


MobLab
A playground for decisions



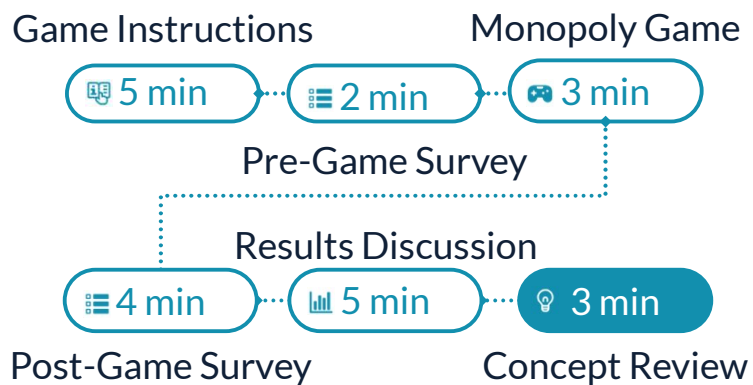
Monopoly and Price Discrimination

Production and Pricing

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What's Included

Monopoly



Enter the Activity



Monopoly





Game Instructions

Monopoly



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You have a patent on a new drug.
Sell your product to consumers!



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SINGLE MARKET

marginal cost
\$2.00

marginal revenue
\$6.00

show graph

price
\$7.00

add to market

4

Submit

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Use the “+” button to increase the amount of product to produce

marginal cost
\$2.00

marginal revenue
\$6.00

show graph

price
\$7.00

add to market

4

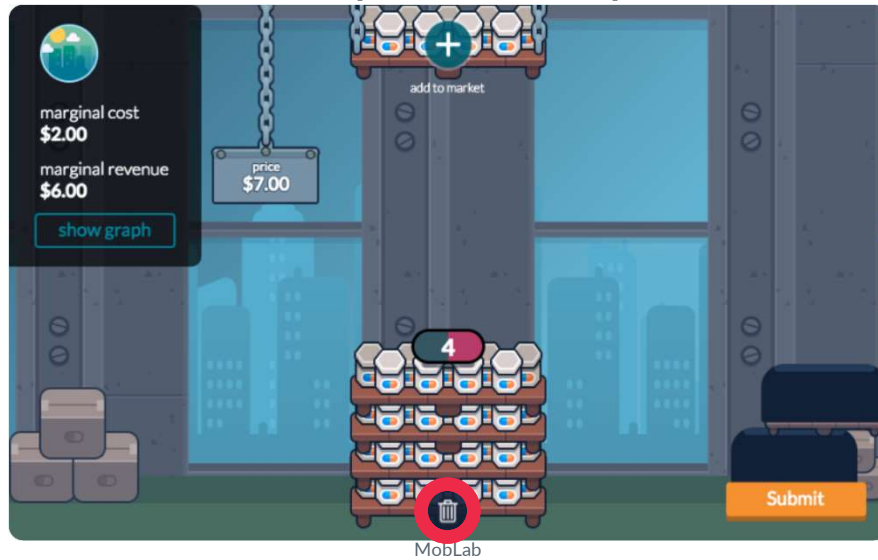
Submit

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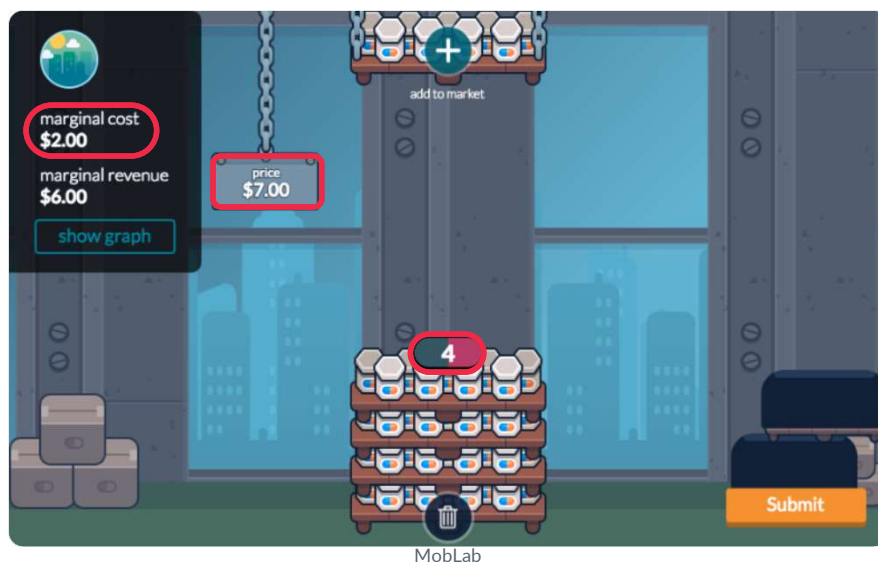
Use the “trash” button to decrease the amount of product to produce



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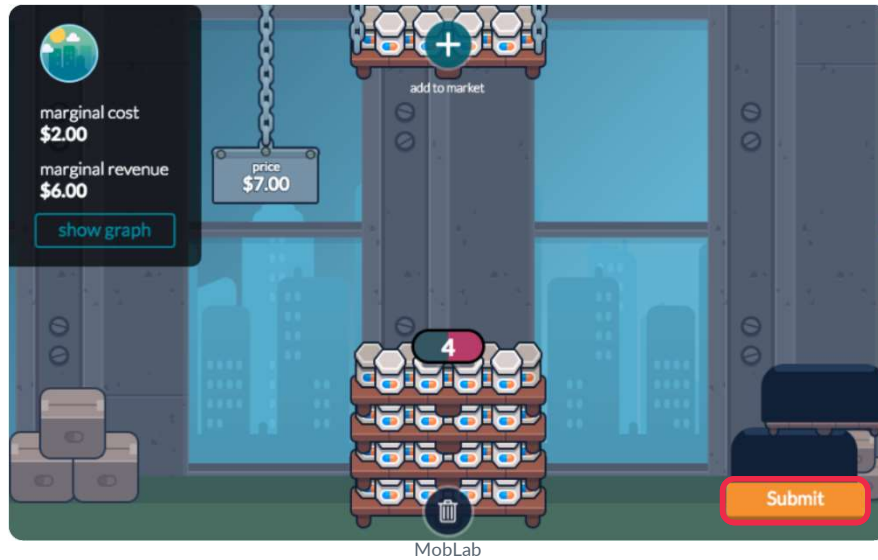
Profit = (Price - Marginal Cost) x Quantity



