Business Analytics with Excel

Dashboarding

Learning Objectives

By the end of this lesson, you will be able to:

- Define dashboards
- Classify the principles of dashboard design
- Create interactive charts in excel and format them
- Describe how to use form controls such as combo box, check box, and radio button
- Construct an interactive dashboard

A Day in the Life of Business Analyst

As a business analyst of an organization:

You are required to create a dashboard with reports on sales by region, month, and employee.

Also, the reports must be intuitive and contain various parameters and filters. It should also be dynamic and avoid unnecessary information.

To achieve these tasks, you will be learning a few concepts, such as dashboard, chart creation, chart formatting and form controls.

DATA AND
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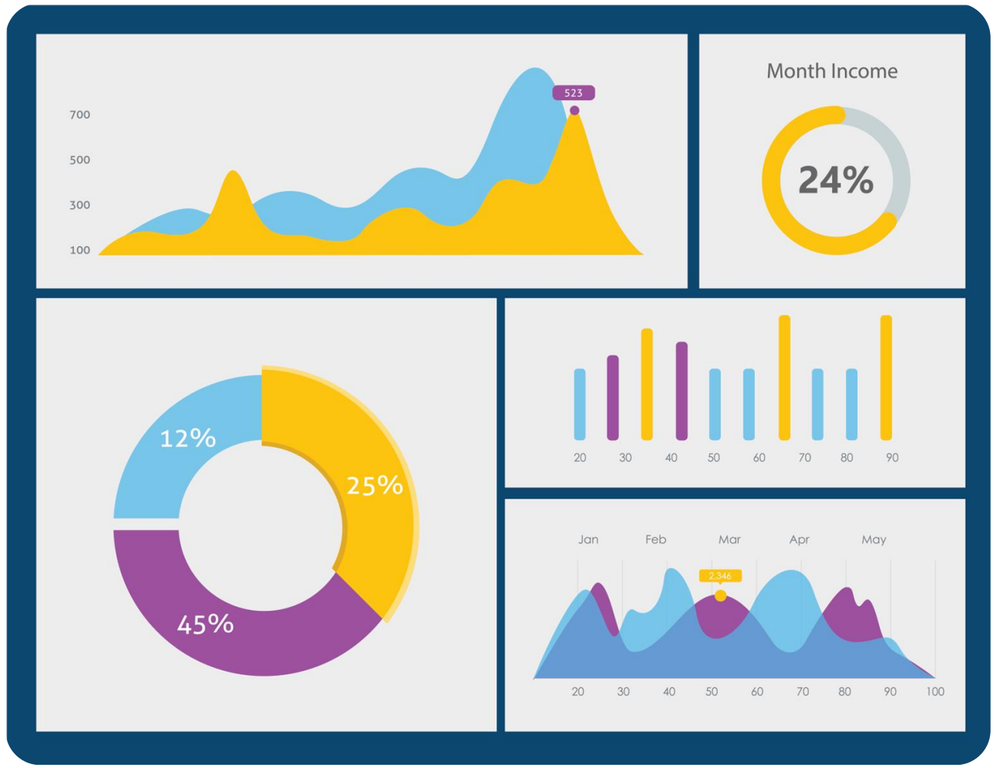
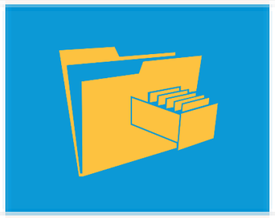
Dashboarding

What Is a Dashboard?

A dashboard is a real-time tool with an easy-to-use user interface that displays data in a graphical format.



Dashboard



Dashboards are an efficient way to turn data into actionable insights.

Dashboard reports are very popular these days.

Dashboard

Dashboards are incisive in validating the effectiveness of the matrices.

Dashboards help consolidate and organize these metrics through a summary.

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Principles of Dashboard Design

Dashboard Design

An appropriately designed dashboard can:

Quicken decision-making process

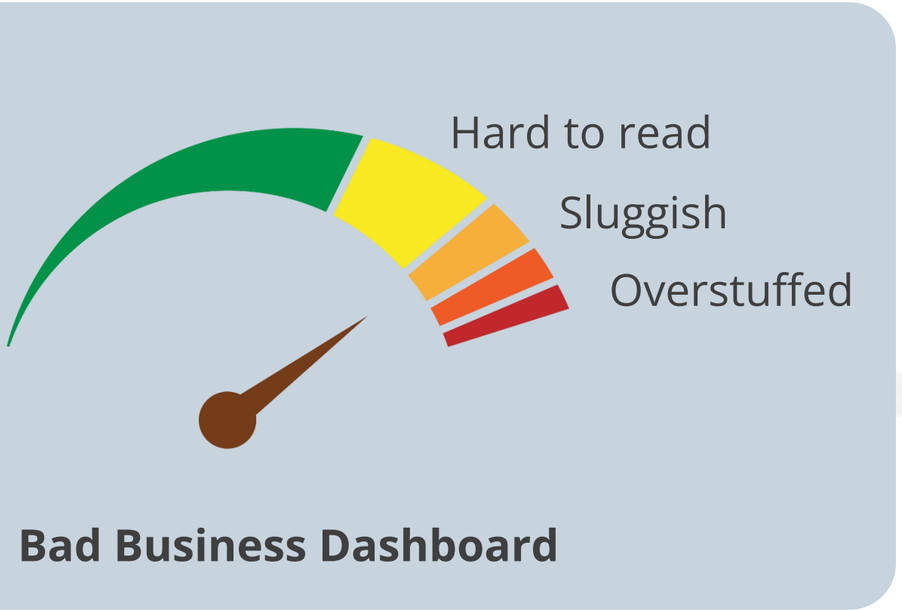
Provide better coordination for an organization's efforts

Record the performance outcome

Principles of Dashboard: Need

A good business dashboard is an indispensable tool when designed appropriately.

Good Business Dashboard



Bad Business Dashboard

A good dashboard presents the right data sets seamlessly and understandably.

Principles of Great Dashboard: Points to Consider

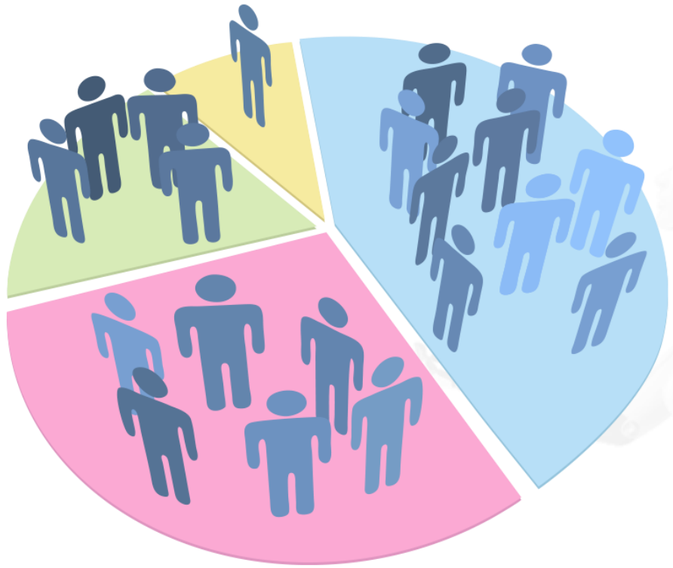
Who is the audience?

The dashboard must be designed keeping in mind the target audience.

Principles of Great Dashboard: Points to Consider

Example

- For CEO-level dashboards, business-level analysis should be included.
- For managerial-level dashboards, associate-level analysis can be included.



Principles of Great Dashboard: Points to Consider

What value will the dashboard add?

Decide which key performance indicators need to be added in a dashboard.

