

Calculated Fields

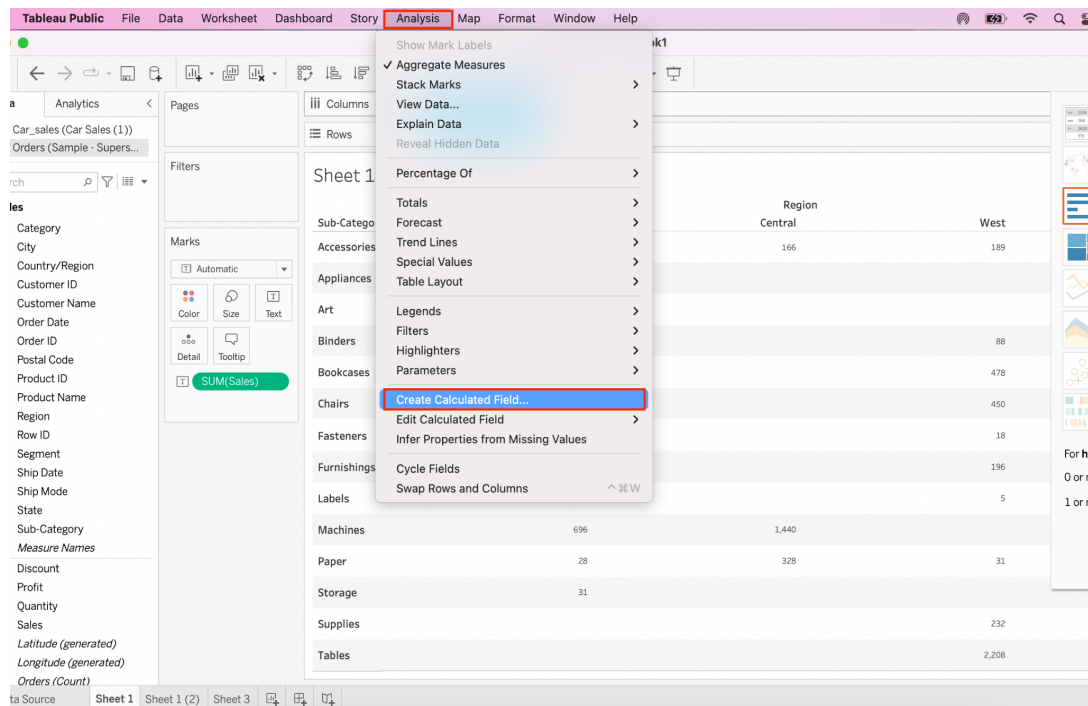
Sometimes, you do not have a few features in a dataset that might help you in an analyse. You need the person's age, but they have given you the date of birth in the dataset. To complete your analysis, you need to create that age feature with the DoB features. Here, Calculated fields help you, and you can use basic mathematical functions, LOD functions etc., to generate new columns.

You can use calculated fields for many, many reasons. Some examples might include:

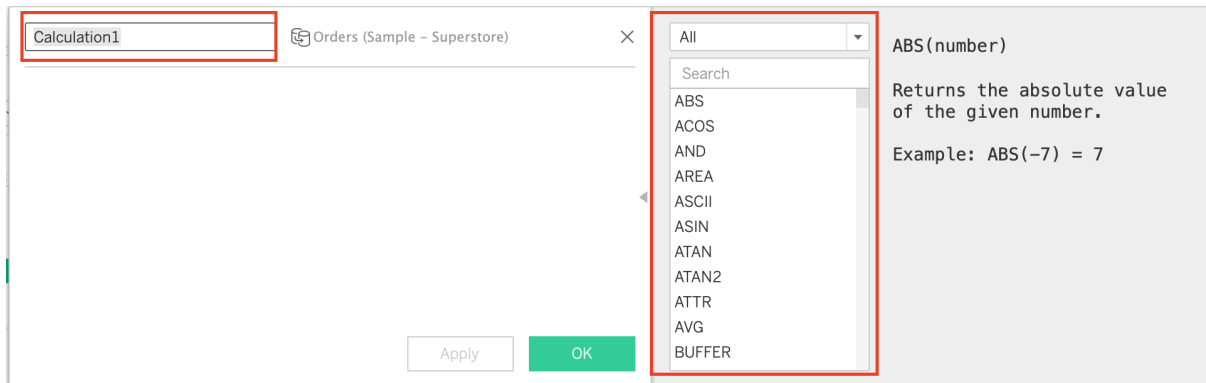
- To convert the data type of a field, such as converting a string to a date.
- To aggregate or segment the data
- To filter and calculate results