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Press “**Submit**” to finalize your decision



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Pre-Game Survey

Monopoly

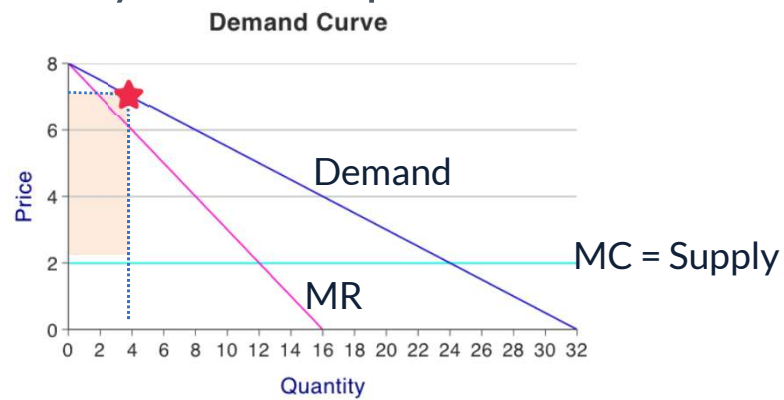


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What would your profit be
if you sold 4 pallets?



$$(Price - Marginal Cost) * Quantity = (\$7 - \$2) * 4 = \$20$$

What quantity maximizes profits?

Let's find out!



Game Time!

Monopoly

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This slide features a red game controller icon above the text. The background includes a grey gradient at the bottom, a small grey icon of a person with a thought bubble in the top left, and another similar icon in the bottom right.



Post-Game Survey

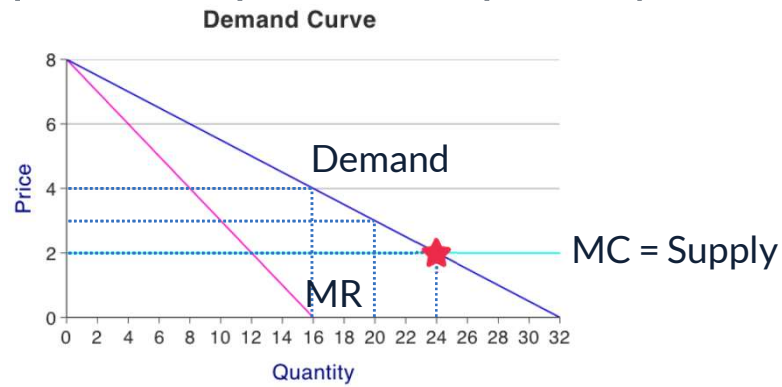
Monopoly

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This slide features a red icon of a survey form above the text. The background includes a grey gradient at the bottom, a small grey icon of a person with a thought bubble in the top left, and another similar icon in the bottom right.



Compared to the competitive market what happened to price and quantity?

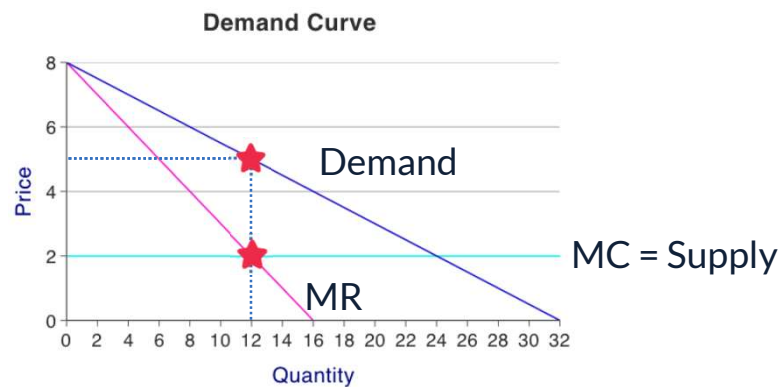


Monopolist P: \$5.00

Monopolist Q: 12



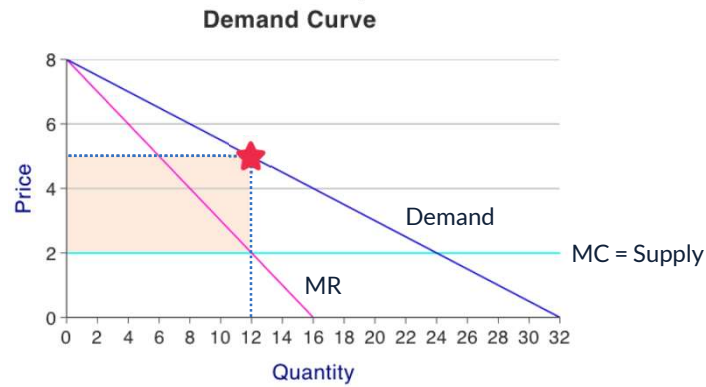
What quantity maximizes profits?



When marginal revenue equals marginal cost!