Principles of Great Dashboard: Points to Consider

Example

Row Labels	Column Labels: Middle – Sum of Net Sales	Middle – Sum of Profit / Loss	North – Sum of Net Sales	North – Sum of Profit / Loss	West – Sum of Net Sales	West – Sum of Profit / Loss	Total Sum of Net Sales	Total Sum of Profit / Loss
Adam	**362,422.8**	**140,046.3**	**439,782.3**	**142,562.7**	**451,979.5**	**143,685.7**	**1,254,184.5**	**426,294.7**
Product1	108,273.5	46,283.3	132,951.8	39,662.2	150,989.5	50,159.3	392,214.8	136,104.8
Product2	123,051.8	47,069.0	130,070.5	52,046.6	168,580.5	43,343.0	421,702.8	142,458.6
Product3	131,097.5	46,693.9	176,760.0	50,853.9	132,409.5	50,183.4	440,267.0	147,731.2
Calvin	**407,584.5**	**161,995.8**	**439,990.0**	**164,803.5**	**424,312.8**	**158,229.4**	**1,271,887.3**	**485,028.6**
Product1	147,964.3	44,320.4	153,243.5	50,553.1	142,755.0	50,029.3	443,962.8	144,902.8
Product2	123,420.5	55,337.9	154,757.0	61,653.5	129,198.8	49,847.3	407,376.3	166,838.8
Product3	136,199.8	62,337.5	131,989.5	52,596.9	152,359.0	58,352.7	420,548.3	173,287.1
Daniel	**402,618.8**	**150,605.2**	**418,069.3**	**145,912.1**	**357,321.3**	**140,789.6**	**1,178,009.3**	**437,307.0**
Product1	130,747.0	50,333.2	151,175.5	48,560.5	142,111.0	58,975.3	424,033.5	157,869.0
Product2	150,461.3	54,891.4	148,657.8	55,102.8	118,843.5	49,013.6	417,962.5	159,007.8
Product3	121,410.5	45,380.6	118,236.0	42,248.8	96,366.8	32,800.7	336,013.3	120,430.2
Henry	**469,768.0**	**160,245.3**	**445,709.3**	**148,871.8**	**427,216.8**	**150,783.8**	**1,342,694.0**	**459,900.9**
Product1	166,716.0	57,821.6	141,242.3	44,309.8	145,047.5	50,961.5	453,005.8	153,092.8
Product2	149,169.5	47,972.8	147,024.0	49,565.8	153,803.5	64,803.1	449,997.0	162,341.7
Product3	153,882.5	54,451.0	157,443.0	54,996.2	128,365.8	35,019.2	439,691.3	144,466.4
Justin	**436,253.5**	**152,858.5**	**376,208.5**	**144,276.8**	**359,283.0**	**161,072.6**	**1,171,745[illegible]**	[illegible]
Product1	141,766.5	41,134.5	140,155.0	63,721.5	126,560.8	48,486.6	408,482[illegible]	[illegible]
Product2	137,154.3	57,322.9	112,392.8	36,545.1	124,501.3	56,318.0	374,048[illegible]	[illegible]
Product3	157,332.8	54,401.0	123,660.8	44,010.1	108,221.0	56,268.1	389,214.5	154,679.2
Paul	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

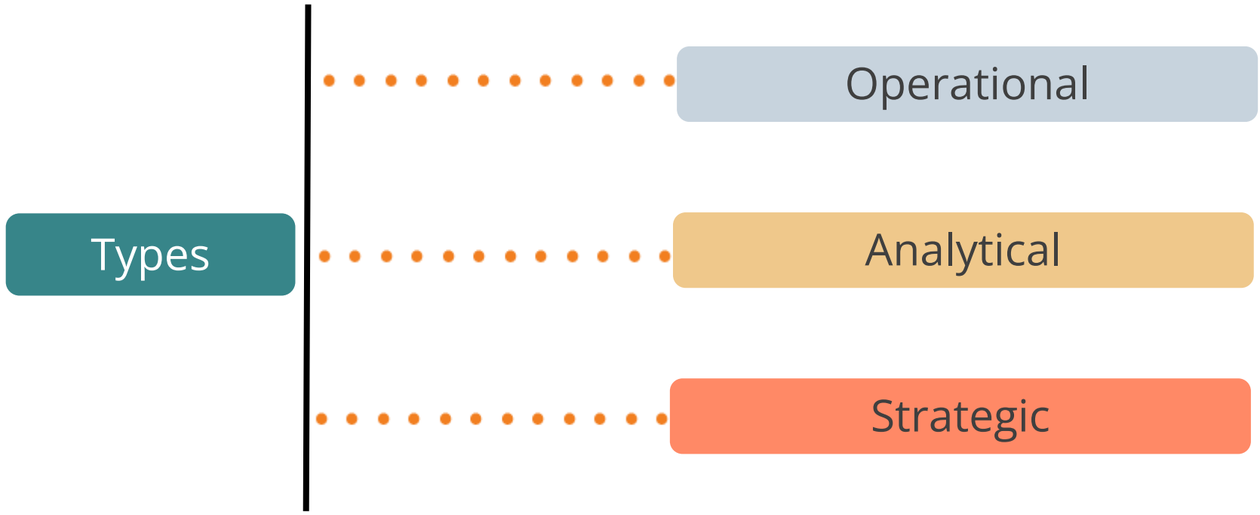
Management can see trends and take actions accordingly.

