Top Power BI Interview Question

1. How do you calculate the total sales in Power BI using DAX?

Answer:

Use the SUM function.

Example: SUM(Sales[SalesAmount])

Explanation: This function sums all values in the SalesAmount column to calculate the total sales.

2. What is the difference between SUM and SUMX in DAX?

Answer:

SUM adds up values in a column, while SUMX evaluates an expression for each row and then

sums the results.

Example: SUM(Sales[SalesAmount])

Explanation: SUMX is used when you need to evaluate an expression row by row.

3. How do you calculate the year-to-date (YTD) sales using DAX?

Answer:

Use the TOTALYTD function.

Example: TOTALYTD(SUM(Sales[SalesAmount]), Date[Date])

Explanation: This function sums the sales amount up to the current date based on the Date table.

4. Explain the CALCULATE function in DAX and provide an example.

Answer:

CALCULATE modifies the filter context of a calculation.

Example: CALCULATE(SUM(Sales[SalesAmount]), Sales[Region] = 'East')

Explanation: It changes the context to only consider sales from the 'East' region and then sums

the sales.

5. How can you calculate the percentage of total sales for each product in DAX?

Answer:

Divide the individual sales by the total sales.

Example: Sales Percentage = DIVIDE(SUM(Sales[SalesAmount]),

CALCULATE(SUM(Sales[SalesAmount]), ALL(Sales)))

Explanation: DIVIDE divides the sales of a product by the total sales, removing any filters.

6. How do you calculate the moving average of sales over the last 30 days using DAX?

Answer:

Use AVERAGEX and DATESINPERIOD.

Example: Moving Average = AVERAGEX(DATESINPERIOD(Date[Date], MAX(Date[Date]), -30,

DAY), Sales[SalesAmount])

Explanation: DATESINPERIOD defines a 30-day period, and AVERAGEX calculates the average

sales over that period.

7. How do you handle blank values in DAX?

Answer:

Use COALESCE or IF.

Example: COALESCE(Sales[SalesAmount], 0)

Explanation: COALESCE returns the first non-blank value. If SalesAmount is blank, it returns 0.

8. What is the difference between ALL and ALLEXCEPT in DAX?

Answer:

ALL removes all filters, while ALLEXCEPT removes all filters except those specified.

Example: CALCULATE(SUM(Sales[SalesAmount]), ALL(Sales))

Explanation: ALL removes all filters, and ALLEXCEPT retains filters on specific columns.

9. How can you filter data within a specific time period using DAX?

Answer:

Use the FILTER function with time-related functions like YEAR or MONTH.

Example: FILTER(Sales, YEAR(Sales[Date]) = 2021)

Explanation: Filters sales data for the year 2021.

10. How do you calculate a running total in Power BI using DAX?

Answer:

Use CALCULATE and FILTER.

Example: Running Total = CALCULATE(SUM(Sales[SalesAmount]), FILTER(ALL(Date[Date]),

Date[Date] <= MAX(Date[Date])))

Explanation: This sums the sales amount for each row up to the current date, creating a running

total.

11. What is the IF function in DAX? Provide an example of its use.

Answer:

IF evaluates a condition and returns one value if true, another if false.

Example: IF(Sales[SalesAmount] > 1000, "High", "Low")

Explanation: Checks if SalesAmount is greater than 1000 and labels it "High" or "Low."

12. What is the difference between EARLIER and EARLIEST in DAX?

Answer:

EARLIER references the value in a previous row context, while EARLIEST does not exist in DAX.

Explanation: EARLIER is used in row context to access previous values during iteration.

13. How can you calculate the first day of the month using DAX?

Answer:

Use DATE and YEAR, MONTH functions.

Example: DATE(YEAR(Date[Date]), MONTH(Date[Date]), 1)

Explanation: This formula generates the first day of the month for a given date.

14. How would you calculate a dynamic rank for products based on sales using DAX?

Answer:

Use the RANKX function.

