

ECON 101: Principles of Economics I

Lecture Note 2

University of Michigan at Ann Arbor

Last Edit Date: 01/6/2023

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Lecture 2 Making Decisions

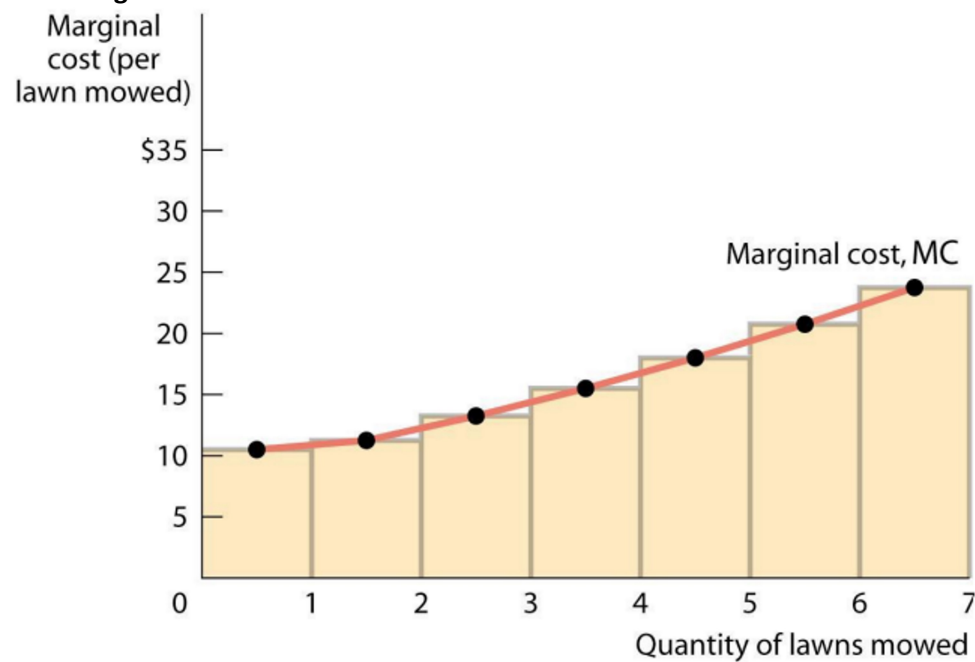
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Felix's Marginal Cost of Mowing Lawns

The marginal cost of an activity is the additional cost incurred by doing one more unit of that activity.

Quantity of Lawns Mowed	Felix's Total Cost	Felix's Marginal Cost of Lawn mowed
0	\$0	
1	\$10.50	\$10.50
2	\$21.75	\$11.25
3	\$35.00	\$13.25
4	\$50.50	\$15.50
5	\$68.50	\$18.00
6	\$89.25	\$20.75
7	\$113.00	\$23.75

