**Data Analysis Report:**

**1. Mean, Median, Mode, and Standard Deviation Analysis:**

**Sales:**

• Mean Sales:

• Median Sales:

• Mode Sales:

• Standard Deviation of Sales:

**2. Data Transformation:**

• Sales Format: Converted 'Sales' column values to dollar amounts.

• Top 5 Sub-Categories: Analyzed and displayed top 5 sub-categories based on sales.

• Profit by Category Trend: Analyzed the trend of profit by category using a line plot.

• Sales and Profit Relationship: Explored the relationship between sales and profit using a scatter plot.

• Top Selling Regions: Identified and visualized the distribution of sales across the top 3 selling regions using a box plot.

**3. Graphical Representations:**

• Bar Chart - Top 5 Sub-Categories by Sales: Displayed sales comparison across the top five sub- categories.

• Line Plot - Trend of Profit by Category: Presented the trend of profit across different categories over time.

• Scatter Plot - Relationship between Sales and Profit: Illustrated the relationship between sales and profit using a scatter plot with custom bubble colors.

• Box Plot - Distribution of Sales across Top Selling Regions: Visualized the distribution of sales across the top selling regions.

This report provides a concise summary of the mean, median, mode, standard deviation, data transformations, and graphical representations carried out on the dataset.