



Libyan International Medical University  
Faculty of Business Administration



# Total Utility & Marginal Utility

by Lubna Gehani  
Student No! : 2253

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# Introduction

It is the level of **satisfaction** obtained from consuming a specific quantity of goods and services.

Utility

Utility  
Function

It is an algebraic expression which allows the ranking of consumption quantities according to satisfaction levels.

Total Utility =  $f(Q_i, Q_i)$   
\*(i- identifying the product)

TU

MU

$MU_i = \Delta \text{Utility} \div \Delta Q_{i\Delta}$   
\*(means "change in")

# Total Utility



<b>Bundle</b>	<b>Quantity of Good X</b>	<b>Quantity of Good Y</b>	<b>Total Utility</b>
<b>A</b>	<b>2.5</b>	<b>10.0</b>	<b>25</b>
<b>B</b>	<b>3.0</b>	<b>7.0</b>	<b>21</b>
<b>C</b>	<b>2.0</b>	<b>12.5</b>	<b>25</b>

# Marginal Utility

- This concept **quantifies** the **added** satisfaction, consumers obtain from consuming extra amounts of a good.
- it determines the **quantity** of an item consumers are willing to purchase

Positive **MU** occurs when the consumption of an additional item **increases** the total utility.

Negative **MU** occurs when the consumption of an additional item **decreases** the total utility.

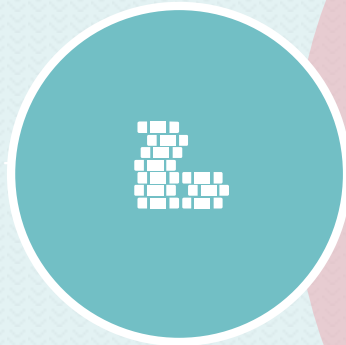
$Q_H/\text{week}$	Total Utility	MU
1	20	----
2	30	10
3	39	9
4	47	8
5	54	7
6	60	6
7	65	5
8	69	4
9	72	3
10	74	2
11	74	0
12	70	-4

# Difference between Total and Marginal Utility



## TU

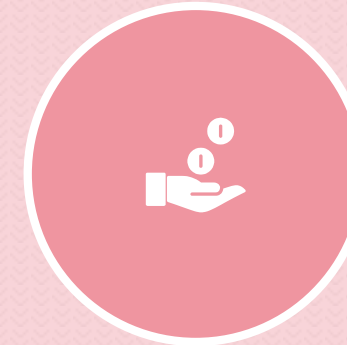
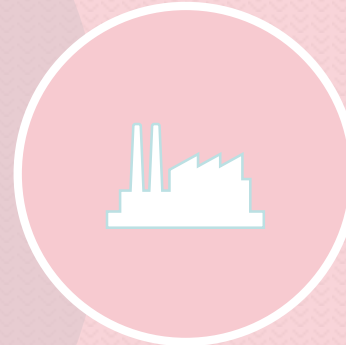
Refers to the total satisfaction received by the consumer from consuming products.



To Calculate the TU, multiply the quantities

## MU

Indicates the additional utility derived from the consumption of extra units of a product



To calculate the MU, change in TU all over change in quantity.

