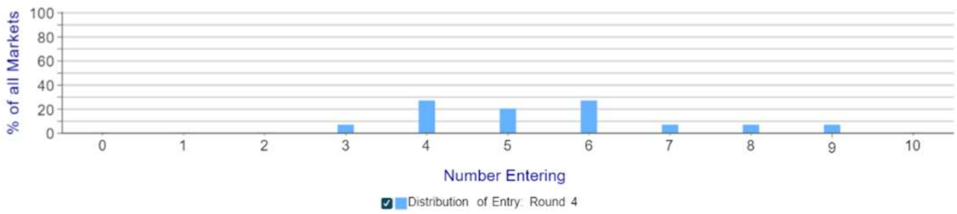
Across-Round Summary

	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

Data Source: Fall 2022 Principles of Microeconomics

▾Distribution of Entry

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
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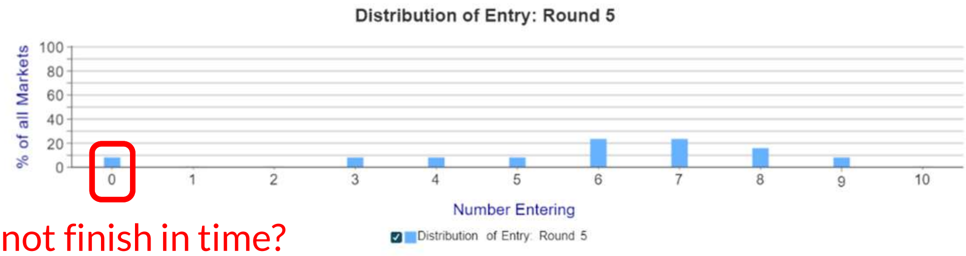
Distribution of Entry

Data Source: Fall 2022 Principles of Microeconomics



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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A playground for decisions

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