Example: Product Rank = RANKX(ALL(Sales[ProductID]), SUM(Sales[SalesAmount]), , DESC)

Explanation: RANKX ranks products based on total sales, in descending order.

15. How can you calculate the difference between two dates in Power BI using DAX?

Answer:

Use DATEDIFF.

Example: DATEDIFF(Sales[StartDate], Sales[EndDate], DAY)

Explanation: DATEDIFF calculates the difference between two dates in the specified unit (e.g.,

days).

16. What is the purpose of the VALUES function in DAX?

Answer:

VALUES returns a distinct list of values from a column or table.

Example: VALUES(Sales[ProductID])

Explanation: This returns a list of distinct product IDs from the Sales table.

17. Explain the DISTINCTCOUNT function in DAX with an example.

Answer:

DISTINCTCOUNT counts the number of unique values in a column.

Example: DISTINCTCOUNT(Sales[ProductID])

Explanation: This counts the number of distinct products sold.

18. How do you calculate the total sales for the last 12 months using DAX?

Answer:

Use the SAMEPERIODLASTYEAR function with CALCULATE.

Example: CALCULATE(SUM(Sales[SalesAmount]), SAMEPERIODLASTYEAR(Date[Date]))

Explanation: This sums sales for the same period in the previous year.

19. What is the SWITCH function in DAX, and how is it used?

Answer:

SWITCH evaluates an expression and returns a result based on matching conditions.

Example: SWITCH(TRUE(), Sales[SalesAmount] > 1000, "High", Sales[SalesAmount] > 500,

"Medium", "Low")

Explanation: Returns different results based on the value of SalesAmount.

20. How would you calculate the growth rate between two periods using DAX?

Answer:

Use the DIVIDE function to calculate the growth rate.

Example: Growth Rate = DIVIDE(SUM(Sales[SalesAmount]),

CALCULATE(SUM(Sales[SalesAmount]), PREVIOUSMONTH(Date[Date]))) - 1

Explanation: This calculates the growth from one period to the next by dividing the current period's

sales by the previous period's sales.

21. What is the RELATED function in DAX, and when do you use it?

Answer:

The RELATED function retrieves a value from a related table.

Example: RELATED(Product[ProductName])

Explanation: This retrieves the ProductName from the Product table based on the relationship

defined between the Sales and Product tables.

22. Explain the SAMEPERIODLASTYEAR function in DAX with an example.

Answer:

SAMEPERIODLASTYEAR returns the same period in the previous year for the given date column.

Example: SAMEPERIODLASTYEAR(Date[Date])

Explanation: This can be used to compare data from the same period last year.

23. How do you apply row-level security (RLS) in DAX?

Answer:

Row-level security is applied by creating roles with DAX expressions.

Example: UserRegion = USERNAME()

Explanation: USERNAME() retrieves the current user's name and is used to filter data based on

user-specific conditions.

24. How can you calculate the number of distinct customers who made purchases in the last 30

days using DAX?

Answer:

Use DISTINCTCOUNT with a FILTER.

Example: DISTINCTCOUNT(FILTER(Sales, Sales[Date] >= TODAY() - 30)[CustomerID])

Explanation: This counts distinct customers who made purchases in the last 30 days.

25. How can you calculate the average sales per customer using DAX?

Answer:

Use SUM and DISTINCTCOUNT.

Example: Average Sales = DIVIDE(SUM(Sales[SalesAmount]),

DISTINCTCOUNT(Sales[CustomerID]))

Explanation: Divides total sales by the number of distinct customers.

26. What is the FILTER function in DAX, and how is it used in calculations?

Answer:

The FILTER function returns a table that has been filtered based on a condition.

Example: FILTER(Sales, Sales[SalesAmount] > 1000)

Explanation: Filters the Sales table to include only sales greater than 1000.

27. How do you use the ALL function in DAX to remove filters?

Answer:

ALL removes all filters from a table or column.

