What Are Functions?

Functions are predefined formulas that perform calculations by using specific values, called arguments, in a particular order, or structure. These functions help you perform calculations, analyze data, and automate tasks quickly. (Microsoft Support)

How Do Functions Work?

Functions follow a specific structure:

1. **Function Name** – The type of calculation you want to perform (e.g., SUM, AVERAGE).
2. **Opening Parenthesis (** – Starts the function's arguments.
3. **Arguments** – The inputs the function needs to work. These can be:
     - Numbers
     - Text
     - Cell references (e.g., A1, B2:B10)
     - Other functions (called **nested functions**)
4. **Closing Parenthesis)** – Ends the function.

Example:

`=SUM(A1:A5)`

- SUM → Function name
- (A1:A5) → Argument (adds values from cells A1 to A5)

Nested Functions

You can use a function **inside another function** for more complex calculations.

Example:
`=AVERAGE(SUM(B2:B5), C2)`

- First, SUM(B2:B5) adds the values in B2 to B5.
- Then, AVERAGE calculates the mean of that sum and cell C2.

References and Bibiography