How much profit could be made as a monopolist?



$$(Price - Marginal Cost) * Quantity = (\$5 - \$2) * 12 = \$36$$



Results Discussion

Monopoly

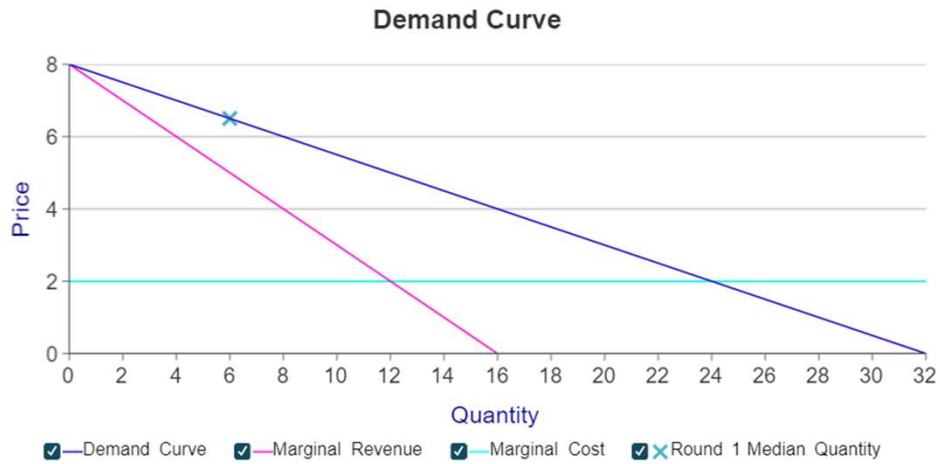




The X shows the median price and quantity.

Single Market Monopoly

Data Source: Fall 2022 Principles of Microeconomics



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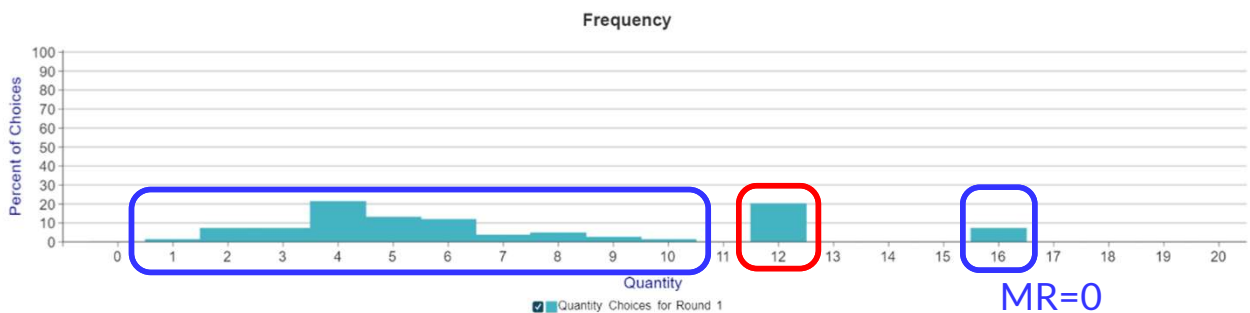
The X shows the median price and quantity.

Summary Statistics

Data Source: Fall 2022 Principles of Microeconomics

Correct Quant.	Correct Quant (A)	Correct Quant (B)	Avg. Profit	Avg. Consumer Surplus
17 / 85	N/A	N/A	25.66	8.31