Example: CALCULATE(SUM(Sales[SalesAmount]), ALL(Sales))

Explanation: Removes filters from the Sales table and calculates the total sales.

28. How would you calculate the closing balance of an account based on transactions over time in

DAX?

Answer:

Use CALCULATE with FILTER to calculate the closing balance.

Example: Closing Balance = CALCULATE(SUM(Transactions[Amount]), FILTER(Transactions,

Transactions[Date] <= TODAY()))

Explanation: This calculates the sum of all transactions up to the current date.

29. What is the RANKX function, and how do you use it in DAX?

Answer:

RANKX ranks the values of an expression in a table.

Example: ProductRank = RANKX(ALL(Sales[ProductID]), SUM(Sales[SalesAmount]))

Explanation: This ranks products by total sales in descending order.

30. How do you calculate the cumulative sales for the current year up to the current date in DAX?

Answer:

Use TOTALYTD.

Example: Cumulative Sales = TOTALYTD(SUM(Sales[SalesAmount]), Date[Date])

Explanation: This calculates the year-to-date sales based on the Date table.

31. How would you calculate the difference between the current month's sales and the previous

month's sales using DAX?

Answer:

Use SAMEPERIODLASTMONTH and CALCULATE.

Example: Sales Difference = SUM(Sales[SalesAmount]) -

CALCULATE(SUM(Sales[SalesAmount]), SAMEPERIODLASTMONTH(Date[Date]))

Explanation: This calculates the sales difference between the current and previous months.

32. How do you calculate the weighted average of a column in Power BI using DAX?

Answer:

Use SUMX and DIVIDE.

Example: Weighted Average = DIVIDE(SUMX(Sales, Sales[Quantity] * Sales[SalesAmount]),

SUM(Sales[Quantity]))

Explanation: This calculates the weighted average by multiplying Quantity by SalesAmount and

then dividing by the total quantity.

33. How would you create a DAX formula for calculating the expected value for a probability

distribution?

Answer:

Use SUMX to calculate the expected value.

Example: Expected Value = SUMX(ProbabilityTable, ProbabilityTable[Probability] *

ProbabilityTable[Outcome])

Explanation: This formula multiplies each probability by its corresponding outcome and sums the

results.

34. What is the purpose of CROSSFILTER in DAX, and when would you use it?

Answer:

CROSSFILTER changes the direction of relationships in a calculation.

Example: CROSSFILTER(Table1[Column], Table2[Column], Both)

Explanation: This function is used when you want to change the relationship direction in

calculations (e.g., bidirectional).

35. How do you calculate a 7-day moving average for sales data in DAX?

Answer:

Use AVERAGEX with DATESINPERIOD.

Example: 7-Day Moving Average = AVERAGEX(DATESINPERIOD(Date[Date], MAX(Date[Date]),

-7, DAY), Sales[SalesAmount])

Explanation: This calculates the average sales over the last 7 days.

36. Explain how to use TIME and TIMEVALUE functions in DAX.

Answer:

TIME returns a time value from hour, minute, and second. TIMEVALUE converts a time in text

format to a time value.

Example: TIME(12, 30, 0)

Explanation: TIME creates a time value for 12:30 PM.

37. What is the difference between USERELATIONSHIP and RELATEDTABLE in DAX?

Answer:

USERELATIONSHIP activates an inactive relationship between two tables, while RELATEDTABLE

returns a related table based on the current row context.

Explanation: USERELATIONSHIP is used to enable an inactive relationship in a calculation, while

RELATEDTABLE returns related rows from a table.

38. How do you calculate the average sales for each product in a given time period using DAX?

Answer:

Use AVERAGEX with FILTER.

Example: Average Sales = AVERAGEX(FILTER(Sales, Sales[Date] >= DATE(2021, 1, 1)),

Sales[SalesAmount])

Explanation: This calculates the average sales for each product in the given time period.

