

30 Best Excel Formulas with Detailed Examples

SUM()

Item	Amount
Laptop	50000
Keyboard	5000
Mouse	2000
Printer	10000
Formula: =SUM(B2:B5) →	67000

AVERAGE()

Student	Marks
Rahul	70
Ankit	85
Puja	90
Neha	60
Formula: =AVERAGE(B2:B5) → 76.25	

IF()

Name	Marks	Result
Rahul	85	Pass
Ankit	25	Fail
Neha	60	Pass
Puja	30	Fail
Formula: =IF(B2>=33,"Pass","Fail")		

VLOOKUP()

ID	Name
101	Amit
102	Suman
103	Puja
Formula: =VLOOKUP(102,A2:B4,2,FALSE) → Suman	

HLOOKUP()

101	102	103
Amit	Suman	Puja
Formula: =HLOOKUP(103,A1:C2,2,FALSE) → Puja		

XLOOKUP()

ID	Name
101	Amit
102	Suman
103	Neha
Formula: =XLOOKUP(103,A2:A4,B2:B4,"Not Found") → Neha	

INDEX()

Names
Amit
Suman
Puja
Formula: =INDEX(A2:A4,3) → Puja

MATCH()

Values
100
200
300
Formula: =MATCH(200,A2:A4,0) → 2

LEN()

Text
Excel
Formula: =LEN(A2) → 5

TRIM()

Text
Excel
Formula: =TRIM(A2) → Excel

CONCAT()

First	Last
Amit	Kumar
Suman	Sharma
Formula: =CONCAT(A2," ",B2) → Amit Kumar	

TEXT()

Date
2024-09-14
Formula: =TEXT(A2,"DD-MM-YYYY") → 14-09-2024

DATEDIF()

Start	End
01-01-2020	01-01-2024
Formula: =DATEDIF(A2,B2,"Y") → 4	

NETWORKDAYS()

Start	End
01-09-2024	10-09-2024
Formula: =NETWORKDAYS(A2,B2) → 8	

30 Best Excel Formulas with Examples

SUM()

Numbers
10
20
30
Formula: =SUM(A2:A4) → Result: 60

AVERAGE()

Marks
70
80
90
Formula: =AVERAGE(A2:A4) → Result: 80

MAX()

Values
10
45
30
Formula: =MAX(A2:A4) → Result: 45

MIN()

Values
10
45
30
Formula: =MIN(A2:A4) → Result: 10

COUNT()

Data
100
Text
200
Formula: =COUNT(A2:A4) → Result: 2

COUNTA()

Data
100
Text
200
Formula: =COUNTA(A2:A4) → Result: 3

ROUND()

Value
45.678
Formula: =ROUND(A2,2) → Result: 45.68

IF()

Marks
85
Formula: =IF(A2>=33,"Pass","Fail") → Pass

AND()

Value1	Value2
60	40
Formula: =AND(A2>50,B2<100) → TRUE	

OR()

Value1	Value2
20	40
Formula: =OR(A2>50,B2<100) → TRUE	

IFERROR()

Value1	Value2
10	0
Formula: =IFERROR(A2/B2,"NA") → NA	

VLOOKUP()

ID	Name
101	Amit
102	Suman
Formula: =VLOOKUP(101,A2:B3,2,FALSE) → Amit	

HLOOKUP()

101	102
Amit	Suman
Formula: =HLOOKUP(101,A1:B2,2,FALSE) → Amit	

XLOOKUP()

ID	Name
101	Amit
102	Suman
Formula: =XLOOKUP(101,A2:A3,B2:B3,"Not Found") → Amit	

INDEX()

Names
Amit
Suman
Formula: =INDEX(A2:A3,2) → Suman

MATCH()

Values
100
200
300
Formula: =MATCH(200,A2:A4,0) → 2

OFFSET()

A1=10

Formula: =OFFSET(A1,0,0) → 10

LEFT()

Text
Excel
Formula: =LEFT(A2,2) → Ex

RIGHT()

Text
Excel
Formula: =RIGHT(A2,2) → el

MID()

Text
Excel
Formula: =MID(A2,2,3) → xce

LEN()

Text
Excel
Formula: =LEN(A2) → 5

TRIM()

Text
Excel
Formula: =TRIM(A2) → Excel

CONCAT()

First	Last
Amit	Kumar
Formula: =CONCAT(A2," ",B2) → Amit Kumar	

TEXT()

Date
2024-09-14
Formula: =TEXT(A2,"DD-MM-YYYY") → 14-09-2024

TODAY()

Formula: =TODAY() → Current Date

NOW()

Formula: =NOW() → Current Date & Time

DATEDIF()

Start	End
01-01-2020	01-01-2024
Formula: =DATEDIF(A2,B2,"Y") → 4	

EOMONTH()

Date
15-01-2024
Formula: =EOMONTH(A2,1) → 29-02-2024

WORKDAY()

Start
01-09-2024
Formula: =WORKDAY(A2,10) → 13-09-2024

NETWORKDAYS()