<36

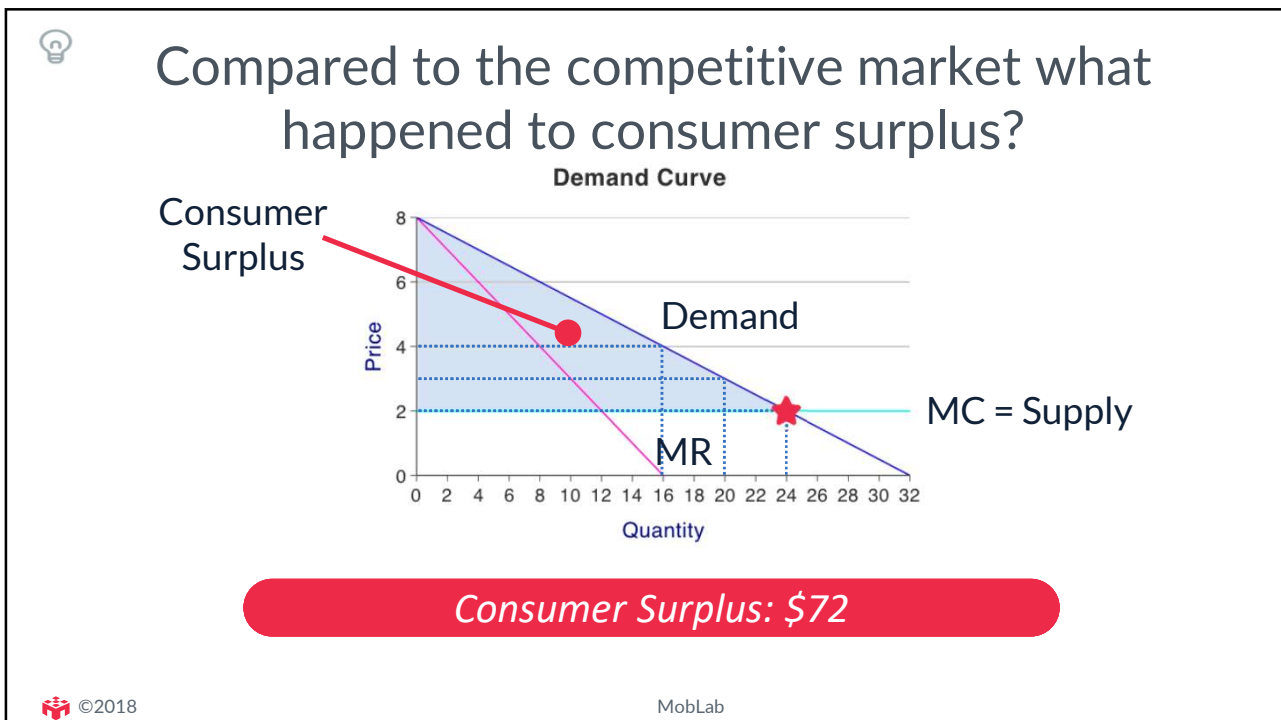


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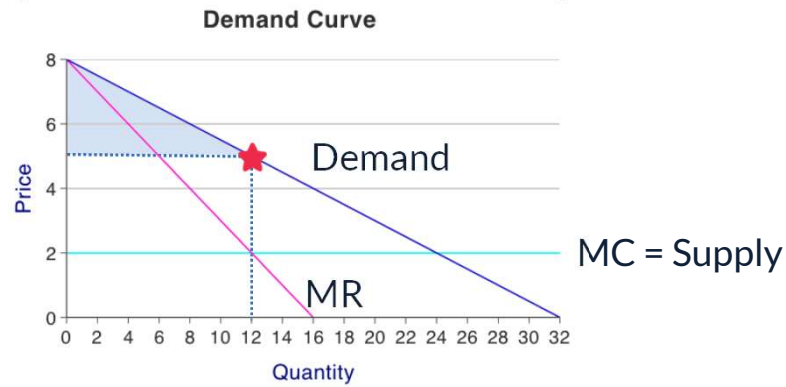

Concept Review
 Monopoly


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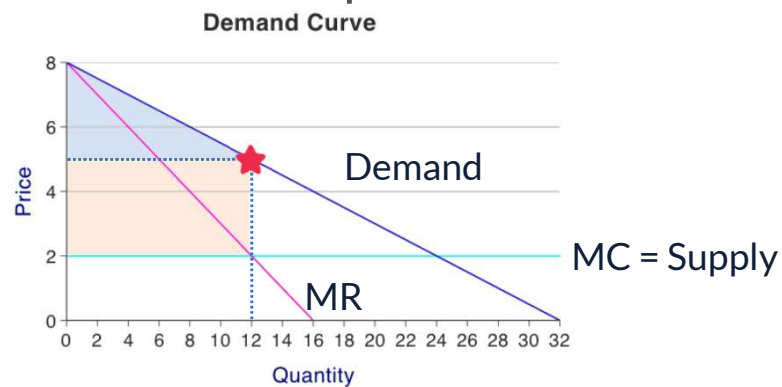
Compared to the competitive market what happened to consumer surplus?



Consumer Surplus: \$18



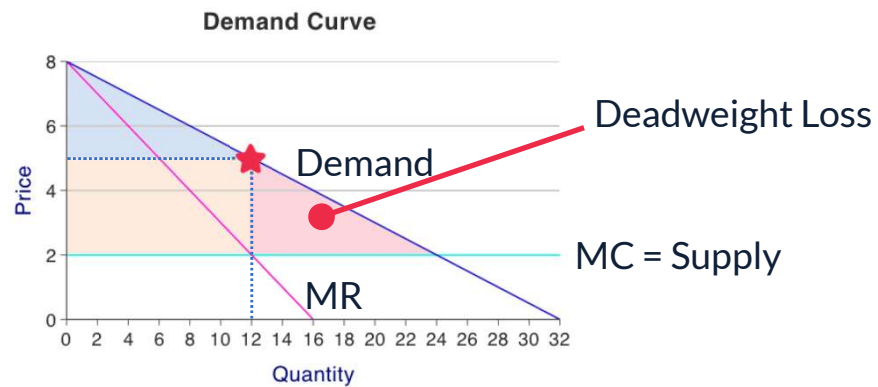
How much profit could be made as a monopolist?



*(Price – Marginal Cost) * Quantity = (\$5 - \$2) * 12 = \$36*



What is the effect on overall market efficiency?



Deadweight Loss: \$18



The different types of monopolies

- **Monopoly over a Resource**
 - DeBeer's owned over 80% of the world's supply of diamonds at one point.
- **Government-Created Monopoly**
 - Patents and Copyrights give creators a monopoly over a product for a determined amount of time.
- **Natural Monopolies**
 - Public Utilities are determined to be able to provide their service to entire market at a lower cost than could two more more firms.



Price Discrimination




What will happen to Profit and Efficiency?

Let's find out:

- Suppose there are **two types of consumers** for your product. You are **unable** to distinguish between the two.





Game Time!

Mixed Market

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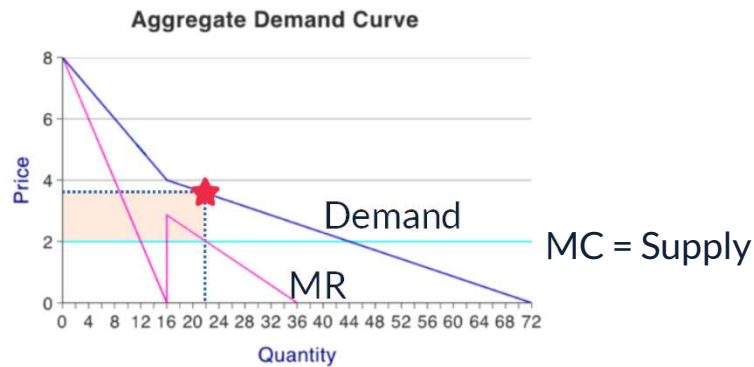
Post-Game Survey