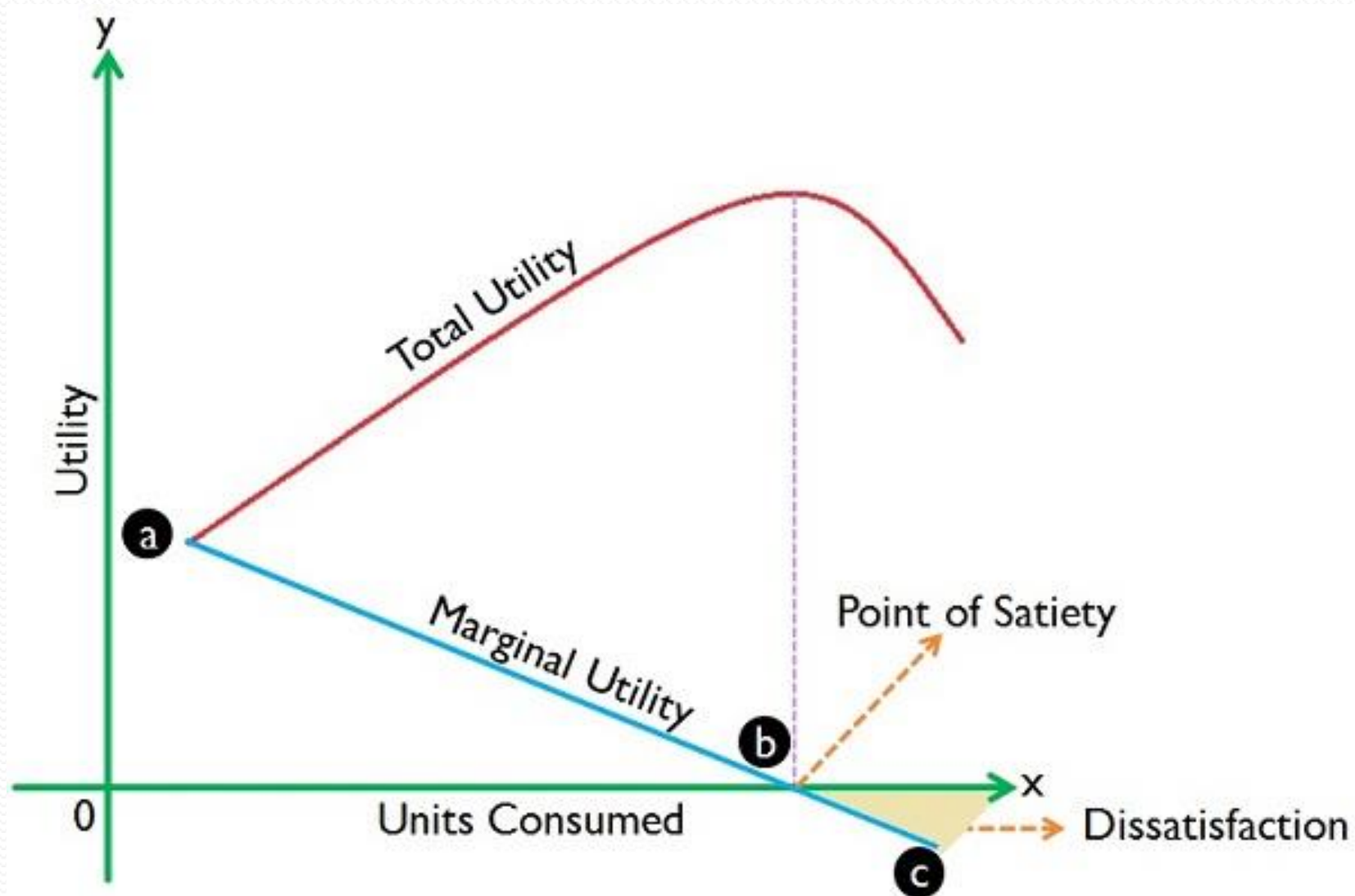


# Difference continued

- The total utility increases as more of a product is consumed. As opposed to this, the marginal utility decreases with each additional unit of a product consumed.

Units Consumed	Total Utility (TU)	Marginal Utility (MU)
1	30	30
2	56	26
3	76	20
4	88	12
5	90	2
6	90	0
7	86	-4
8	78	-8

# Graph




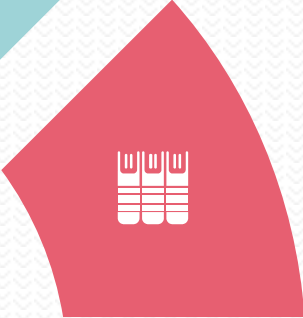

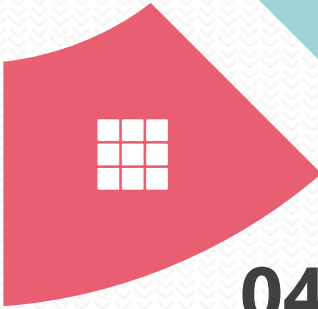



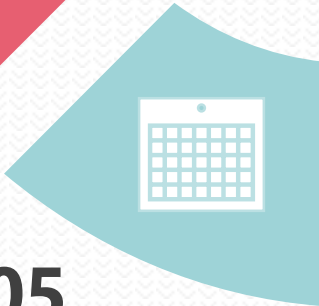
# Conclusion

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- While marginal utility is the change in the total utility received from the consumption of a unit of an item, the total Utility is the summation of utility obtained from each item.
- As the TU increases, MU will decrease, because there will be no additional products to be consumed.

# Reference

- **01** Mohamed Alrifadi, NA, 2019
- **02** Mohamed Alrifadi, NA, 2019
- **03** Mohamed Alrifadi, NA, 2019
- **04** Andrew Bloomenthal, (April 11,2019). Marginal Utility  
<https://www.investopedia.com/terms/m/marginalutility.asp>

- **05**
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Surbhi S, (May 31,2016).Difference between total and marginal utility.

<https://keydifferences.com/difference-between-total-and-marginal-utility.html>



**THANK YOU**