39. What is the SUMX function in DAX, and how does it differ from SUM?

Answer:

SUMX evaluates an expression row by row and sums the results, whereas SUM directly sums a

column.

Example: SUMX(Sales, Sales[Quantity] * Sales[SalesAmount])

Explanation: SUMX performs row-wise evaluations before summing, while SUM sums a column

directly.

40. How can you create a calculated column that shows whether a product's sales are above or

below average using DAX?

Answer:

Use IF to compare the sales with the average.

Example: Sales Status = IF(Sales[SalesAmount] > AVERAGE(Sales[SalesAmount]), "Above

Average", "Below Average")

Explanation: This formula compares each product's sales with the average and labels it

accordingly.

41. How do you calculate the cumulative sales for a specific product over time using DAX?

Answer:

Use CALCULATE with FILTER.

Example: Cumulative Sales = CALCULATE(SUM(Sales[SalesAmount]), FILTER(ALL(Date[Date]),

Date[Date] <= MAX(Date[Date])))

Explanation: This formula calculates the cumulative sum of sales for a product over time.

42. What is the DATESINPERIOD function in DAX, and how is it used?

Answer:

DATESINPERIOD returns a table with dates within a specified period.

Example: DATESINPERIOD(Date[Date], TODAY(), -1, MONTH)

Explanation: This returns a table with dates from the last 1 month.

43. How would you create a calculated column for classifying customers based on their purchase

history using DAX?

Answer:

Use IF to categorize based on total sales.

Example: Customer Classification = IF(SUM(Sales[SalesAmount]) > 1000, "High Value", "Low

Value")

Explanation: This formula classifies customers based on whether their total sales exceed a

threshold.

44. Explain how to use the TREATAS function in DAX.

Answer:

TREATAS treats one table as another table's column to establish relationships for calculations.

Example: TREATAS(VALUES(Sales[ProductID]), Products[ProductID])

Explanation: This creates a relationship between Sales[ProductID] and Products[ProductID] in

calculations.

45. What is the difference between ALLSELECTED and ALL in DAX?

Answer:

ALL removes all filters, while ALLSELECTED removes filters except those applied by the user's

selection.

Example: ALL(Sales) vs. ALLSELECTED(Sales)

Explanation: ALL clears all filters, while ALLSELECTED retains user-selected filters.

46. How do you calculate the share of total sales by product category using DAX?

Answer:

Divide the product category sales by the total sales.

Example: Category Share = DIVIDE(SUM(Sales[SalesAmount]),

CALCULATE(SUM(Sales[SalesAmount]), ALL(Sales)))

Explanation: This calculates the share of total sales for each product category.

47. How do you calculate the total sales per product in a specific region using DAX?

Answer:

Use CALCULATE to apply filters.

Example: Sales by Region = CALCULATE(SUM(Sales[SalesAmount]), Sales[Region] = "East")

Explanation: This formula sums the sales for products in the 'East' region.

48. What is the EARLIER function used for in DAX? Provide an example.

Answer:

EARLIER is used to reference a value in an outer row context.

Example: IF(Sales[SalesAmount] > EARLIER(Sales[SalesAmount]), "Higher", "Lower")

Explanation: EARLIER allows you to compare values in a nested row context.

49. How can you use the LOOKUPVALUE function in DAX to retrieve a related value from another

table?

Answer:

LOOKUPVALUE returns a value from a column in a related table based on a match.

Example: LOOKUPVALUE(Product[ProductName], Product[ProductID], Sales[ProductID])

Explanation: This retrieves the product name based on the product ID from the Sales table.

50. What is the COALESCE function in DAX, and how is it used to handle null values?

Answer:

COALESCE returns the first non-blank value.

Example: COALESCE(Sales[SalesAmount], 0)

Explanation: This returns 0 if SalesAmount is blank.

51. How do you calculate the difference between the current row value and the previous row value

in DAX?

Answer:

Use EARLIER with CALCULATE.