Mixed Market

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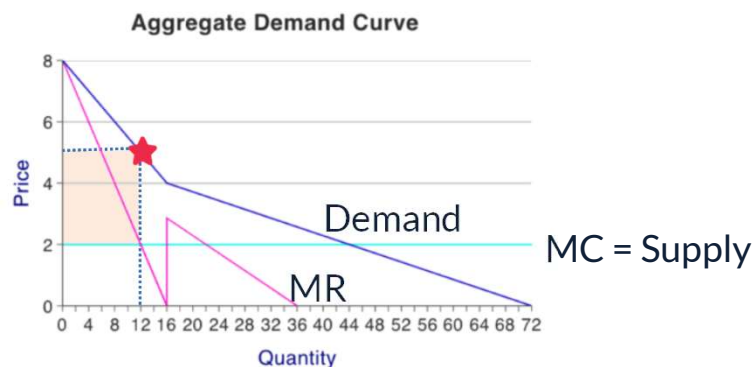
What profit can a monopolist earn in a market with two types of consumers?



$$(P - \text{Marginal Cost}) * Q = (\$3.57 - \$2) * 22 = \$34.54$$



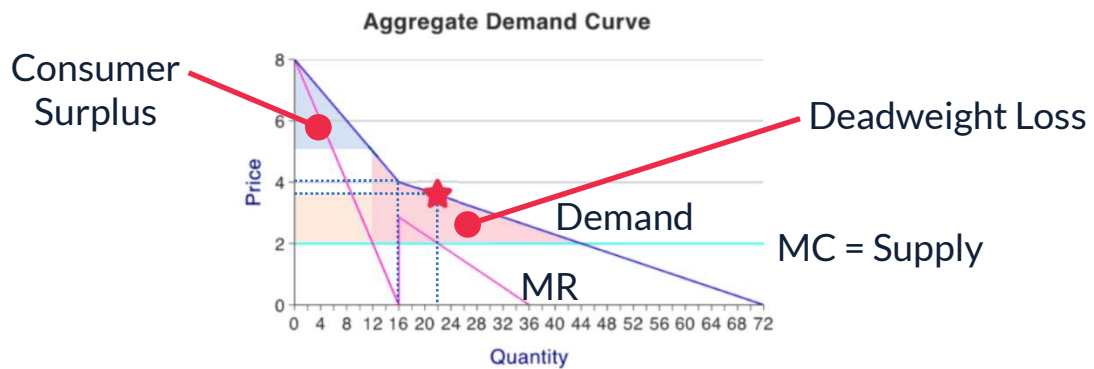
What profit can a monopolist earn in a market with two types of consumers?



$$(P - \text{Marginal Cost}) * Q = (\$5.00 - \$2) * 12 = \$36.00$$



What profit can a monopolist earn in a market with two types of consumers?




Consumer Surplus: \$18 Deadweight Loss: \$38

What will happen to Profit and Efficiency?


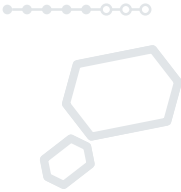
Let's find out:

- Suppose there are **two types of consumers** for your product. You are **able** to distinguish between the two.





Game Time!
Price Discrimination



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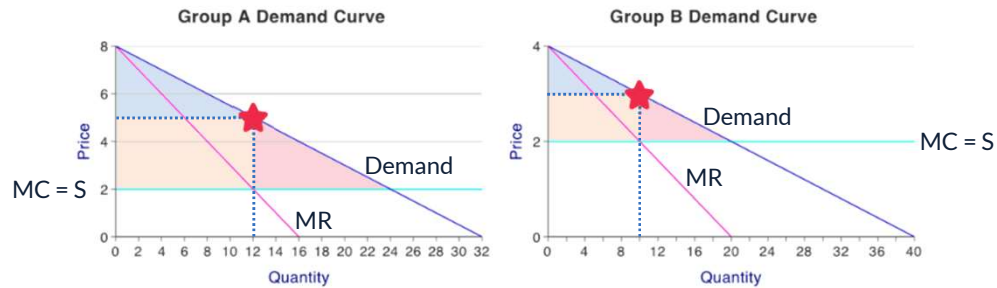
Post-Game Survey
Price Discrimination



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What happened to profit and efficiency?



