Table Calculation Types

Tableau Desktop Reference Guide

As you add or modify table calculations, you choose a calculation type and then select the scope and direction. The calculation type is the computation that you want performed on your data in the view.

Calculation Types

The standard table calculation types are as follows:

Calculation Type	Description	Example	Calculation Type Options
Difference From	Computes the difference between the current value and another value in the table, i.e., absolute change.	To see by how much sales values go up or down from month-to-month during the course of each year.	Relative To For the calculation types that compute a difference, **Difference From**, **Percent Difference From**, and **Percent From**, you can choose which value to compute the difference from. The **Relative to** option default is **Previous**, but **Next**, **First**, and **Last** are also available as **Relative** to options.
Percent Difference From	Computes the difference between the current value and another value in the table as a percentage, i.e., rate of change.	To see how values change, in terms of a percentage from month-to-month during the course of each year. The **Compute compounded rate** option can be used to calculate year over year growth.	Compounded Rate For the **Percent Difference From** table calculation, the **Compute compounded rate** option can be used to calculate the rate of change as if it were consistent over the time period, for example, the average year over year growth rate. Relative To The Relative to option default is **Previous**, but **Next**, **First**, and **Last** are also available as **Relative** to options.

Percent From	Calculates an absolute change as a percent of a specified value.	Compare how each month's sales value differs from the previous month's value, as a percentage.	Relative To The **Relative to** option default is **Previous**, but **Next**, **First**, and **Last** are also available as **Relative to** options.
Percent of Total	Computes a value as a percentage of all values within the table structure.	See the percentage that each month's sales contributes to each year's total sales.	Relative To The **Relative to** option default is **Previous**, but **Next**, **First**, and **Last** are also available as **Relative to options**.
Rank	Computes a ranking for each value using the table structure.	See how each month within a given year ranks in total sales, from most sales (ranked 1) to least sales ranked 12).	Ascending and Descending For the **Rank** calculation type, you can choose whether you want the rank numbers to be Ascending (least to greatest) or **Descending** (greatest to least). The default value is **Descending**, where the highest value is assigned a 1. You can also change how duplicate values are handled using the **Competition** drop-down menu
Percentile	Computes a percentile rank for each value, below which a percentage of data falls, using the table structure.	Determine the percentage of test scores in its frequency distribution that are equal or lower than it. The top test score will have a percentile rank of 100% since it is greater than or equal to 100% of the test scores of people who took the test.	Ascending and Descending For the **Percentile** calculation type, you can choose whether you want the rank numbers to be **Ascending** (least to greatest) or **Descending** (greatest to least). The default value is **Ascending**, where the highest value is assigned the 100 percentile and the lowest value is assigned the 0 percentile.

Running Total	Computes a cumulative total using the table structure. Can also be used to compute averages or replace the greatest or least value using the table structure.	Calculate the cumulative sales for each quarter for several years.	Computation The **Running Total** table calculation is not limited to only computing sums. Other options to **Sum** include **Average** to average values or **Minimum** or **Maximum** to replace all values with either the lowest or highest actual value. Secondary Calculation Running total can also use a secondary calculation. The capability allows you to transform values twice to obtain the result you want.
Moving Calculation	Performs an aggregation (sum, average, minimum, or maximum) across a specified number of values before and/or after the current value.	Smooth short term fluctuations in your sales data so that you can see long term trends.	Computation The **Moving Calculation** table calculation allows you to summarize values using **Sum**, **Average**, **Minimum**, or **Maximum**. Use the **Previous values** and the **Next values** options to specify how many values should be included in each computation. The **Current value** check box enables you to include the current value in the calculation. Secondary calculation Moving calculations can also use a secondary calculation. The capability allows you to transform values twice to obtain the result you want.