Example: Difference = Sales[SalesAmount] - EARLIER(Sales[SalesAmount])

Explanation: This calculates the difference between the current row and the previous row.

52. Explain how to use IN and NOT IN operators in DAX.

Answer:

IN checks if a value exists in a list, and NOT IN checks if it does not.

Example: IF(Sales[ProductID] IN {1, 2, 3}, "Valid", "Invalid")

Explanation: This checks if ProductID is 1, 2, or 3.

53. What is the purpose of ALL in DAX and how is it different from REMOVEFILTERS?

Answer:

ALL removes filters from a table, while REMOVEFILTERS removes filters from specific columns or

tables.

Example: ALL(Sales) vs. REMOVEFILTERS(Sales[ProductID])

Explanation: ALL removes all filters, whereas REMOVEFILTERS can selectively remove filters

from specific columns.

54. How can you use DATEADD to calculate the sales for the previous period in DAX?

Answer:

Use DATEADD to shift the date context by one period.

Example: Sales Last Period = CALCULATE(SUM(Sales[SalesAmount]), DATEADD(Date[Date], -1,

MONTH))

Explanation: This calculates sales for the previous month by shifting the date context.

55. How would you create a DAX expression for calculating the number of days between two

dates?

Answer:

Use DATEDIFF.

Example: DATEDIFF(Sales[StartDate], Sales[EndDate], DAY)

Explanation: This calculates the difference between two dates in days.

56. What is the DIVIDE function in DAX, and why should it be preferred over normal division?

Answer:

The DIVIDE function divides two numbers and handles errors such as division by zero.

Example: DIVIDE(Sales[SalesAmount], Sales[Quantity])

Explanation: DIVIDE avoids errors like dividing by zero, making it more robust than regular

division.

57. How do you calculate the percentage change between two values using DAX?

Answer:

Calculate the difference between the two values and divide by the previous value.

Example: Percentage Change = (SUM(Sales[SalesAmount]) -

CALCULATE(SUM(Sales[SalesAmount]),
PREVIOUSMONTH(Date[Date]))) /

CALCULATE(SUM(Sales[SalesAmount]),
PREVIOUSMONTH(Date[Date]))

Explanation: This formula calculates the percentage change between sales of the current month

and the previous month.

58. How do you filter data by year and month in DAX?

Answer:

Use YEAR and MONTH functions in a FILTER.

Example: FILTER(Sales, YEAR(Sales[Date]) = 2021 && MONTH(Sales[Date]) = 5)

Explanation: This filters the Sales table for data from May 2021.

59. What is the COUNTROWS function in DAX, and how is it used in reporting?

Answer:

COUNTROWS counts the number of rows in a table.

Example: COUNTROWS(Sales)

Explanation: This counts the number of rows in the Sales table.

60. How can you calculate the total sales in the previous quarter using DAX?

Answer:

Use PARALLELPERIOD to shift the date context to the previous quarter.

Example: Sales Previous Quarter = CALCULATE(SUM(Sales[SalesAmount]),

PARALLELPERIOD(Date[Date], -1, QUARTER))

Explanation: This calculates sales for the previous quarter by shifting the date context.

61. What is the DATE function in DAX, and how do you use it?

Answer:

The DATE function creates a date from year, month, and day values.

Example: DATE(2021, 12, 31)

Explanation: This generates a date for December 31, 2021.

62. Explain the use of EARLIER in row context in DAX.

Answer:

EARLIER is used to reference a value from an earlier row context in a calculation.

Example: IF(Sales[SalesAmount] > EARLIER(Sales[SalesAmount]), "Higher", "Lower")

Explanation: This compares the current row value to the value from an earlier row context.

63. How do you calculate the percentage contribution of each product to total sales using DAX?

Answer:

Divide the product's sales by the total sales.