$$(\$5 - \$2) * 12 = \$36$$

$$(\$3 - \$2) * 10 = \$10$$

Consumer Surplus: \$18

Consumer Surplus: \$5

Deadweight Loss: \$18

Deadweight Loss: \$5



Results Discussion

Price Discrimination

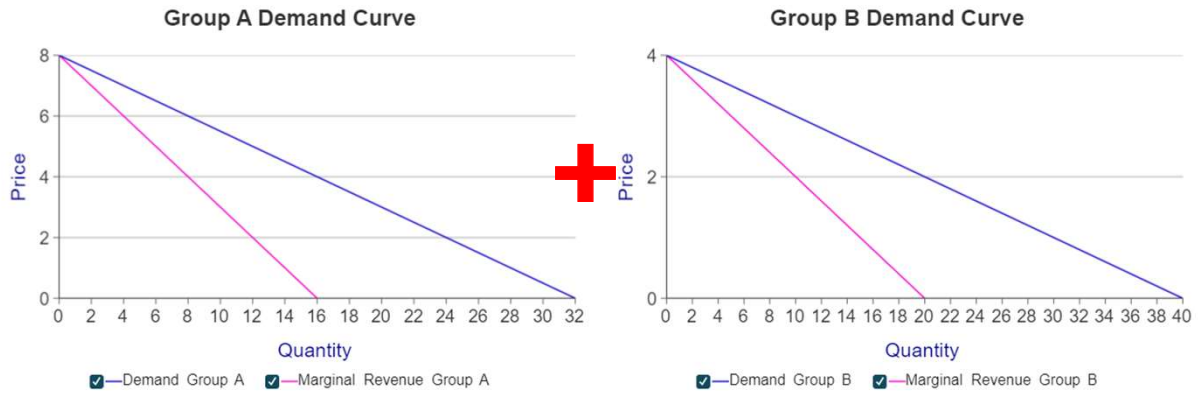




Unable to Separate Group A vs. B Consumers

Data Source: Fall 2022 Principles of Microeconomics

Mixed Market Monopoly



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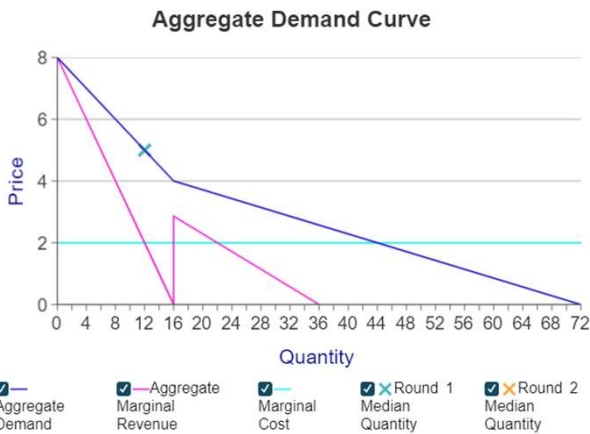
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Unable to Separate Group A vs. B Consumers

Data Source: Fall 2022 Principles of Microeconomics

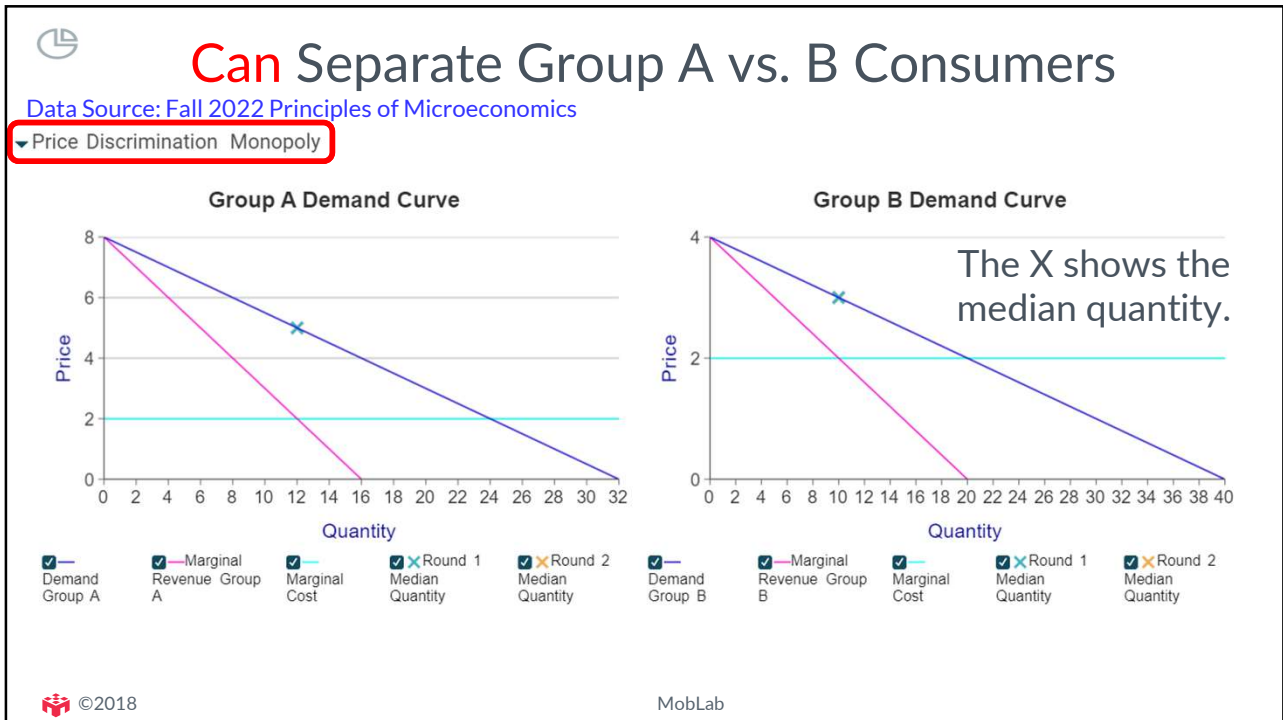
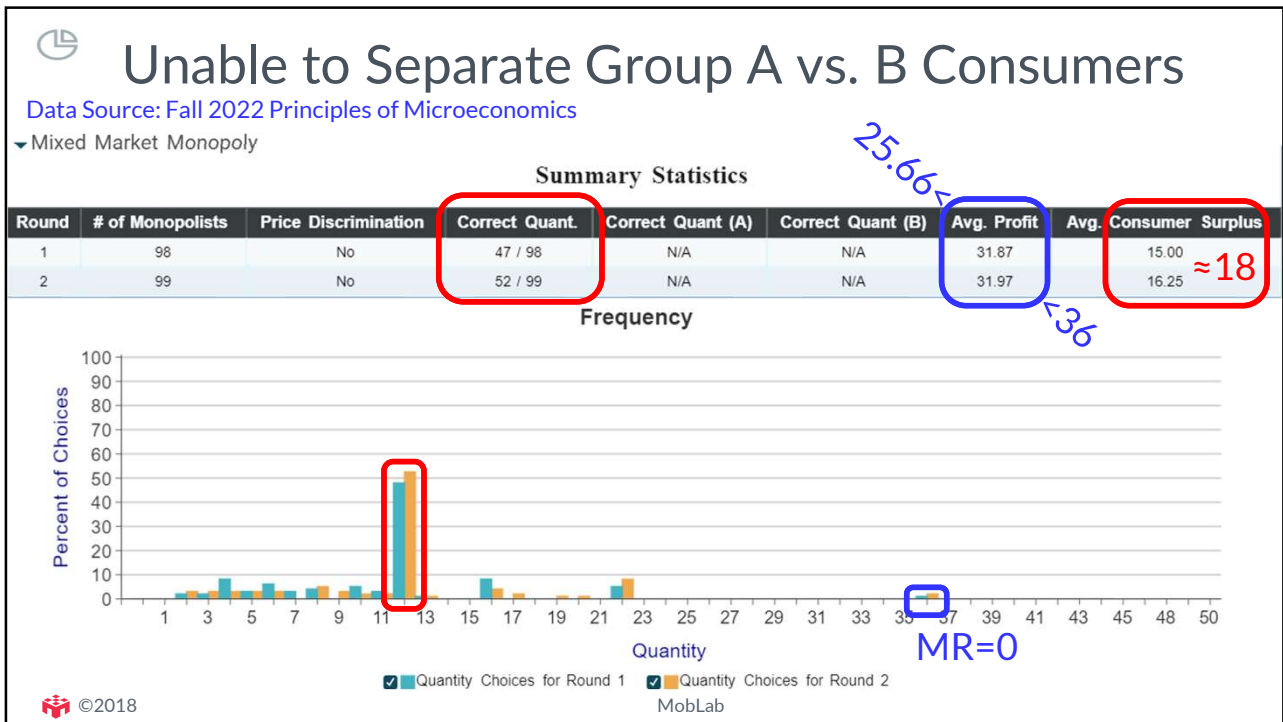
Mixed Market Monopoly

