

Assignment Title: Excel with copilot

Question 1. Use Copilot to identify and summarize missing values in the dataset.

SOLUTION :

The screenshot shows a Microsoft Excel spreadsheet with data in columns A through N. The first few rows contain headers like Order ID, Region, Country, Category, Sales Channel, Order Priority, Order Date, Units Sold, Unit Price, and Unit Cost. Row 12 is highlighted in orange. The Copilot sidebar is open on the right, showing the formula `=COUNTBLANK(A2:D12)`. The sidebar also provides instructions for identifying missing values using the COUNTBLANK function.

Order ID	Region	Country	Category	Sales Channel	Order Priority	Order Date	Units Sold	Unit Price	Unit Cost	
C400001	East	Germany	Beverage	Online	High	05-03-2023 00:00	210	120.10	132.10	40
C400002	West	India	Food	Online	Low	02-03-2023 00:00	341	88.10	100.84	
C400003	North	India	Clothing	Offline	High	09-03-2023 00:00	179	470.90	511.14	
C400004	East	USA	Furniture	Offline	Medium	04-03-2023 00:00	18	314.50	349.87	
C400005	East	India	Furniture	Offline	Medium	05-03-2023 00:00	472	190.79	208.46	
C400006	West	UK	Clothing	Online	High	06-03-2023 00:00	49	308.03	333.92	
C400007	North	Germany	Clothing	Online	Low	07-03-2023 00:00	34	344.76	371.07	
C400008	North	India	Beverage	Online	High	08-03-2023 00:00	279	102.12	110.50	
C400009	East	India	Beverage	Online	Low	09-03-2023 00:00	404	278.74	306.58	
C400010	USA	Furniture	Online	Medium	10-03-2023 00:00	432	308.79	334.94		

Question 2. Use Copilot to fill missing values in the region and category columns.

SOLUTION :

The screenshot shows a Microsoft Excel spreadsheet with data in columns A through N. The Copilot sidebar is open on the right, showing steps for filling missing values from above. It includes instructions for selecting the range, using the 'Special > Blanks' option, and using the '=' operator to click the cell above and press Enter. The sidebar also asks for feedback on which method to use or if a formula is needed.

A	B	C	D	E	F	G	H	I	J	K	L	M	N
C400011	West	UK	Beverage	Offline	Low	29-03-2023 00:00	470	328.17	356.87				
C400012	West	Germany	Beverage	Online	Medium	30-03-2023 00:00	50	189.5	203.23				
C400013	West	India	Beverage	Online	Low	31-03-2023 00:00	123	275.30	296.92				
C400014	North	Germany	Beverage	Online	High	01-03-2023 00:00	89	248.17	263.78				
C400015	West	UK	Beverage	Online	Medium	02-03-2023 00:00	205	45.36	52.86				
C400016	South	India	Clothing	Online	Low	03-03-2023 00:00	283	208.64	231.34				
C400017	West	India	Food	Offline	Low	19-01-2023 00:00	47	232.11	260.88				
C400018	North	Germany	Food	Online	High	18-01-2023 00:00	337	345.79	376.81				
C400019	West	Germany	Food	Offline	High	17-01-2023 00:00	280	298.67	321.82				
C400020	West	India	Food	Offline	Medium	18-01-2023 00:00	358	328.5	350.37				
C400021	West	USA	Beverage	Online	Medium	19-01-2023 00:00	189	242.34	253.53				
C400022	East	India	Food	Offline	High	20-01-2023 00:00	99	309.79	329.13				
C400023	South	India	Electronics	Online	Low	21-01-2023 00:00	46	379.42	407.86				
C400024	South	Germany	Electronics	Online	Medium	22-01-2023 00:00	413	167.96	186.23				
C400025	North	Australia	Food	Offline	High	23-01-2023 00:00	463	217.74	236.17				
C400026	South	Australia	Electronics	Online	Low	24-01-2023 00:00	46	379.42	407.86				
C400027	West	UK	Food	Offline	Medium	24-01-2023 00:00	325	436.56	460.37				
C400028	West	India	Food	Offline	Medium	25-01-2023 00:00	189	218.66	231.31				
C400029	South	India	Beverage	Offline	High	26-01-2023 00:00	470	29.61	61.21				

Question 3. Fill missing numeric values in the units sold and unit price columns.

