

# Mercedes Product Sales Analysis (2020–2025)

## Power BI DAX Explanation Guide

### Total Sales

```
SUM(mercedes_cleaned[sales_volume])
```

Adds all sales volume values to calculate total units sold across the dataset.

### Estimated Revenue

```
SUMX(mercedes_cleaned, mercedes_cleaned[base_price] * mercedes_cleaned[sales_volume])
```

Calculates revenue row-by-row by multiplying base price with sales volume, then sums the results.

### Average Base Price

```
AVERAGE(mercedes_cleaned[base_price])
```

Calculates the average base price across all models.

### Total Models

```
DISTINCTCOUNT(mercedes_cleaned[model])
```

Counts unique models in the dataset.

### Electric Sales

```
CALCULATE([Total Sales], mercedes_cleaned[fuel_type] = "Electric")
```

Calculates total sales but filters only Electric vehicles using CALCULATE.

## Electric Share %

```
DIVIDE([Electric Sales], [Total Sales])
```

Computes the percentage of total sales that come from Electric vehicles.

## Turbo %

```
DIVIDE(CALCULATE([Total Sales], mercedes_cleaned[turbo] = "Yes"), [Total Sales])
```

Calculates percentage contribution of Turbo vehicles in total sales.

## Revenue Rank

```
RANKX(ALL(mercedes_cleaned[model]), [Estimated Revenue], , DESC)
```

Ranks models based on revenue from highest to lowest.

## Sales Rank

```
RANKX(ALL(mercedes_cleaned[model]), [Total Sales], , DESC)
```

Ranks models based on total sales volume.

## Price Rank

```
RANKX(ALL(mercedes_cleaned[model]), [Avg Base Price], , DESC)
```

Ranks models based on average base price.

## Previous Year Sales

```
CALCULATE([Total Sales], FILTER(ALL(mercedes_cleaned[year]), mercedes_cleaned[year] = MAX(mercedes_cleaned[year] - 1)))
```

Retrieves sales from the previous year dynamically for time comparison.

## YoY Growth %

```
DIVIDE([Total Sales] - [Previous Year Sales], [Previous Year Sales])
```

Calculates year-over-year growth percentage.

## HP Bucket (Calculated Column)

```
SWITCH(TRUE(), horsepower < 200, "Low Power", horsepower < 350, "Mid Power", horsepower < 500, "High Power",
```

Categorizes horsepower into performance segments for grouped analysis.

## Ultra Luxury Share %

```
DIVIDE(CALCULATE([Total Sales], price_category = "Ultra Luxury"), [Total Sales])
```

Calculates percentage of total sales from Ultra Luxury category.

## Model Sales Volatility

```
STDEVX.P(VALUEs(mercedes_cleaned[year]), [Total Sales])
```

Measures stability by calculating standard deviation of yearly sales per model.