**🚗 Power BI Chapter: Vehicle Data – Line Chart with Secondary Y-Axis & Formatting**

**🔹 1. Data Preparation in Power Query**

**✅ Check and Correct Data Types**

* Go to **Transform Data** → Power Query Editor
* Check data types for:
  + Price Each → Should be **Whole Number** or **Decimal Number**
  + Quantity Ordered → Should be **Whole Number**
* If incorrect:
  + Select column → Click **Data Type icon** → Change to correct numeric type

**🔹 2. Creating a Line Chart**

**✅ Visual Setup:**

* Use a **Line Chart** from the Visualizations pane

**Example:**

* **X-Axis** → Date or Month
* **Y-Axis** → Quantity Ordered

**Adding Another Line (Secondary Axis):**

* Drag Price Each or Revenue into the **Secondary Values** field
* The chart now has:
  + Left Y-axis: Quantity Ordered (Primary)
  + Right Y-axis: Price Each (Secondary)

**⚠️ Important Note:**

* You **cannot use both** a **Legend** and a **Secondary Y-axis** at the same time in a Line Chart.
* If you add a secondary axis, Power BI will automatically **disable the legend**.

**🔹 3. Visual Formatting – Line Chart**

Use the **Format tab (🖌️)** to style your chart:

| **Section** | **What You Can Do** |
| --- | --- |
| **Title** | Rename the chart (e.g., “Quantity vs Price Over Time”), adjust font, color, alignment |
| **X-Axis** | Format date labels (rotation, font size), show/hide title |
| **Y-Axis (Primary)** | Style axis title, gridlines, font |
| **Y-Axis (Secondary)** | Control line style, scale, and axis display |
| **Data Labels** | Turn on for clarity if needed |
| **Line Style** | Change thickness, color, dashed/solid lines |
| **Tooltip** | Enable hover info to show exact values |
| **Background/Border** | Style the overall visual container |

**✅ Example Use Case**

**Chart Goal:** Compare how quantity ordered and unit price changed over time.

| **Visual Feature** | **Field** |
| --- | --- |
| X-Axis | Order Date |
| Y-Axis (Primary) | Quantity Ordered |
| Y-Axis (Secondary) | Price Each |
| Title | “Monthly Trends – Quantity vs Price” |
| Formatting | Dual Y-axes, consistent colors, clean fonts |