# Lab 5 DAX Time Series

**Objectives**

**Time: 15-20 Minutes**

1. Create a DAX measure that produces the following measures.
   1. Sales for the previous year using the **PREVIOUSYEAR function**
   2. Sales for the previous month using the **DATEADD function**
   3. Sales year to date using the **TOTALYTD function**
   4. Last Quarter Sales using the **PARALLELPERIOD function**
   5. Percent change of the previous year to the current year using the variables command in the formula
   6. Percent change of the previous month to the current year using the variables command in the formula

**Lab steps**

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Previous YearPrevious MonthSales Year to date | |  |  | | --- | --- | | Formula | Format | | Sales Last Year = CALCULATE([Total Sales],PREVIOUSYEAR(Cal\_tbl[Date])) | Currency |  |  |  | | --- | --- | | Formula | Format | | Sales Previous Month = CALCULATE([Total Sales],DATEADD(Cal\_tbl[Date],-1,MONTH)) | Currency |  |  |  | | --- | --- | | Formula | Format | | SalesYTD = TOTALYTD([Total Sales],Cal\_tbl[Date]) | Currency | |
| Create a new Tab titled “Time Series”  Place the new measures into a table visual and place a year slicer visual on the canvas set to the year 2019 |  |
| Sales % Change previous year.  Sales % Change previous month. | |  |  | | --- | --- | | Formula | Format | | Sales Previous Year % Change =  var CY = [Total Sales]  var PY = [Same Period Last Year]  RETURN  DIVIDE(CY-PY,PY) | Currency |  |  |  | | --- | --- | | Formula | Format | | Sales Previous Month % Change =  var CM = [Total Sales]  var PM = [sales Previous Month]  RETURN  DIVIDE(CM-PM,PM) | Currency | |
| 1 . Place the new measures into a table visual  2 . Add the Total Sales, Year and Sales Last Year measures into a KPI card visual. This visual will provide a conditional format for current year sales compared to the previous year's sales |  |
| Last Quarter Sales  1. Add the Total Sales, Year, Month short name and Last Quarter Sales measures to a Matrix table visual. You will need to disable the filter interaction so that you get all years as displayed | |  |  | | --- | --- | | Formula | Format | | Last Quarter Sales = CALCULATE([Total Sales],PARALLELPERIOD(Cal\_tbl[Date],-1,QUARTER)) | Currency | |
| **END** |  |