

1. What does DAX stand for?

Data Analysis Expressions

2. Write a DAX formula to sum the Sales column.

Total Sales = SUM(Sales[Sales])

3. What is the difference between a calculated column and a measure?

Both calculated columns and measures use DAX, but they serve different purposes and behave differently in your data model.

If creating a field to filter or group by, use a calculated column.
If creating a numeric summary (total, average, etc.), use a measure.

4. Use the DIVIDE function to calculate Profit Margin (Profit/Sales).

Profit Margin = DIVIDE([Profit], [Total Sales])

5. What does COUNTROWS() do in DAX?

The COUNTROWS() function in DAX returns the number of rows in a table.

6. Create a measure: Total Profit that subtracts total cost from total sales

Total Profit = [Total Sales] - [Total Cost]

Total Sales = SUM(Sales[SalesAmount])

Total Cost = SUM(Sales[Cost])

7. Write a measure to calculate Average Sales per Product.

Total Sales = SUM(Sales[SalesAmount])

Average Sales per Product =

DIVIDE(

[Total Sales],

DISTINCTCOUNT(Sales[ProductID])

)

8. Use IF() to tag products as "High Profit" if Profit > 1000.

Profit Category =

IF([Total Profit] > 1000, "High Profit", "Low/Normal Profit")

9. What is a circular dependency error in a calculated column?

A circular dependency error occurs when a calculated column refers to itself directly or indirectly — causing Power BI to get stuck in an endless loop when trying to compute the value.

10. Explain row context vs. filter context.

Row Context:

Happens automatically in calculated columns and some iterators like SUMX()

It means DAX is evaluating one row at a time

You can reference other columns in the same row

Filter Context:

Comes from report filters, slicers, visuals, or CALCULATE()

It defines which rows are visible when a measure is being evaluated

Used mostly in measures

11. Write a measure to calculate YTD Sales using TOTALYTD().

YTD Sales =

```
TOTALYTD(  
    [Total Sales],  
    'Date'[Date]  
)
```

12. Create a dynamic measure that switches between Sales, Profit, and Margin.

13. Optimize a slow DAX measure using variables (VAR).

14. Use CALCULATE() to override a filter

15. Write a measure that returns the highest sales amount