Start	End
01-09-2024	10-09-2024
Formula: =NETWORKDAYS(A2,B2) → 8	

More Advanced Excel Projects - The Future Track Computer Education

Text to Columns – Employee Data Split

Full Data
Rahul Kumar - IT
Suman Sharma - HR
Task → Use Text to Columns to split Name & Department

Data Table – Loan Analysis

Loan Amount	Interest Rate	Tenure	EMI
500000	8%	5 years	=PMT()
500000	10%	5 years	=PMT()
Task → Use Data Table for multiple scenarios			

Subtotal – Sales Report

Region	Product	Sales
East	Laptop	50000
East	Keyboard	12000
West	Mouse	8000
Task → Apply Subtotal by Region		

Group & Ungroup – Monthly Expenses

Date	Expense
01-Jan	500
02-Jan	300
05-Feb	700
Task → Group by Month and collapse/expand	

Sort – Student Performance

Student	Total Marks	Percentage
Ankit	450	90%
Pooja	380	76%
Task → Sort by Marks (Descending)		

Filter with Slicer – Product Report

Product	Region	Sales
Laptop	East	20000
Mouse	West	5000
Task → Insert Slicer to filter by Product		

Timeline – Sales Trend

Date	Sales
01-Jan	1500
02-Feb	1800
05-Mar	2100
Task → Use Timeline to analyze monthly sales	

Advanced Sorting – Multi-Level

Employee	Department	Salary
Amit	IT	60000
Neha	HR	50000
Task → Sort by Dept (A-Z) then Salary (High-Low)		

Custom Sorting – Grades

Student	Grade
Ravi	B
Suman	A
Task → Custom Sort: A → B → C → Fail	

Nested Subtotal – Sales by Region & Product

Region	Product	Sales
East	Laptop	50000
East	Mouse	10000
West	Keyboard	15000
Task → Apply Nested Subtotal		

Advanced Excel Projects - The Future Track Computer Education

Pivot Table – Sales Analysis

Product	Region	Month	Sales
Laptop	East	Jan	50000
Keyboard	West	Feb	12000
Mouse	North	Mar	8000
Pivot Table → Total Sales by Region, Top Product			

Advanced Filter – Employee Database

Name	Dept	Salary	Joining Date
Rahul	IT	60000	2019
Suman	HR	45000	2021
Filter → Salary > 50,000, Joining > 2020			

Paste Special – Financial Report

Quarter	Profit
Q1	15000
Q2	20000
Task → Transpose rows to columns using Paste Special	

Charts Dashboard

Month	Sales
Jan	25000
Feb	30000
Mar	28000
Task → Create Line, Column & Pie Chart	

Forecast Sheet – Sales Prediction

Month	Sales
Jan	10000
Feb	12000
Mar	15000
Task → Forecast next 6 months	

Goal Seek – Profit Planning

Cost Price	Selling Price	Quantity	Profit
400	600	100	= (SP-CP)*Qty
Goal Seek → Target Profit = 50,000			

Data Validation – Student Register

Name	Roll No	Course	Marks
Ankit	101	DCA	85
Validation → Course Dropdown, Marks 0–100			

Conditional Formatting – Performance Report

Employee	Target	Achieved
Pooja	100	120
Amit	100	75
Rule → $\geq 100\%$ Green, $< 80\%$ Red		

Loan Calculator with PMT

Loan Amount	Rate	Period	EMI
500000	10%	5 years	=PMT()

Project Management – Gantt Chart

Task	Start Date	End Date	Duration
Design	01-Jan	10-Jan	DATEDIF()
Task → Create Gantt Chart using Bar Chart			

Excel Projects - The Future Track Computer Education

Student Marksheet System

Student	Sub1	Sub2	Sub3	Sub4	Sub5	Total	Percentage	Grade
Rahul	78	65	80	72	90	SUM()	AVERAGE()	IF()

Sales Dashboard

Month	Product A	Product B	Product C	Total
Jan	1200	1500	1000	SUM()

Attendance Register

Name	Day1	Day2	Day3	Day4	Total Present	Attendance %
Suman	P	A	P	P	COUNTIF()	=(Total/Days)*100

Income & Expense Tracker

Month	Income	Expenses	Balance
Jan	25000	18000	=Income-Expenses

Employee Salary Sheet

Employee	Basic	HRA	DA	Deductions	Net Salary
Ankit	15000	5000	4000	2000	=SUM(B2:D2)-E2

Library Management System

Book ID	Title	Issued To	Issue Date	Return Date	Days Taken	Fine
101	MS Office	Rahul	01-Jan	10-Jan	DATEDIF()	IF()

Invoice Generator

Product	Qty	Price/Unit	Total
Laptop	2	40000	=B2*C2

Stock Management

Product	Opening	Sales	Purchases	Closing
Keyboard	50	20	10	=B2-C2+D2

Bank Loan EMI Calculator

Loan Amount	Rate	Tenure	EMI
500000	10%	5 years	=PMT()

Project Planner (Gantt Chart)

Task	Start Date	End Date	Duration
Design	01-Jan	10-Jan	DATEDIF()