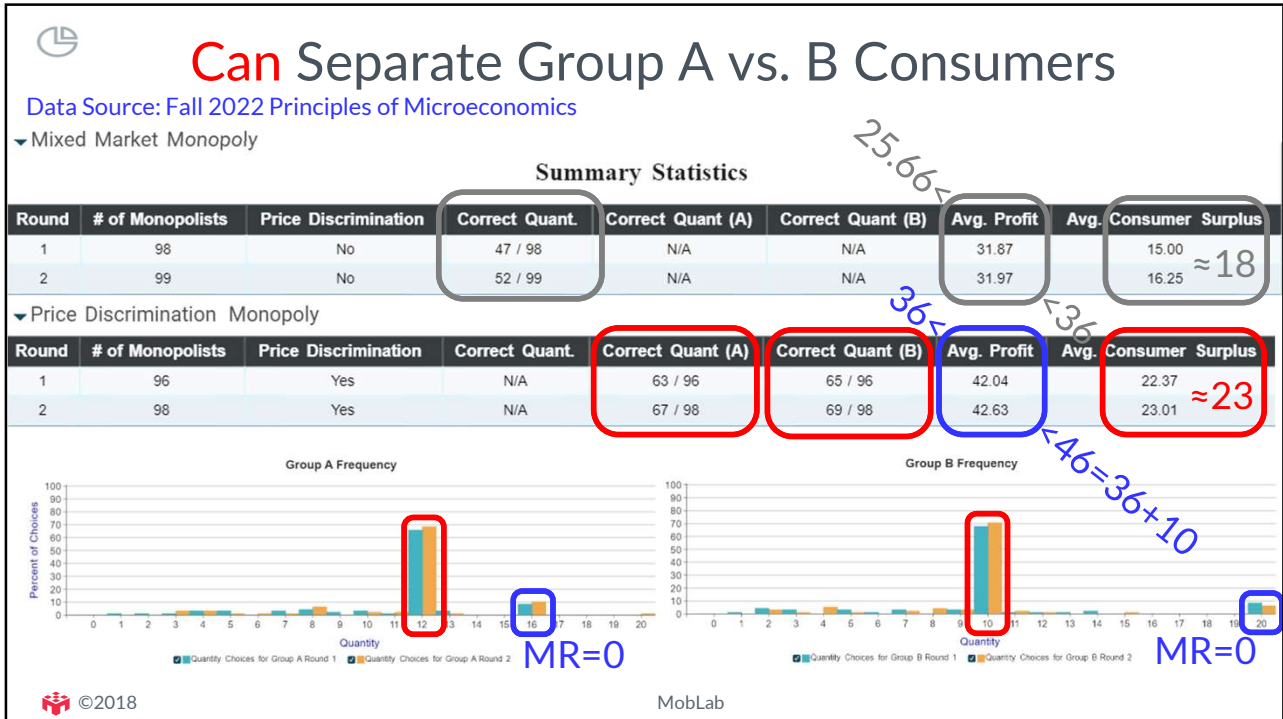


The X shows the median quantity.

