

➤ Excel for Business Automation

Calculating Measures

Let's get started with calculated columns:

Setting Up Calculated Columns

- Click on the first cell of the nearest free column;
- Start typing your formula in the formula bar. We're calculating 'Gross Profit' in the 'Sales 2024' table. Begin with the column name 'GP', followed by a colon and an equals sign, then write your formula;
- Writing the formula;
- Type 'Revenue' and select the 'Revenue' column from the 'Sales 2024' table. Add a plus sign, type 'COGS', and select the COGS column from the same table. Press Enter;

Power Pivot for Excel - Bakery_PL_2024.xlsx

File Home Design Advanced

Paste From Database From Data From Other Existing Refresh PivotTable

Clipboard Get External Data

Data Type : Format : \$ % , .00 .00

Clear All Sort by Filters Column Find

AutoSum Create KPI

Data View Diagram View Show

GP:='Sales 2024'[Revenue (USD)]+'Sales 2024'[SUM COGS (USD)]

	D..	Bake...	Prod...	Quantity (Pcs)	Revenue (USD)	SUM COGS (USD)	Add Column
1	01.01....	AB101	100001	117	292,5	-93,6	
2	01.01....	AB102	100001	198	891	-158,4	
3	01.01....	AB101	100002	130	325	-156	
4	01.01....	AB101	100003	145	435	-130,5	
5	01.01....	AB101	100004	180	540	-90	
6	01.01....	AB101	100005	172	602	-258	
7	01.01....	AB101	100006	160	560	-112	
8	01.01....	AB101	100007	141	493,5	-119,85	
9	01.01....	AB101	100008	140	490	-140	
10	01.01....	AB101	100009	163	652	-154,85	
11	01.01....	AB101	100010	174	696	-191,4	
12	01.01....	AB101	100011	142	568	-113,6	
13	01.01....	AB101	100012	156	702	-140,4	
14	01.01....	AB101	100013	140	420	-175	
15	01.01....	AB101	100014	124	372	-173,6	
16	01.01....	AB101	100015	121	423,5	-72,6	
17	01.01....	AB101	100016	187	654,5	-224,4	
18	01.01....	AB101	100017	146	511	-160,6	
19	01.01....	AB101	100018	188	658	-141	
20	01.01....	AB101	100019	132	264	-85,8	
21	01.01....	AB101	100020	173	346	-259,5	
22	01.01....	AB101	100021	215	501,25	-107,5	

Address Products Base Calendar Sales 2024 Sales 2023

- You'll encounter an error because it requires using aggregation functions like SUM. Wrap each column reference in the SUM function and press Enter again. Now, you'll see the calculated cells.

Power Pivot for Excel - Bakery_PL_2024.xlsx

File Home Design Advanced

Clipboard: Paste, Get External Data, Refresh, PivotTable

Formatting: Data Type: Auto (Decimal Number), Format: General, \$, %, .00, .00

Sort and Filter: Clear All Filters, Sort by Column

Find: Find

Calculations: AutoSum, Create KPI

View: Data View, Diagram View, Show Hidden, Calculation Area

Formula Bar: [GP] =Sales 2024[Revenue (USD)]-Sales 2024[SUM COGS (USD)]

	D...	Bake...	Prod...	Quantity (Pcs)	Revenue (USD)	SUM COGS (USD)	GP	Add Column
1	01.01....	AB101	100001	117	292,5	-93,6	198,9	
2	01.01....	AB102	100001	198	891	-158,4	732,6	
3	01.01....	AB101	100002	130	325	-156	169	
4	01.01....	AB101	100003	145	435	-130,5	304,5	
5	01.01....	AB101	100004	180	540	-90	450	
6	01.01....	AB101	100005	172	602	-258	344	
7	01.01....	AB101	100006	160	560	-112	448	
8	01.01....	AB101	100007	141	493,5	-119,85	373,65	
9	01.01....	AB101	100008	140	490	-140	350	
10	01.01....	AB101	100009	163	652	-154,85	497,15	
11	01.01....	AB101	100010	174	696	-191,4	504,6	
12	01.01....	AB101	100011	142	568	-113,6	454,4	
13	01.01....	AB101	100012	156	702	-140,4	561,6	
14	01.01....	AB101	100013	140	420	-175	245	
15	01.01....	AB101	100014	124	372	-173,6	198,4	
16	01.01....	AB101	100015	121	423,5	-72,6	350,9	
17	01.01....	AB101	100016	187	654,5	-224,4	430,1	
18	01.01....	AB101	100017	146	511	-160,6	350,4	
19	01.01....	AB101	100018	188	658	-141	517	
20	01.01....	AB101	100019	132	264	-85,8	178,2	
21	01.01....	AB101	100020	173	346	-259,5	86,5	