SOLUTION :

A	B	C	D	E	F	G	H	I	J	K	L	M	N
Order ID	Region	Country	Category	Sales Channel	Order Priority	Order Date	Units Sold	Unit Price	Unit Cost				
Beverage													
ORD0001	East	Germany	S	Online	High	01-01-2023 00:00	210	152.92	153.6				
ORD0002	West	India	Food	Online	Low	02-01-2023 00:00	341	467.92	139.04				
ORD0003	North	India	Clothing	Offline	High	03-01-2023 00:00	179	479.94	97.14				
ORD0004	East	UK	Furniture	Offline	Medium	04-01-2023 00:00	18	314.51	204.87				
ORD0005	East	India	Furniture	Offline	Medium	05-01-2023 00:00	472	392.79	158.46				
ORD0006	West	UK	S	Online	Medium	06-01-2023 00:00	330	63.49	226.08				
ORD0007	South	India	Clothing	Online	Low	07-01-2023 00:00	231	264.81	248.38				
ORD0008	South	Germany	Food	Online	High	08-01-2023 00:00	327	114.18	57.4				
ORD0009	North	Germany	S	Online	Medium	09-01-2023 00:00	358	212.11	159.51				
ORD0010	West	UK	Food	Online	High	06-01-2023 00:00	124	212.11	132.07				
ORD0011	North	India	Clothing	Online	Medium	07-01-2023 00:00	195	401.62	128.18				
ORD0012	North	UK	Clothing	Online	High	08-01-2023 00:00	135	91.12	36.21				

A	B	C	D	E	F	G	H	I	J	K	L	M	N
Order ID	Region	Country	Category	Sales Channel	Order Priority	Order Date	Units Sold	Unit Price	Unit Cost				
Beverage													
ORD0001	East	Germany	S	Online	High	01-01-2023 00:00	210	152.92	153.6				
ORD0002	West	India	Food	Online	Low	02-01-2023 00:00	341	467.92	139.04				
ORD0003	North	India	Clothing	Offline	High	03-01-2023 00:00	179	479.94	97.14				
ORD0004	East	UK	Furniture	Offline	Medium	04-01-2023 00:00	18	314.51	204.87				
ORD0005	East	India	Furniture	Offline	Medium	05-01-2023 00:00	472	392.79	158.46				
ORD0006	West	UK	S	Online	Medium	06-01-2023 00:00	330	63.49	226.08				
ORD0007	South	India	Clothing	Online	Low	07-01-2023 00:00	231	264.81	248.38				
ORD0008	South	Germany	Food	Online	High	08-01-2023 00:00	327	114.18	57.4				
ORD0009	North	Germany	S	Online	Medium	09-01-2023 00:00	358	212.11	159.51				
ORD0010	West	UK	Food	Online	High	06-01-2023 00:00	124	212.11	132.07				
ORD0011	North	India	Clothing	Online	Medium	07-01-2023 00:00	195	401.62	128.18				
ORD0012	North	UK	Clothing	Online	High	08-01-2023 00:00	135	91.12	36.21				

Question 4. Create a new calculated column total revenue.

SOLUTION :

A	B	C	D	E	F	G	H	I	J	K	L	M	N
Order ID	Region	Country	Category	Sales Channel	Order Priority	Order Date	Units Sold	Unit Price	Unit Cost				
Beverage													
ORD0001	East	Germany	S	Online	High	01-01-2023 00:00	210	152.92	153.6	335958.2			
ORD0002	West	India	Food	Online	Low	02-01-2023 00:00	341	467.92	139.04	159560.72			
ORD0003	North	India	Clothing	Offline	High	03-01-2023 00:00	179	479.94	97.14	84815.26			
ORD0004	East	UK	Furniture	Offline	Medium	04-01-2023 00:00	18	314.51	204.87	9881.54			
ORD0005	East	India	Furniture	Offline	Medium	05-01-2023 00:00	472	392.79	158.46	185295.88			
ORD0006	West	Germany	S	Online	Medium	06-01-2023 00:00	330	63.49	226.08	21272.32			
ORD0007	South	India	Clothing	Online	Low	07-01-2023 00:00	231	264.81	248.38	6105.25			
ORD0008	South	Germany	Food	Online	High	08-01-2023 00:00	327	114.18	57.4	36815.25			
ORD0009	North	Germany	S	Online	Medium	09-01-2023 00:00	358	212.11	159.51	76205.25			
ORD0010	West	UK	Food	Online	High	06-01-2023 00:00	124	212.11	132.07	27289.25			
ORD0011	North	India	Clothing	Online	Medium	07-01-2023 00:00	195	401.62	128.18	78805.25			
ORD0012	North	UK	Clothing	Online	High	08-01-2023 00:00	135	91.12	36.21	1242845.7			

Question 5. Use Copilot to find the total price of Order ID = 'ORD0123'.

SOLUTION :

The screenshot shows an Excel spreadsheet with data from rows 1 to 12. Column A contains Order IDs (e.g., ORD0001 to ORD0012). Columns B through J show details like Region, Country, Category, Sales Channel, Order Priority, Order Date, Units Sold, Unit Price, and Unit Cost. Column K lists Total price. A Copilot sidebar is open, showing the formula `=XLOOKUP("ORD0123", A3:A12, K3:K12)`. The sidebar also provides instructions: "To find the total price for Order ID: 'ORD0123', you can use the XLOOKUP Function to search for the Order ID and return the corresponding value from the 'Total revenue' column." Below the formula, it says "Here's the formula:" followed by the same XLOOKUP formula.

