

Lesson 13

Topic: Introduce time-based calculations

Prerequisites: Download Chocolate Sales.csv file and disable Auto DateTime options by Options in Current File and create new DATE table by using CALENDARAUTO() and FORMAT functions. File: C:\Users\MaabLLC\Desktop\maab_files\PowerBI_Homeworks\Chocolate Sales.csv

Basic Level (1–5)

Total Sales Amount (All-Time)

Total Sales (All-Time) := [Sales Amount]

Current Year (YTD)

Sales CY (YTD) := TOTALYTD([Sales Amount], 'Date'[Date])

Last Year (Full Year)

Sales LY (Full Year) := CALCULATE([Sales Amount], FILTER(ALL('Date'), YEAR('Date'[Date]) = YEAR(TODAY()) - 1))

Current Month

Sales CM := CALCULATE([Sales Amount], FILTER(ALL('Date'), YEAR('Date'[Date]) = YEAR(TODAY()) && MONTH('Date'[Date]) = MONTH(TODAY())))

Current Quarter

Sales CQ := CALCULATE([Sales Amount], FILTER(ALL('Date'), YEAR('Date'[Date]) = YEAR(TODAY()) && QUARTER('Date'[Date]) = QUARTER(TODAY())))

Intermediate Level (6–10)

YoY %

YoY % := VAR Prev = CALCULATE([Sales Amount], SAMEPERIODLASTYEAR('Date'[Date])) RETURN DIVIDE([Sales Amount] - Prev, Prev)

Last Month

Sales Last Month := CALCULATE([Sales Amount], DATEADD('Date'[Date], -1, MONTH))

Running Total

Running Total := CALCULATE([Sales Amount], FILTER(ALL('Date'[Date]), 'Date'[Date] <= MAX('Date'[Date])))

Last 3 Months

Sales Last 3 Months := CALCULATE([Sales Amount], DATESINPERIOD('Date'[Date], MAX('Date'[Date]), -3, MONTH))

Max Month in Last 12M

Max Sales Month Last 12M := VAR Period = DATESINPERIOD('Date'[Date], MAX('Date'[Date]), -12, MONTH)

VAR T = ADDCOLUMNS(SUMMARIZE(Period, 'Date'[Date]), "Amt", [Sales Amount])

VAR One = TOPN(1, T, [Amt], DESC, 'Date'[Date], ASC)

RETURN FORMAT(MINX(One, 'Date'[Date]), "MMMM yyyy")

Advanced Level (11–15)

Q1 Sales

Q1 Sales := CALCULATE([Sales Amount], KEEPFILTERS(QUARTER('Date'[Date]) = 1))

YoY Δ (December Only)

YoY Δ (December Only) := VAR IsDec = SELECTEDVALUE('Date'[Date]) <> BLANK() && MONTH(MAX('Date'[Date])) = 12 RETURN DIVIDE([Sales Amount] - CALCULATE([Sales Amount], FILTER(ALL('Date'), YEAR('Date'[Date]) = YEAR(TODAY()) - 1 && MONTH('Date'[Date]) = 12)), [Sales Amount])

Sales Last 12M

Sales Last 12M := CALCULATE([Sales Amount], DATESINPERIOD('Date'[Date], MAX('Date'[Date]), -12, MONTH))

Δ QoQ

Δ QoQ := VAR PrevQ = CALCULATE([Sales Amount], DATEADD('Date'[Date], -1, QUARTER)) RETURN [Sales Amount] - PrevQ

>110% of LY Flag

>110% of LY Flag := VAR LY = CALCULATE([Sales Amount], SAMEPERIODLASTYEAR('Date'[Date])) RETURN IF(