Example: Product Contribution = DIVIDE(SUM(Sales[SalesAmount]),

CALCULATE(SUM(Sales[SalesAmount]), ALL(Sales)))

Explanation: This formula calculates the percentage contribution of each product to the total sales.

64. How can you calculate sales for the current quarter using DAX?

Answer:

Use QUARTER and YEAR functions in a FILTER.

Example: FILTER(Sales, YEAR(Sales[Date]) = 2021 && QUARTER(Sales[Date]) = 1)

Explanation: This filters data for the first quarter of 2021.

65. How would you calculate the average sales per region in DAX?

Answer:

Divide total sales by the number of regions.

Example: Average Sales per Region = DIVIDE(SUM(Sales[SalesAmount]),

DISTINCTCOUNT(Sales[Region]))

Explanation: This calculates the average sales for each region.

66. How do you use the PATH function in DAX to calculate hierarchical data?

Answer:

PATH returns a delimited string representing the hierarchy of a column.

Example: PATH(Employee[EmployeeID], Employee[ManagerID])

Explanation: This function is useful for handling and working with hierarchical data.

67. How do you calculate the last non-blank value in a column using DAX?

Answer:

Use LASTNONBLANK.

Example: LASTNONBLANK(Sales[SalesAmount], 1)

Explanation: This function returns the last non-blank value in the SalesAmount column.

68. What is the ALLSELECTED function used for in DAX?

Answer:

ALLSELECTED returns all values in a column or table, but respects filters set by the user in a

report.

Example: ALLSELECTED(Sales)

Explanation: This function returns all values selected by the user, including filters applied by

slicers.

69. How would you create a calculated column that checks if a product has been sold in the last

month using DAX?

Answer:

Use CALCULATE with FILTER and DATEADD.

Example: Sold Last Month = IF(CALCULATE(COUNTROWS(Sales), DATEADD(Date[Date], -1,

MONTH)) > 0, "Yes", "No")

Explanation: This checks if there are any sales in the last month.

70. What is the purpose of CALCULATETABLE in DAX?

Answer:

CALCULATETABLE modifies the filter context and returns a table.

Example: CALCULATETABLE(Sales, Sales[Region] = "East")

Explanation: This returns a filtered table based on the given condition.

71. How do you calculate total sales for a product category in the last 30 days using DAX?

Answer:

Use FILTER and TODAY.

Example: Total Sales Last 30 Days = CALCULATE(SUM(Sales[SalesAmount]), FILTER(Sales,

Sales[Date] >= TODAY() - 30))

Explanation: This sums the sales for the last 30 days.

72. Explain how to use SELECTCOLUMNS to create a new table in DAX.

Answer:

SELECTCOLUMNS creates a table by selecting specific columns.

Example: SELECTCOLUMNS(Sales, "Product", Sales[ProductID], "Sales Amount",

Sales[SalesAmount])

Explanation: This creates a table with selected columns.

73. How would you create a DAX formula to calculate sales by region for a specific year?

Answer:

Use FILTER and YEAR.

Example: Sales by Region = CALCULATE(SUM(Sales[SalesAmount]), YEAR(Sales[Date]) =

2021, Sales[Region] = "East")

Explanation: This formula calculates sales for the 'East' region in 2021.

74. How do you calculate total sales for products that have not been sold using DAX?

Answer:

Use EXCEPT to find products not sold.

Example: Total Sales Unsold = CALCULATE(SUM(Sales[SalesAmount]), EXCEPT(ALL(Products),

VALUES(Sales[ProductID])))

Explanation: This sums sales for products that are not present in the sales data.

75. How do you use FILTER to create a conditional column in DAX?

Answer:

Use FILTER to define the condition and IF to apply logic.

Example: New Column = IF(FILTER(Sales, Sales[SalesAmount] > 1000), "High", "Low")

Explanation: This creates a column based on conditions evaluated by FILTER.

76. How can you calculate the average sales for a specific period using DAX?

Answer:

Use AVERAGEX with a FILTER.