Steps for Calculation Field:

1. Click on the Analysis -> then click on Create Calculated fields

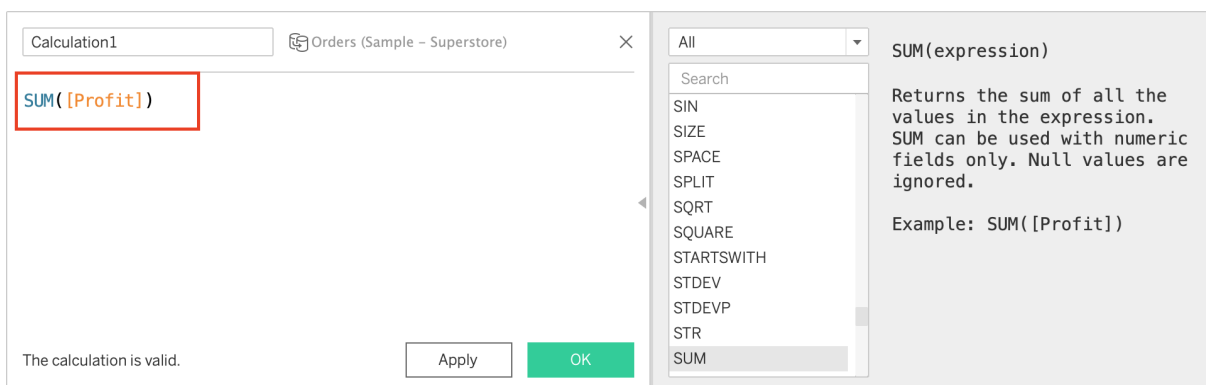


2. Once you click on create calculation field. One more screen will open.



In place of calculation1, write the feature name which you are creating. Also, on the left of this screen, you can see the name of the mathematical function you want to perform with the description and example.

3. You can define the function in the middle space of the screen.



As you can see in the image, we are doing the sum of the profit by using the SUM function. And on the left side, you can also see how we can define those functions with the expected output. Once you see "calculation is valid ", you can apply this and create a new column or feature.

Calculation building blocks

There are four basic components to calculations in Tableau:

- **Functions** - Statements used to transform the values or members in a field. E.g. SUM, IF, CASE, DATEIF etc.
- **Fields** - Dimensions or measures (columns) from your data source. Features name is created in the tableau or on which you want to perform the operations.
- **Operators** - Symbols that denote an operation. Eg. ==, < , > , <= etc.
- **Literal expressions** - Constant values that are represented "as is", such as "Profitable" and "Unprofitable". For E.g. this is helpful in if condition or CASE statement you want to write something new based on the results.
- **Parameters:** Placeholder variables can be inserted into calculations to replace constant values.
- **Comments**

Now let's take an example :

[Dataset](#)

Follow these steps in tableau public.

1. Click on analysis and click on the create calculated fields
2. Once the dialogue box opens, give the name to your calculator as profit ratio (this will be your new feature name)
3. Now, in the centre part, write the formula, so to calculate the profit ratio, you have to divide the sum of profit by the sum of sales. So write down

SUM(Profit) / SUM(Sales) // tableau will suggest you the parameter
automatically

4. As soon as you click on apply and ok. You can see that a new field has been created under the measure name profit ratio.
5. Now, you can plot to understand the profit ratio between regions and different subcategories.

Tableau Calculated fields