

## 1. Difference between Relative, Absolute, and Mixed Cell Referencing

- Relative Cell Reference (A1):

Changes automatically when a formula is copied to another cell.

Example:  $=A1+B1 \rightarrow$  copied down becomes  $=A2+B2$ .

- Absolute Cell Reference (\$A\$1):

Remains fixed even when the formula is copied.

Example:  $=$A$1+$B$1$ .

- Mixed Cell Reference (\$A1 or A\$1):

Either the row or column remains fixed.

$$A1 \rightarrow$  Column fixed, row changes

$A\$1 \rightarrow$  Row fixed, column changes

## 2. Formula to Calculate Total Sales of Car and Bicycle Only

Assuming:

Prices are in B2:B4

Car is in B2

Bicycle is in B3

Formula:

$=SUM(B2:B3)$

### **3. Formula to Calculate Average Sales of Items Priced Above 100 but Less Than 300**

Assuming:

Prices in B2:B4

Sales in C2:C4

Formula (using AVERAGEIFS):

=AVERAGEIFS(C2:C4, B2:B4, ">100", B2:B4, "<300")

### **4. Count How Many Customer Names Are Recorded**

Assuming customer names are in Column A:

=COUNTA(A:A)

### **5. Calculate Total Sales for Each Row**

If:

Quantity in C

Price in D

Formula (Row 2):

=C2\*D2

Copy the formula down for all rows.

### **6. Total Sales of Notebooks in the North Region Only**

Assuming:

Product column = B

Region column = C

Total Sales column = E

Formula:

=SUMIFS(E:E, B:B, "Notebook", C:C, "North")

## 7. Create a Column Chart Showing Total Sales by Product

Steps:

Select Product and Total Sales columns.

Go to Insert → Charts.

Choose Column Chart → Clustered Column.

Add chart title: “Total Sales by Product”.

## 8. Insert a Line Chart Showing Daily Sales Trend

Steps:

Select Date and Sales columns.

Go to Insert → Charts.

Choose Line Chart.

Add chart title: “Daily Sales Trend”.