



# cheatsheet

Type	Note
Status	Completed

## 1. Basic Tableau Cheatsheet — Common Measures & Tasks

Task	How-To / Formula	Notes
<b>Top N Filter</b>	Drag dimension to Filters > Top tab > Top N by measure	Easy way to limit data
<b>% of Total</b>	Right-click measure > Quick Table Calc > % of Total	Shows proportion
<b>Running Total</b>	Quick Table Calc > Running Total	Cumulative sums
<b>Difference / Change</b>	Quick Table Calc > Difference or Percent Difference	Show changes over time
<b>Rank</b>	Quick Table Calc > Rank	Ranking values
<b>Average</b>	<code>AVG([Field])</code>	Calculate mean
<b>Count / Count Distinct</b>	<code>COUNT([Field])</code> / <code>COUNTD([Field])</code>	Total or unique counts
<b>IF Condition</b>	<code>IF [Field] &gt; 100 THEN "High" ELSE "Low"</code>	Categorize data
<b>Create BINs</b>	Right-click field > Create > Bins	For histograms
<b>Calculated Field</b>	Example: <code>[Sales] / [Profit]</code>	Custom formulas
<b>Filter by Date</b>	Drag date field > Filters	Filter by time

## 2. Extra Features to Know

Feature	Use Case / Notes
<b>Relative Date Filter</b>	Filter recent periods like last 7 days
<b>Parameters</b>	Create dynamic controls for measures, colors, filters
<b>Heatmap / Highlight</b>	Use colors to emphasize data

<b>Totals</b>	Analytics pane > Totals for row/column sums
<b>Dual Axis</b>	Combine 2 charts (bar + line)
<b>Dashboard Actions</b>	Add interactivity like click-to-filter
<b>Tooltip Customization</b>	Edit hover details
<b>Sort by Field</b>	Sort bars, rows easily

### 3. Step-By-Step Quick Guide to Common Tasks

#### Connect to Data

- Open Tableau > Connect to "Sample - Superstore Subset.xlsx"

#### Create Parameter for Measure or Top N

- Right-click Dimensions > Create Parameter
- Name it (e.g., "Choose Measure")
- Data type: String / Integer
- List values (e.g., Sales, Profit, Top 10)

#### Create Calculated Field with Parameter

```
CASE [Choose Measure]
WHEN 'Sales' THEN SUM([Sales])
WHEN 'Profit' THEN SUM([Profit])
END
```

#### Build Chart

- Drag Dimension (e.g., Region) to Columns
- Drag Calc Field to Rows
- Show Parameter Control
- Format axis titles with parameters

#### Apply Top N Filter

- Drag dimension to Filters
- Top tab > Top N by measure

## Use Parameter to Change Color

- Create parameter (e.g., target threshold)
- Calc field: `SUM([Sales]) > [Target]`
- Drag calc field to Color in Marks card
- Edit colors (True = green, False = gray)

## Dual Axis Chart with Parameter to Switch Chart Type

- Parameter for chart type (Bar/Line)
- Calc fields with IIF:

```
IIF([Chart Type] = 'Bar', SUM([Sales]), NULL)  
IIF([Chart Type] = 'Line', SUM([Sales]), NULL)
```

- Dual axis, synchronize, format marks accordingly

## 4. Other Useful Measures and Calculations

Measure Type	Formula / How to Use
Median	<code>MEDIAN([Field])</code>
Min / Max	<code>MIN([Field])</code> , <code>MAX([Field])</code>
Standard Deviation	<code>STDEV([Field])</code>
Percentile	<code>PERCENTILE([Field], 0.9)</code> (for 90th pct)
Window Calculations	<code>WINDOW_SUM()</code> , <code>WINDOW_AVG()</code> for running/windowed sums

## 5. Date Functions & Parameters

Task	Formula / Method
Extract Year	<code>YEAR([Date])</code>
Extract Month	<code>MONTH([Date])</code>
Date Difference	<code>DATEDIFF('day', [Start Date], [End Date])</code>
Use Date Parameter	For dynamic date filtering or range selection

## 6. String Parameters, Sets & Groups

- Use string parameters to let users pick dimensions or measures
  - Use Sets to group top customers or highlight parts of data
  - Use Groups to combine categories into simpler buckets
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## 7. Table Calculations to Remember

- Running Total
- Percent Difference From
- Rank
- Moving Average

Use "Quick Table Calculation" menu to apply these fast.

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## 8. Parameter-Driven Filters

- Dynamic Top N controlled by parameter
  - Threshold filters based on parameter value
  - Calculated fields flagging records above or below thresholds
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## 9. Interactivity & Dashboard Elements

- Show Parameter Controls for user choices
  - Filter and Highlight Actions for interactive dashboards
  - Customize tooltips for better info display
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## 10. Common Pitfalls

- Forgetting to synchronize dual axes
  - Mixing aggregates with raw fields in calculations
  - Not showing parameter control after creating parameter
  - Filter order mistakes (context vs normal filters)
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## From assignment

Top N Products

Edit Parameter [Top N Products]

Name

Top N Products

Properties

Data type

Integer

Display format

10

Current value

10

Value when workbook opens

Current value

Allowable values

☐ All
☐ List
☒ Range

Range of values

☒ Minimum

1

☒ Maximum

50

☒ Step size

1

☒ Fixed
☐ When workbook opens

Add values from

Cancel

OK

Is In Top N

[Product Sales Rank] <= [Top N Products]

Product Sales Rank

RANK\_UNIQUE(SUM([Total Sales]), 'desc')