1. **SUM**

- Structure: =SUM(number1, [number2], ...)
- o Example: =SUM(A1:A10)

2. SUMIF

- Structure: =SUMIF(range, criteria, [sum range])
- Example: =SUMIF(A1:A10, ">10", B1:B10)

3. **AVERAGE**

- o Structure: =AVERAGE(number1, [number2], ...)
- Example: =AVERAGE(A1:A10)

4. **IF**

- Structure: =IF(logical_test, value_if_true, value_if_false)
- o Example: =IF(A1>10, "Yes", "No")

5. VLOOKUP

- Structure: =VLOOKUP(lookup_value, whole_table, ans_col_num, exact_approximate)
- Example: =VLOOKUP(A1, B1:C10, 2, FALSE)

6. **HLOOKUP**

- Structure: =HLOOKUP(lookup_value, table_array, row_index_num, [range_lookup])
- Example: =HLOOKUP(A1, A2:F10, 3, FALSE)

7. **INDEX**

- o Structure: =INDEX(array, row_num, [column_num])
- Example: =INDEX(A1:C10, 2, 3)

8. **MATCH**

- Structure: =MATCH(lookup_value, lookup_array, [match_type])
- o Example: =MATCH(A1, B1:B10, 0)

9. **CONCATENATE (or CONCAT)**

- Structure: =CONCATENATE(text1, [text2], ...)
- o Example: =CONCATENATE(A1, " ", B1)

10. **COUNT**

- Structure: =COUNT(value1, [value2], ...)
- o Example: =COUNT(A1:A10)

11. COUNTA

- Structure: =COUNTA(value1, [value2], ...)
- o Example: =COUNTA(A1:A10)

12. AVERAGEIF

- Structure: =AVERAGEIF(cri_range, criteria, [average_range])
- o Example: =AVERAGEIF(A1:A10, ">10", B1:B10)
- o **Description:** Calculates the average of cells that meet a specified condition.

13. AVERAGEIFS

- o **Structure:** =AVERAGEIFS(average_range, criteria_range1, criteria1, [criteria_range2, criteria2], ...)
- o ans_range, 1st_cri_range, 1st_cri, 2nd_cri_range, 2nd_cri
- Example: =AVERAGEIFS(B1:B10, A1:A10, ">10", C1:C10, "<20")
- o **Description:** Calculates the average of cells that meet multiple conditions.