## MC and AC Relationship

## 1. Input:

мо Describe the relation between marginal cost and average cost.

## 2. Output ChatGPT:

Marginal cost (MC) and average cost (AC) are two concepts used in economics to understand the cost structure of a firm or industry. Marginal cost refers to the cost of producing one additional unit of output, while average cost refers to the total cost per unit of output produced.

The relationship between marginal cost and average cost can be described as follows:

1. When marginal cost is less than average cost, average cost is decreasing. This is because the additional unit being produced is cheaper to produce than the average unit, which brings down the overall cost per unit.
2. When marginal cost is greater than average cost, average cost is increasing. This is because the additional unit being produced is more expensive to produce than the average unit, which raises the overall cost per unit.
3. When marginal cost equals average cost, average cost is at its minimum point. This is because the cost of producing the additional unit is exactly the same as the average cost of all units produced so far.

Therefore, the relationship between marginal cost and average cost is that the behavior of marginal cost determines the direction of change in average cost. When marginal cost is below average cost, average cost is decreasing, and when marginal cost is above average cost, average cost is increasing.

Send a message.
3. Graph about marginal and average cost
3.1 An example:

3.2 Rules about the relation between marginal cost and average cost:

| $M C<A C$ | $\rightarrow$ | $A C$ is falling |
| :---: | :---: | :---: |
| $M C>A C$ | $\rightarrow$ | $A C$ is rising |
| $M C=A C$ | $\rightarrow$ | $A C$ is at the minimum |

Abreviations:
MC = Marginal cost
AC = Average cost

