Most Commonly used Excel Formulas for a Data Analyst

1. SUM: =SUM(A1:A10)
   Adds up all the numbers in a range of cells.

2. AVERAGE: =AVERAGE(B1:B10)
   Calculates the average of a range of numbers.

3. COUNT: =COUNT(C1:C10)
   Counts the number of cells that contain numbers.

4. COUNTA: =COUNTA(D1:D10)
   Counts the number of non-empty cells.

5. MIN: =MIN(E1:E10)
   Finds the smallest number in a range.

6. MAX: =MAX(F1:F10)
   Finds the largest number in a range.

7. IF: =IF(G1>10, "Yes", "No")
   Returns one value if a condition is true and another if it's false.

8. CONCATENATE (or TEXTJOIN/&): =CONCATENATE(A2, " ", B2)
   Combines text from multiple cells into one cell.

9. TRIM: =TRIM(H2)
   Removes extra spaces from text.

10. LEFT, RIGHT, MID: =LEFT(I2, 3)
    Extracts a specific number of characters from the start, end, or middle of a text string.

11. VLOOKUP: =VLOOKUP(J2, K2:L10, 2, FALSE)
    Looks up a value in a table and returns a corresponding value.

12. HLOOKUP: =HLOOKUP(M2, N2:O10, 2, FALSE)
    Similar to VLOOKUP but searches horizontally across the top row of a table.

13. INDEX: =INDEX(P2:P10, 4)
    Returns the value of a cell in a specified position within a range.

14. MATCH: =MATCH("Value", Q2:Q10, 0)
    Returns the relative position of an item in a range.

15. SUMIF: =SUMIF(R2:R10, ">100", S2:S10)

Adds cells that meet a specified condition.

16. COUNTIF: =COUNTIF(T2:T10, "Criteria")
Counts cells that meet a specified condition.

17. IFERROR: =IFERROR(VLOOKUP(U2, V2:W10, 2, FALSE), "Not Found")
Returns a value you specify if a formula evaluates to an error; otherwise, it returns the result of the formula.

18. SUMPRODUCT: =SUMPRODUCT(X2:X10, Y2:Y10)
Multiplies corresponding elements in the specified arrays and returns the sum of those products.

19. TEXT: =TEXT(Z2, "yyyy-mm-dd")
Formats a number or date as text in a specified format.

20. PIVOT TABLES: While not a formula, knowing how to create and manipulate Pivot Tables is crucial for data analysis in Excel.

21. ARRAYFORMULA: =ARRAYFORMULA(A2:A10 B2:B10)
Performs calculations on ranges of data rather than a single cell.

22. XLOOKUP: =XLOOKUP(AA2, AB2:AB10, AC2:AC10)
A more powerful version of VLOOKUP that allows for searching both vertically and horizontally.

23. OFFSET: =OFFSET(AD2, 2, 3)
Returns a reference to a range that is a specified number of rows and columns from a cell or range of cells.

24. TRANSPOSE: =TRANSPOSE(AE2:AE10)
Converts a vertical range of cells to a horizontal range and vice versa.

25. INDIRECT: =INDIRECT("AF2:AF10")
Returns the reference specified by a text string.