

LOOKUP & REFERENCE

Formula	Use Case	Example
VLOOKUP	Look up a value in the first column of a range, return a related value	=VLOOKUP (A2, Sheet2!A:C, 3, FALSE)
XLOOKUP	Modern, more flexible lookup — no column counting needed	=XLOOKUP (A2, Sheet2!A:A, Sheet2!C:C)
INDEX/MATCH	Flexible two-part lookup, works looking left or right	=INDEX (C:C, MATCH (A2, A:A, 0))

LOGICAL

Formula	Use Case	Example
IF	Return one value if true, another if false	=IF (B2>7, "Long", "Normal")
IFS	Test multiple conditions without nesting IFs	=IFS (A2>90, "A", A2>80, "B", TRUE, "C")
AND / OR	Combine multiple conditions in one test	=IF (AND (A2>60, B2="F"), "Flag", "")

AGGREGATE

Formula	Use Case	Example
SUM	Add a range of numbers	=SUM (B2:B50)
AVERAGE	Calculate the mean of a range	=AVERAGE (C2:C50)
COUNT / COUNTA	Count numeric cells / any non-blank cell	=COUNTA (D2:D50)
SUMIF / COUNTIF	Sum or count only cells matching a condition	=SUMIF (A:A, "Lagos", B:B)
SUMIFS / COUNTIFS	Sum or count with multiple conditions	=SUMIFS (C:C, A:A, "Lagos", B:B, "2026")

TEXT

Formula	Use Case	Example
TRIM	Remove extra spaces from text	=TRIM (A2)
PROPER / UPPER / LOWER	Standardize text casing	=PROPER (A2)
LEFT / RIGHT / MID	Extract part of a text string	=LEFT (A2, 3)
CONCAT / TEXTJOIN	Combine text from multiple cells	=TEXTJOIN (" ", TRUE, A2, B2)

DATE & TIME

Formula	Use Case	Example
TODAY ()	Current date, updates automatically	=TODAY ()
DATEDIF	Difference between two dates (days/months/years)	=DATEDIF (B2, TODAY (), "Y")
EOMONTH	Find the last day of a month	=EOMONTH (A2, 0)