Example: Average Sales = AVERAGEX(FILTER(Sales, Sales[Date] >= DATE(2021, 1, 1)),

Sales[SalesAmount])

Explanation: This calculates the average sales for the specified period.

77. How do you calculate the first and last date of a fiscal year in DAX?

Answer:

Use DATE and YEAR.

Example: First Date = DATE(YEAR(TODAY()), 1, 1)

Explanation: This calculates the first date of the fiscal year based on the current date.

78. What is the VALUES function in DAX and when should it be used?

Answer:

VALUES returns distinct values from a column.

Example: VALUES(Sales[ProductID])

Explanation: This is useful for creating a list of distinct values.

79. How would you calculate the market share of a product using DAX?

Answer:

Divide the product's sales by the total market sales.

Example: Market Share = DIVIDE(SUM(Sales[SalesAmount]),

CALCULATE(SUM(Sales[SalesAmount]), ALL(Sales)))

Explanation: This calculates the market share of a product.

80. What is the purpose of the DATEADD function in DAX, and how would you use it?

Answer:

DATEADD shifts the date context by a specified number of intervals.

Example: DATEADD(Date[Date], -1, MONTH)

Explanation: This shifts the date by one month backward.

81. How do you calculate total sales for a specific product group using DAX?

Answer:

Use CALCULATE with a filter.

Example: Sales by Product Group = CALCULATE(SUM(Sales[SalesAmount]),

Sales[ProductGroup] = "Electronics")

Explanation: This calculates sales for a specific product group.

82. How do you calculate the total sales for products that exceed a certain price point using DAX?

Answer:

Use CALCULATE and a filter on Price.

Example: Sales for Expensive Products = CALCULATE(SUM(Sales[SalesAmount]), Sales[Price] >

1000)

Explanation: This calculates sales for products with a price greater than 1000.

83. How would you calculate a DAX expression for the maximum sales value for a specific product

category?

Answer:

Use MAXX.

Example: Max Sales = MAXX(FILTER(Sales, Sales[Category] = "Electronics"),

Sales[SalesAmount])

Explanation: This calculates the maximum sales for the "Electronics" category.

84. How can you implement a DAX solution for showing monthly growth in sales?

Answer:

Use CALCULATE with SAMEPERIODLASTMONTH.

Example: Monthly Growth = (SUM(Sales[SalesAmount]) -

CALCULATE(SUM(Sales[SalesAmount]), SAMEPERIODLASTMONTH(Date[Date]))) /

CALCULATE(SUM(Sales[SalesAmount]), SAMEPERIODLASTMONTH(Date[Date]))

Explanation: This calculates the growth in sales from the previous month.

85. How do you use RELATED to access data from a related table in DAX?

Answer:

RELATED retrieves a value from a related table based on the current row context.

Example: RELATED(Customer[CustomerName])

Explanation: This retrieves the customer name from the related Customer table.

86. What is the difference between ALL and ALLEXCEPT in DAX, and when would you use them?

Answer:

ALL removes all filters, while ALLEXCEPT removes all filters except those on specified columns.

Example: ALL(Sales) vs. ALLEXCEPT(Sales, Sales[Region])

Explanation: Use ALL to clear all filters, and ALLEXCEPT to keep filters on specific columns.

87. How do you create a DAX measure for average sales by store?

Answer:

Divide total sales by the number of stores.

Example: Average Sales by Store =
DIVIDE(SUM(Sales[SalesAmount]),

DISTINCTCOUNT(Sales[StoreID]))

Explanation: This calculates the average sales per store.

88. What is the use of the HASONEVALUE function in DAX?

Answer:

HASONEVALUE checks if there is exactly one value in a column or table.

Example: IF(HASONEVALUE(Sales[Region]), "One Region Selected", "Multiple Regions

Selected")

Explanation: This is used for conditional logic when there's exactly one value in a column.

