

## Experiment 2: Formatting and insertion of data

You can quickly change how fonts, titles, and lines look in every view in a workbook by specifying format settings at the workbook level, instead of the worksheet level.

For example, you might want to use a specific font, size, and color so that all views adhere to your company's brand. You might also want to remove grid lines from your views—or make them more noticeable by increasing their pixel size or color.

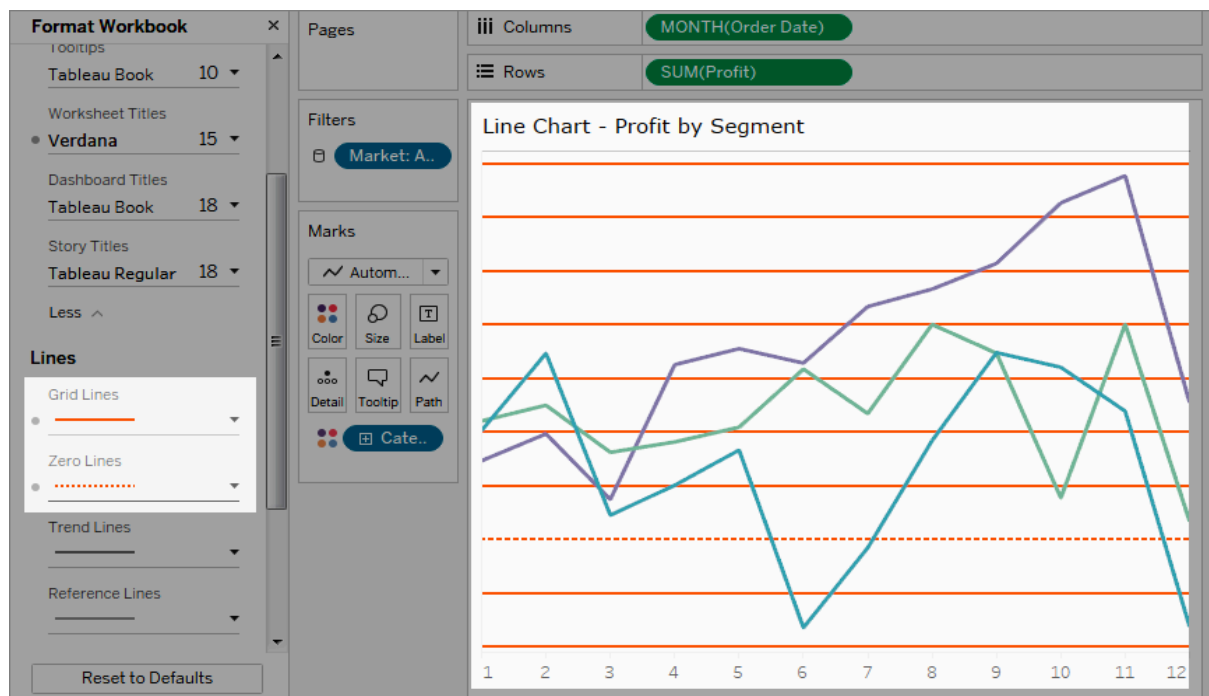
You can also change the theme used by your workbook. Themes control items like the default font, colors, and line thickness. When you create a new workbook, it automatically uses the Default theme, which uses visual best practices.

### Change lines in your workbook

You can change every type of line for all views in your workbook, or you can change just certain types of lines, such as trend lines. You can also turn off certain types of lines, including grid lines.

When you make changes to your workbook's line settings, a gray dot appears next to the setting in the Format Workbook pane. You can quickly switch back to default settings using the Reset to Defaults button.

1. On the Format menu, select Workbook.
2. The Format Workbook pane replaces the Data pane on the left and provides a series of drop-down lists where you can change all line settings in a workbook.



To confirm that your change has been applied to every view in your workbook, you can use thumbnails. Right-click a thumbnail, and select Refresh All Thumbnails.

### Change fonts in your workbook

You can change all fonts in your workbook or you can change fonts for only certain areas, such as just worksheet titles.

1. On the Format menu, select Workbook.
2. The Format Workbook pane replaces the Data pane on the left and provides a series of drop-down lists where you can change all font settings in a workbook, as well as the font settings for titles of worksheets, stories, and dashboards.

### **Steps to be Followed**

1. **Prepare Your Data:**
  - o Ensure your data is in a structured format, preferably in a spreadsheet like Excel or CSV.
  - o Make sure your data includes all relevant information for your lab experiment, such as variables, measurements, and any other relevant metrics.
2. **Open Tableau:**
  - o Launch Tableau Desktop or Tableau Public, depending on your version.
3. **Connect to Your Data Source:**
  - o In Tableau, go to the "Connect" pane.
  - o Choose the appropriate data source type (Excel, CSV, Database, etc.).
  - o Navigate to your data file and select it.
  - o Follow the prompts to connect to your data.
4. **Format Your Data:**
  - o Once your data is loaded into Tableau, review it to ensure it's correctly formatted.
  - o Check for any missing or erroneous values and clean your data if necessary.
  - o Rename fields and assign appropriate data types (e.g., dimensions for categorical data, measures for numerical data).
5. **Create Worksheets:**
  - o Click on the "Sheet" tab to create a new worksheet.
  - o Drag and drop fields from the Data pane onto Rows and Columns to create visualizations.
  - o Experiment with different chart types (e.g., bar charts, line charts, scatter plots) to represent your data effectively.
6. **Customize Visualizations:**
  - o Format your visualizations by adjusting colors, labels, and other properties to make them more visually appealing and informative.
  - o Add titles, annotations, and legends to clarify the meaning of your visualizations.
7. **Combine Worksheets into Dashboards:**
  - o Once you've created individual worksheets, you can combine them into a dashboard to present your experiment's data comprehensively.
  - o Click on the "Dashboard" tab and drag worksheets onto the dashboard canvas.
  - o Arrange and resize the worksheets to create a layout that suits your needs.
  - o Add text boxes, images, or other elements to provide context or instructions.
8. **Share Your Work:**
  - o Once you're satisfied with your dashboard, you can share it with others by publishing it to Tableau Server or Tableau Public.
  - o Alternatively, you can export your dashboard as an image, PDF, or interactive web page to share via email or other platforms.

By following these steps, you should be able to format and insert your data into Tableau and create visually compelling visualizations and dashboards to analyze and present your findings.