Address Products Base Calendar Sales 2024 Sales 2023

Record: 1 of 4,500

Exploring the Concept of 'Measure'

Measures are calculated in the Calculation Area and use the same formulas as calculated columns but are more memory-efficient. A calculated column stores multiple unique values, consuming more space, whereas a measure stores only one.

1. Creating Measures:

- Click on a cell in the Calculation Area and insert the same formula, renaming it to 'Gross Profit 2024' to avoid naming conflicts;
- Calculate 'Gross Profit' for the previous year using a similar approach.

Power Pivot for Excel - Bakery_PL_2024.xlsx

File Home Design Advanced

Clipboard Get External Data Refresh Paste

Formatting Sort and Filter Find Calculations View

[Date] - x ✓ f_x GrossProfit2024:=SUM('Sales 2024'[Revenue (USD))]+SUM('Sales 2024'[SUM COGS (USD)])

	Date	Bake...	Prod...	Quantity (Pcs)	Revenue (USD)	SUM COGS (USD)	GP	Add C
1	01.01.2024 0:00:00	AB101	100001	117	292,5	-93,6	198,9	
2	01.01.2024 0:00:00	AB102	100001	198	891	-158,4	732,6	
3	01.01.2024 0:00:00	AB101	100002	130	325	-156	169	
4	01.01.2024 0:00:00	AB101	100003	145	435	-130,5	304,5	
5	01.01.2024 0:00:00	AB101	100004	180	540	-90	450	
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7	01.01.2024 0:00:00	AB101	100006	160	560	-112	448	
8	01.01.2024 0:00:00	AB101	100007	141	493,5	-119,85	373,65	
9	01.01.2024 0:00:00	AB101	100008	140	490	-140	350	
10	01.01.2024 0:00:00	AB101	100009	163	652	-154,85	497,15	
11	01.01.2024 0:00:00	AB101	100010	174	696	-191,4	504,6	
12	01.01.2024 0:00:00	AB101	100011	142	568	-113,6	454,4	
13	01.01.2024 0:00:00	AB101	100012	156	702	-140,4	561,6	
14	01.01.2024 0:00:00	AB101	100013	140	420	-175	245	
15	01.01.2024 0:00:00	AB101	100014	124	372	-173,6	198,4	
16	01.01.2024 0:00:00	AB101	100015	121	423,5	-72,6	350,9	
17	01.01.2024 0:00:00	AB101	100016	187	654,5	-224,4	430,1	
18	01.01.2024 0:00:00	AB101	100017	146	511	-160,6	350,4	
19	01.01.2024 0:00:00	AB101	100018	188	658	-141	517	
20	01.01.2024 0:00:00	AB101	100019	132	264	-85,8	178,2	
21	01.01.2024 0:00:00	AB101	100020	173	346	-259,5	86,5	

Address Products Base Calendar Sales 2024 Sales 2023

2. Utilizing the CALCULATE Function:

Begin with 'PastrySales' followed by a colon and equals. Enter the CALCULATE function, then add 'Quantity' from 'Sales 2024', a semicolon, and use a filter for 'PLGroup' from the product table, setting it equal to 'Pastry.' Hit Enter, and if an error appears, wrap the column in the SUM function.

3. Calculating Additional Measures:

Quickly calculate 'Volume 2024' and 'Volume 2023' by simply summing the quantity of units sold for each year.

Measures can be used in Pivot Tables and Pivot Charts just like columns, which we will apply in our dashboard.

Save Your Progress

To save your progress, just close the Power Pivot window and save the workbook.