89. How do you calculate the sum of sales for the last 6 months using DAX?

Answer:

Use DATESINPERIOD to calculate sales over the last 6 months.

Example: Sales Last 6 Months = CALCULATE(SUM(Sales[SalesAmount]),

DATESINPERIOD(Date[Date], TODAY(), -6, MONTH))

Explanation: This calculates sales for the last 6 months.

90. How would you calculate sales variance between actual and budgeted sales in DAX?

Answer:

Subtract budgeted sales from actual sales.

Example: Variance = SUM(Sales[ActualSales]) - SUM(Sales[BudgetedSales])

Explanation: This formula calculates the variance between actual and budgeted sales.

91. What is the SUMMARIZE function in DAX, and how is it used?

Answer:

SUMMARIZE creates a table that summarizes data based on specified columns and expressions.

Example: SUMMARIZE(Sales, Sales[Product], "Total Sales", SUM(Sales[SalesAmount]))

Explanation: This creates a summary table of total sales by product.

92. How would you calculate the sales difference between two specific periods using DAX?

Answer:

Use CALCULATE with DATESBETWEEN.

Example: Sales Difference = CALCULATE(SUM(Sales[SalesAmount]),

DATESBETWEEN(Date[Date], DATE(2021,1,1), DATE(2021,3,31))) -

CALCULATE(SUM(Sales[SalesAmount]), DATESBETWEEN(Date[Date], DATE(2020,1,1),

DATE(2020,3,31)))

Explanation: This calculates the sales difference between two periods.

93. How can you count the number of days between two date columns using DAX?

Answer:

Use DATEDIFF.

Example: DATEDIFF(Sales[StartDate], Sales[EndDate], DAY)

Explanation: This calculates the number of days between two date columns.

94. How do you create a rolling average using DAX?

Answer:

Use AVERAGEX with DATESINPERIOD.

Example: Rolling Average = AVERAGEX(DATESINPERIOD(Date[Date], MAX(Date[Date]), -30,

DAY), Sales[SalesAmount])

Explanation: This calculates the moving average of sales over a specified period.

95. How do you calculate the weighted sales using DAX?

Answer:

Use SUMX and DIVIDE.

Example: Weighted Sales = DIVIDE(SUMX(Sales, Sales[Quantity] * Sales[SalesAmount]),

SUM(Sales[Quantity]))

Explanation: This calculates the weighted sales by multiplying Quantity by SalesAmount and

dividing by the total quantity.

96. What is the TREATAS function in DAX, and when would you use it?

Answer:

TREATAS treats one table or column as another for calculation purposes.

Example: TREATAS(VALUES(Sales[ProductID]), Products[ProductID])

Explanation: This creates a relationship between two columns during calculation.

97. How do you calculate the average order value using DAX?

Answer:

Divide total sales by the number of orders.

Example: Average Order Value = DIVIDE(SUM(Sales[SalesAmount]),

DISTINCTCOUNT(Sales[OrderID]))

Explanation: This calculates the average sales per order.

98. How would you write a DAX formula to calculate the sales growth from last year to this year?

Answer:

Use SAMEPERIODLASTYEAR to compare sales year-over-year.

Example: Sales Growth = SUM(Sales[SalesAmount]) - CALCULATE(SUM(Sales[SalesAmount]),

SAMEPERIODLASTYEAR(Date[Date]))

Explanation: This calculates the difference in sales between this year and last year.

99. How do you calculate the total sales for a specific region using DAX?

Answer:

Use CALCULATE with a region filter.

Example: Sales for Region = CALCULATE(SUM(Sales[SalesAmount]), Sales[Region] = "East")

Explanation: This formula calculates the total sales for the "East" region.

100. How would you calculate the closing stock value for a product using DAX?

Answer:

Use CALCULATE with the appropriate filters.

Example: Closing Stock Value = CALCULATE(SUM(Stock[StockValue]), Stock[ProductID] =

"ProductX")

Explanation: This calculates the closing stock value for the specified product.