



PROMPT WO-042

Create an Excel Formula

Purpose

Use this prompt to generate accurate Excel formulas for calculations, data analysis, lookups, text manipulation, date functions, financial calculations, and automation. It explains how the formula works and suggests alternatives where appropriate.

DIFFICULTY
 **Beginner**

TIME SAVED
 **10–30 min**

BEST FOR
Excel Formulas

Best AI Tools

- ChatGPT
- Claude
- Microsoft Copilot
- Google Gemini

Copy & Paste Prompt

You are an expert Microsoft Excel Consultant.

Create the most suitable Excel formula using the information below.

Objective:

[Describe what you want the formula to do]

Excel Version:

[Microsoft 365, Excel 2021, Excel 2019, etc.]

Worksheet Structure:

[Describe the worksheet layout]

Relevant Columns:

[List the columns involved]

Example Data:



[Provide sample data if available]

Desired Result:

[Explain the expected outcome]

Please:

- Recommend the best Excel formula.
- Explain how the formula works in simple language.
- Break down each function used.
- Suggest a simpler or alternative formula if appropriate.
- Highlight any common mistakes to avoid.
- Provide a worked example using the sample data.
- Recommend whether another Excel feature (such as Pivot Tables or Power Query) may be more suitable if applicable.

Return only the completed solution.



Example

INPUT

Objective: Return the salesperson's name with the highest sales.

Columns: A = Salesperson, B = Sales Value

Excel Version: Microsoft 365

EXPECTED OUTPUT

Recommended Formula

`=XLOOKUP(MAX(B2:B100),B2:B100,A2:A100)`

Explanation

This formula:

- Finds the highest value in column B using MAX().
- Searches for that value using XLOOKUP().
- Returns the matching salesperson's name from column A.

Formula Breakdown — see table below

FUNCTION	PURPOSE
MAX()	Finds the largest value



FUNCTION	PURPOSE
XLOOKUP()	Returns the matching value from another column

ALTERNATIVE FORMULA

For older versions of Excel:

```
=INDEX(A2:A100,MATCH(MAX(B2:B100),B2:B100,0))
```

COMMON MISTAKES

- Selecting different-sized ranges.
- Using XLOOKUP in unsupported Excel versions.
- Including blank rows within the lookup range.

RECOMMENDATION

If analysing many sales metrics, consider using a Pivot Table or Dashboard instead of individual formulas.

 **Builder's Tip:** *Learning why a formula works is just as valuable as copying it. Understanding the logic behind Excel functions makes it much easier to troubleshoot errors and build more advanced spreadsheets over time.*

Related Prompts

- WO-041 – Analyse Spreadsheet Data
- WO-043 – Build a Pivot Table
- WO-044 – Design a Dashboard
- WO-049 – Automate Spreadsheet Tasks

Tags

EXCEL

FORMULAS

SPREADSHEET

MS EXCEL

DATA
ANALYSIS