What is row context? Give an example in a calculated column.

Row context means DAX evaluates expressions row by row in a table. Example: A calculated column in Sales -> Sales[TotalPrice] = Sales[Quantity] * Sales[UnitPrice].

Write a measure that finds total sales

Total Sales = SUMX(Sales, Sales[Quantity] * Sales[UnitPrice])

Use RELATED to fetch the Name from the Customers table into the Sales table.

New column in Sales: CustomerName = RELATED(Customers[Name])

What does CALCULATE(SUM(Sales[Quantity]), Sales[Category] = "Electronics") return?

It returns the total Quantity sold where Category = Electronics.

Explain the difference between VAR and RETURN in DAX.

VAR defines a variable (temporary result). RETURN specifies what the measure should output using the variable(s).

Create a calculated column in Sales called TotalPrice using row context (Quantity * UnitPrice).

Sales[TotalPrice] = Sales[Quantity] * Sales[UnitPrice]

Write a measure Electronics Sales using CALCULATE to sum sales only for the "Electronics" category.

Electronics Sales = CALCULATE(SUMX(Sales, Sales[Quantity] * Sales[UnitPrice]), Sales[Category] = "Electronics")

Use ALL(Sales[Category]) in a measure to show total sales ignoring category filters.

Total Sales Ignore Category = CALCULATE(SUMX(Sales, Sales[Quantity] * Sales[UnitPrice]), ALL(Sales[Category]))

Fix this error: A calculated column in Sales uses RELATED(Customers[Region]) but returns blanks.

Reason: No relationship exists between Sales and Customers or wrong column used. Fix by creating a relationship using Sales[CustomerID] -> Customers[CustomerID].

Why does CALCULATE override existing filters?

Because CALCULATE modifies the filter context explicitly, replacing or adding filters as defined inside its arguments.

Write a measure that returns average unitprice of products

Avg UnitPrice = AVERAGE(Sales[UnitPrice])

Use VAR to store a temporary table of high-quantity sales (Quantity > 2), then count rows.

High Qty Count = VAR HighSales = FILTER(Sales, Sales[Quantity] > 2) RETURN COUNTROWS(HighSales)

% of Category Sales that shows each sale's contribution to its category total.

% of Category Sales = DIVIDE(SUM(Sales[Quantity] * Sales[UnitPrice]), CALCULATE(SUM(Sales[Quantity] * Sales[UnitPrice]), ALLEXCEPT(Sales, Sales[Category])))

Simulate a "remove filters" button using ALL in a measure.

Total Sales All = CALCULATE(SUMX(Sales, Sales[Quantity] * Sales[UnitPrice]), ALL(Sales))

Troubleshoot: A CALCULATE measure ignores a slicer. What's the likely cause?

Likely cause: The measure uses ALL() or REMOVEFILTERS() inside CALCULATE, which removes the slicer effect.

Sample Sales Data:

SaleID	ProductID	CustomerID	Quantity	UnitPrice	Category
1	P1	C1	2	100	Electronics
2	P2	C2	1	50	Clothing
3	P1	C1	3	100	Electronics