Question 6. Use Copilot to generate a summary chart of average profit by region.

SOLUTION :

The screenshot shows an Excel spreadsheet with data from rows 1 to 13. Column A contains Order Priority (Low, Medium, High). Columns B through E show Order ID, Order Date, Units Sold, Unit Price, and Unit Cost. Column F lists Total price. A pivot table is displayed with columns L, M, N, O, and P. A Copilot sidebar is open, showing a bar chart titled "Here's the summary chart showing Average Profit by Region". The chart has four bars representing different regions with values 15.8k, 16.8k, 11.2k, and 10.8k. Below the chart, there are three buttons: "Provide the exact values in Excel format", "Show the profit for each region by product", and "Explain how the average profit was calculated". At the bottom, there is a "Message Copilot" button.

Question 7. Create a pivot table summarizing total sales by category and region.

SOLUTION :

The screenshot shows an Excel spreadsheet with data from rows 1 to 13. Column A contains Order ID. Columns B through J show Region, Country, Category, Sales Channel, Order Priority, Order Date, Units Sold, Unit Price, and Unit Cost. A pivot table is displayed with columns Category, East, and North. A Copilot sidebar is open, showing a table titled "Here's the pivot table summarizing total sales by category and region". The table has three rows: Beverages (East: 886,000, North: 986,000), Clothing (East: 1,699,000, North: 642,500), Electronics (East: 1,025,000, North: 1,272,000), and Food (East: 689,500, North: 1,867,000). Below the table, there are two buttons: "Show total sales by region" and "Provide the total sales figures for each category". At the bottom, there is a "Message Copilot" button.

Here's the pivot table summarizing total sales by category and region:

	East	North	South
	888,200	986,000	1,146,000
	1,699,000	642,500	496,500
	1,039,000	1,272,000	1,123,000
	889,500	1,687,000	648,400

Question 8. Build a dashboard combining key KPIs and charts.

SOLUTION :

Analysis ▾

Your dashboard has been created successfully! It includes:

Key KPIs

- Total Sales
- Total Profit

Charts

- Bar chart: Average Profit by Region

Add trend analysis to the dashboard Include customer satisfaction metrics

Provide recommendations based on the data

Message Copilot

+

dashboard.xlsx

Question 9. Use Copilot to generate a summary report.

SOLUTION :

The screenshot shows a Microsoft Excel spreadsheet on the left containing a dataset of sales records. On the right, a Copilot interface titled "Sales Summary Report and Regional Insights" is displayed. The interface includes a summary text: "Here's a summary report based on the data from Book Sales". Below this are several interactive buttons: "Provide a detailed analysis of top-selling products", "Show monthly sales trends", "Include profit calculations in the report", and "Message Copilot". A "generate a summary report" button is located in the top right corner of the Copilot window.

Order ID	Region	Country	Category	Sales Channel	Order Priority
O400001	East	Germany	Beverage	Online	High
O400002	West	India	Food	Online	Low
O400003	North	India	Clothing	Offline	High
O400004	East	USA	Furniture	Offline	Medium
O400005	East	India	Furniture	Offline	Medium
O400006	West	UK	Clothing	Online	High
O400007	North	Germany	Clothing	Online	Low
O400008	North	India	Beverage	Online	High
O400009	East	India	Beverage	Online	Low
O400010	East	USA	Furniture	Online	Medium
O400011	East	USA	Food	Online	Low
O400012	East	UK	Furniture	Offline	Medium

Sales Summary Report

1. Overview

- The dataset contains sales records for various regions, countries, and product categories.
- Key columns include Order ID, Region, Country, Category, Sales Channel, Order Priority, Order Date, Units Sold, Unit Price, and Unit Cost.

2. Regional Performance

- The chart provided shows **Average Profit by Region**:
 - **South**: Highest average profit at 16.9k
 - **North**: 15.8k
 - **East**: 13.2k
 - **West**: 13.1k
- **South** and **North** regions are leading in profitability.

3. Product Categories

- Categories include Beverages, Food, Clothing, Furniture, Electronics.

Sales are distributed across both **Online** and **Offline** channels.

4. Sales Channels

- Both **Online** and **Offline** channels are used.
- Orders have varying priorities: High, Medium, Low.

5. Key Insights

- **Furniture** and **Electronics** appear frequently, indicating strong sales in these categories.
- **India, Germany, USA, UK, and Australia** are major countries in the dataset.
- **Order Priority** varies, with many high-priority orders in Electronics and Clothing.

6. Potential Actions

- Focus marketing efforts on **South** and **North** regions to leverage higher profitability.
- Analyze top-performing categories for further growth opportunities.
- Consider strategies to boost sales in **West** and **East** regions.