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Concept Review

Price Discrimination

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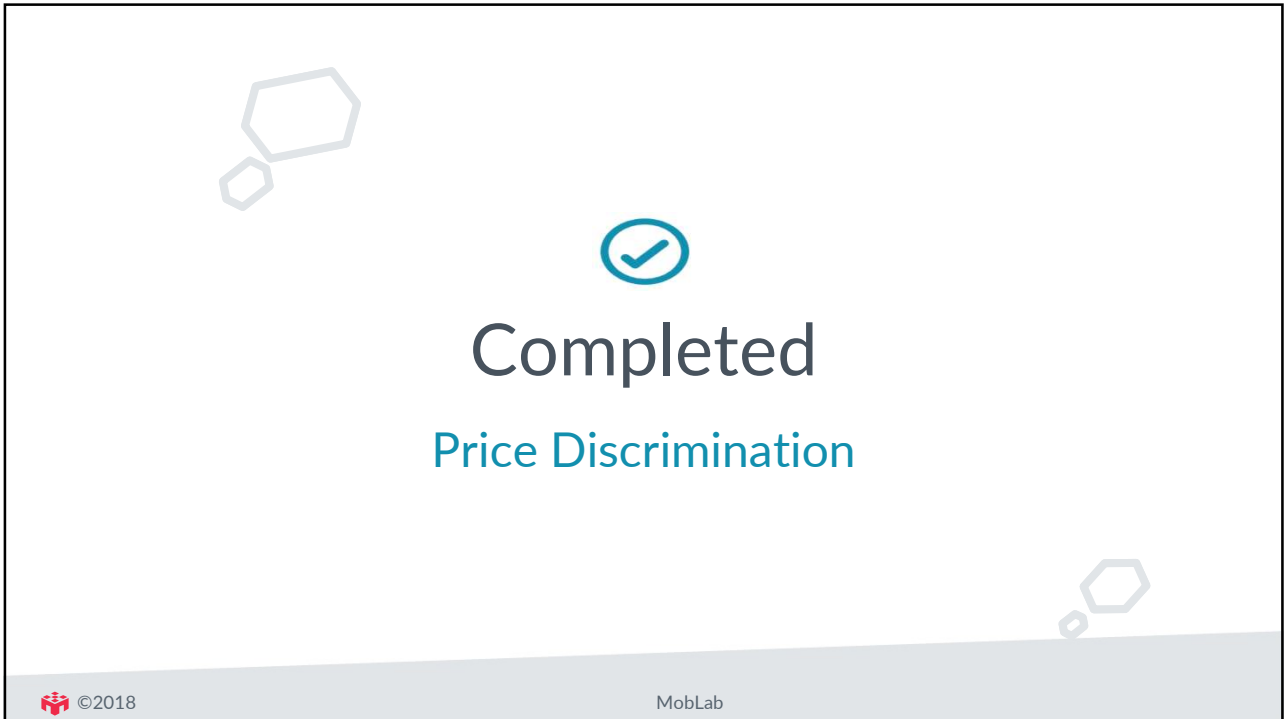
What happened to profit and efficiency?

	Mixed Market	Price Discrimination	Difference
Profit	\$36	$\$36 + \$10 = \$46$	+\$10
Consumer Surplus	\$18	$\$18 + \$5 = \$23$	+\$5
Total Surplus	\$54	\$69	+\$15
Deadweight Loss	\$38	$\$18 + \$5 = \$23$	-\$15



Key Takeaways

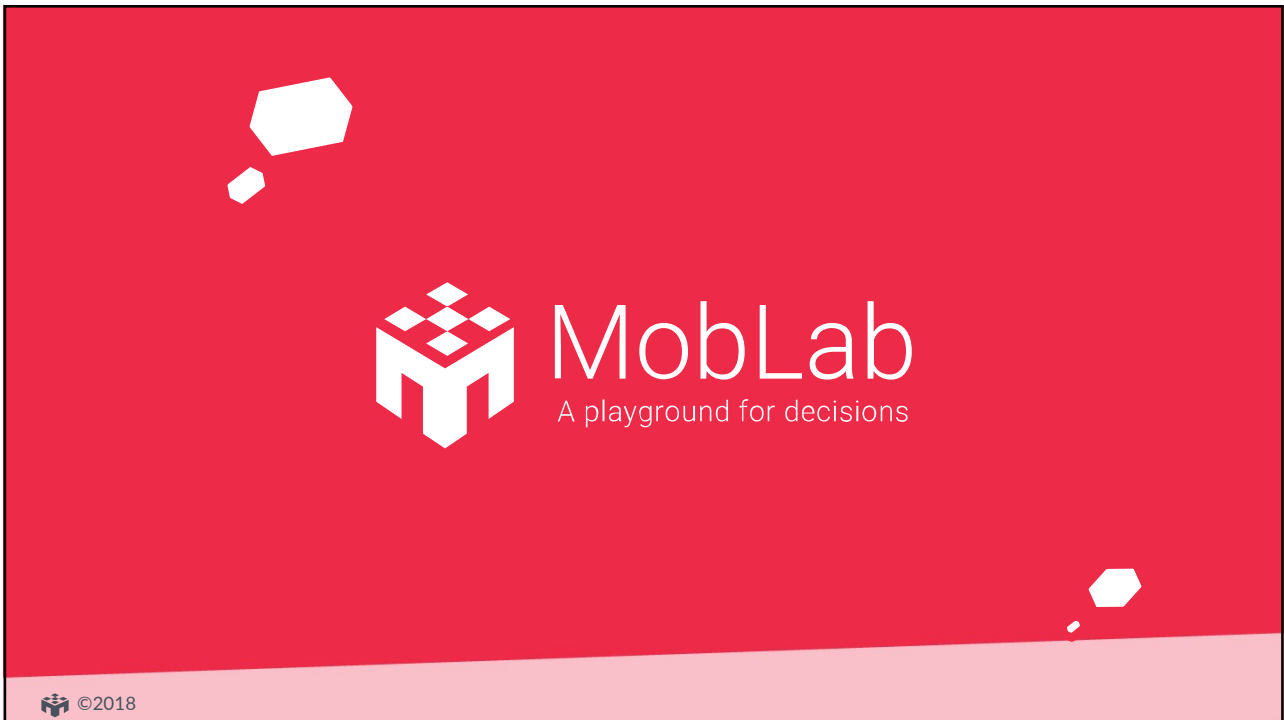
- *Price Discrimination* is the act of charging different consumers different prices for the same product.
 - Price discrimination can increase a monopolist's profit.
 - Price discrimination can also increase overall efficiency in the market by increasing total (consumer and/or producer) surplus.



Completed
Price Discrimination

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This slide features a light gray background with a dark gray footer. In the center, there is a blue checkmark icon inside a circle. Below the icon, the word "Completed" is written in a large, dark gray font, and "Price Discrimination" is written in a smaller, blue font. There are faint, light gray 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.



MobLab
A playground for decisions

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This slide has a solid red background with a light red footer. In the center, there is a white MobLab logo, which consists of a stylized 'M' shape with a checkered pattern on top. To the right of the logo, the word "MobLab" is written in a large, white font, and "A playground for decisions" is written 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.