The Marginal Cost Curve

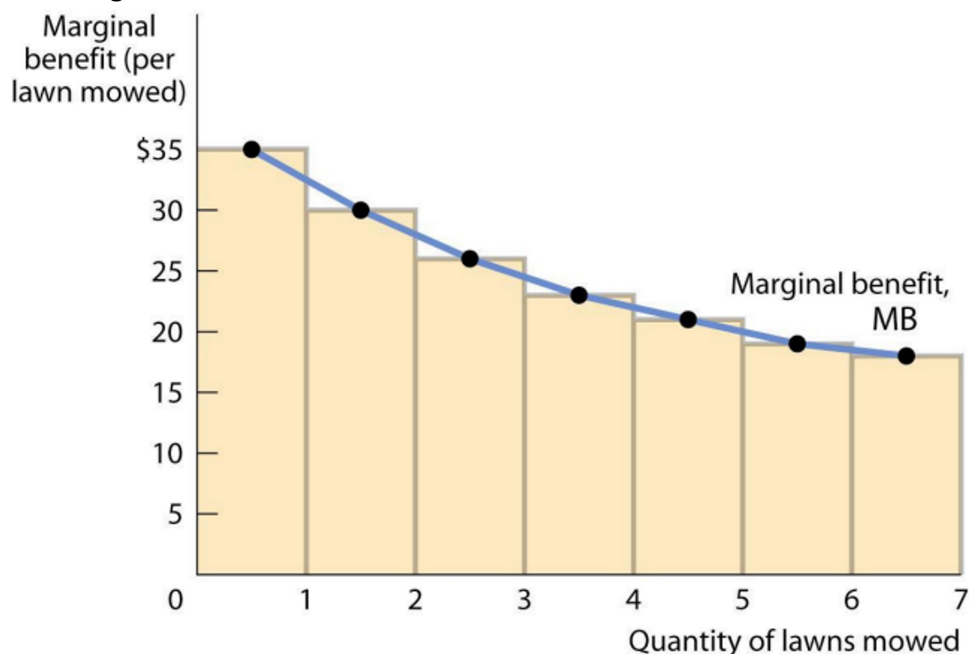


Felix's Marginal Benefit of Mowing Lawns

The marginal benefit from an activity is the additional benefit derived from undertaking one more unit of that activity.

Quantity of Lawns Mowed	Felix's Total Benefit	Felix's Marginal Benefit of Lawn mowed
0	\$0	
1	\$35.00	\$35.00
2	\$65.00	\$30.00
3	\$91.00	\$26.00
4	\$114.00	\$23.00
5	\$135.00	\$21.00
6	\$154.00	\$19.00
7	\$172.00	\$18.00

The Marginal Benefit Curve



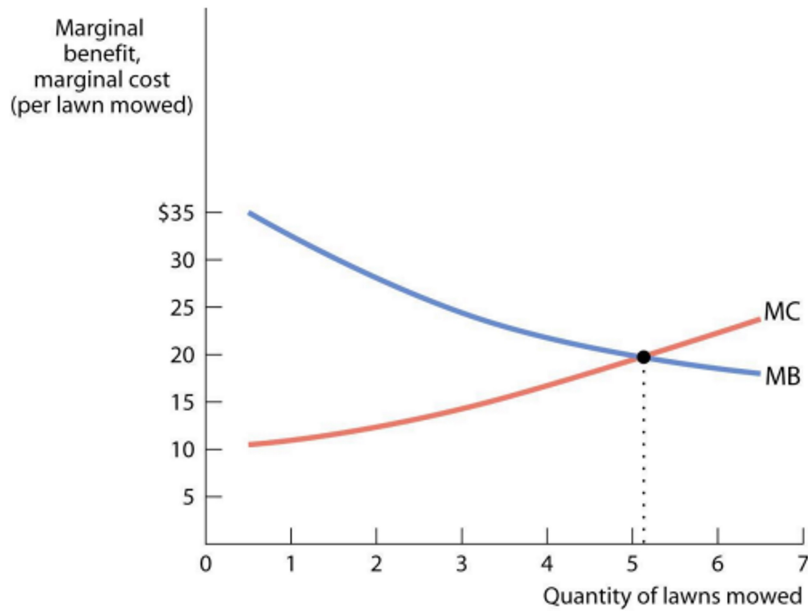
Marginal Analysis

- Optimal Quantity: Level that generates the maximum possible total net gain
- Principle of marginal analysis: The optimal quantity of an activity if the quantity at which marginal benefit equal to marginal cost.

Felix's Net Gain from Mowing Lawns

Quantity of Lawns Mowed	Felix's MB of Lawn Mowed	Felix's MC of Lawn Mowed	Felix's Marginal Net Gain	Total Net Gain
0				\$0
1	\$35.00	\$10.50	\$24.50	\$24.50
2	\$30.00	\$11.25	\$18.75	\$43.25
3	\$26.00	\$13.25	\$12.75	\$56.00
4	\$23.00	\$15.50	\$7.50	\$63.50
5	\$21.00	\$18.00	\$3.00	\$66.50
6	\$19.00	\$20.75	-\$1.75	\$64.75
7	\$18.00	\$23.75	-\$5.75	\$59.00

The Optimal Quantity



IMPORTANT

- Generally, marginal cost increases with quantity and marginal benefit decreases with quantity
 - Thus, MC upward sloping and MB is downward sloping
- The Optimal Quantity is where the net gains are maximized
 - This is the Quantity where MB intersects MC
- When deciding their quantity, individuals (firms or consumers) want to act (produce or consume) at the optimal quantity.
 - If $MB > MC$, then they increase quantity.
 - If $MB < MC$, then they decrease quantity.