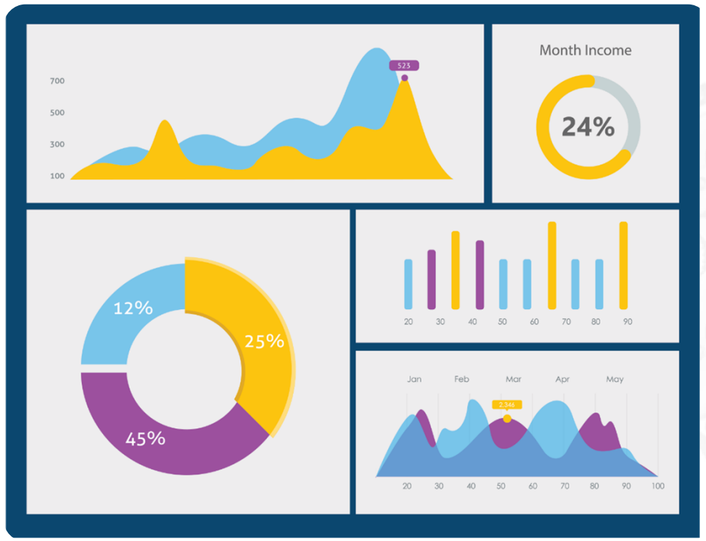
Principles of Great Dashboard: Points to Consider

Which type of dashboard should be created?

Decide the type of dashboard required based on the target audience.

Principles of Great Dashboard: Points to Consider





Principles of Great Dashboard: Points to Consider

Why no scrolling?

It is best to be able to see all the data at once. Fragmentation of data should be avoided.

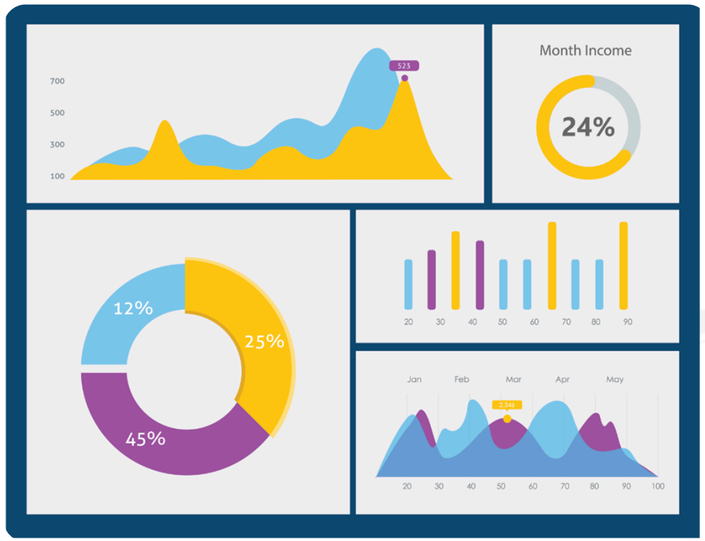
Principles of Great Dashboard: Points to Consider

What should be added to have drill-down capabilities?

It’s good to add form controls in the dashboard, to have drill-down capabilities.

Principles of Great Dashboard: Points to Consider

These controls enable users to drill down the data and see the result.



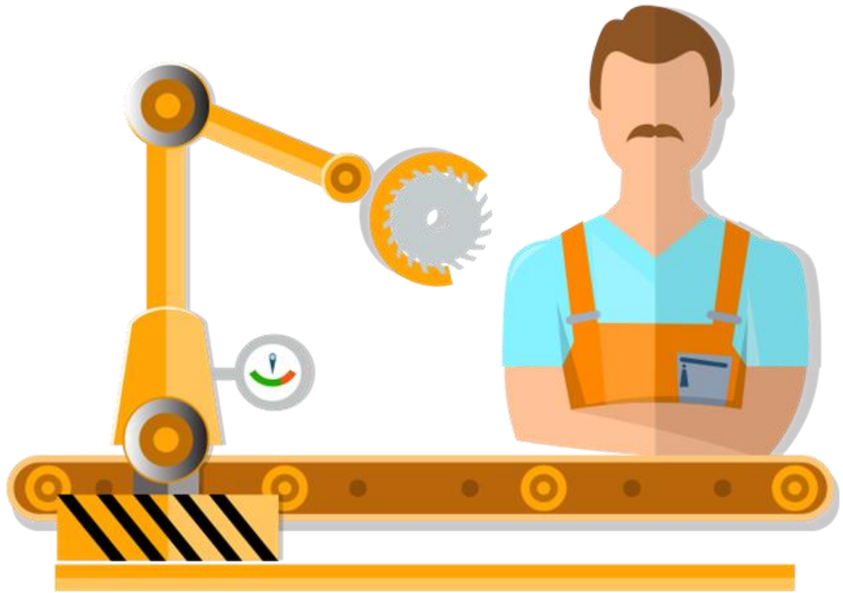
Principles of Great Dashboard: Points to Consider

What type of information should be added?

It’s good to include information that prompts the user to initiate an action.

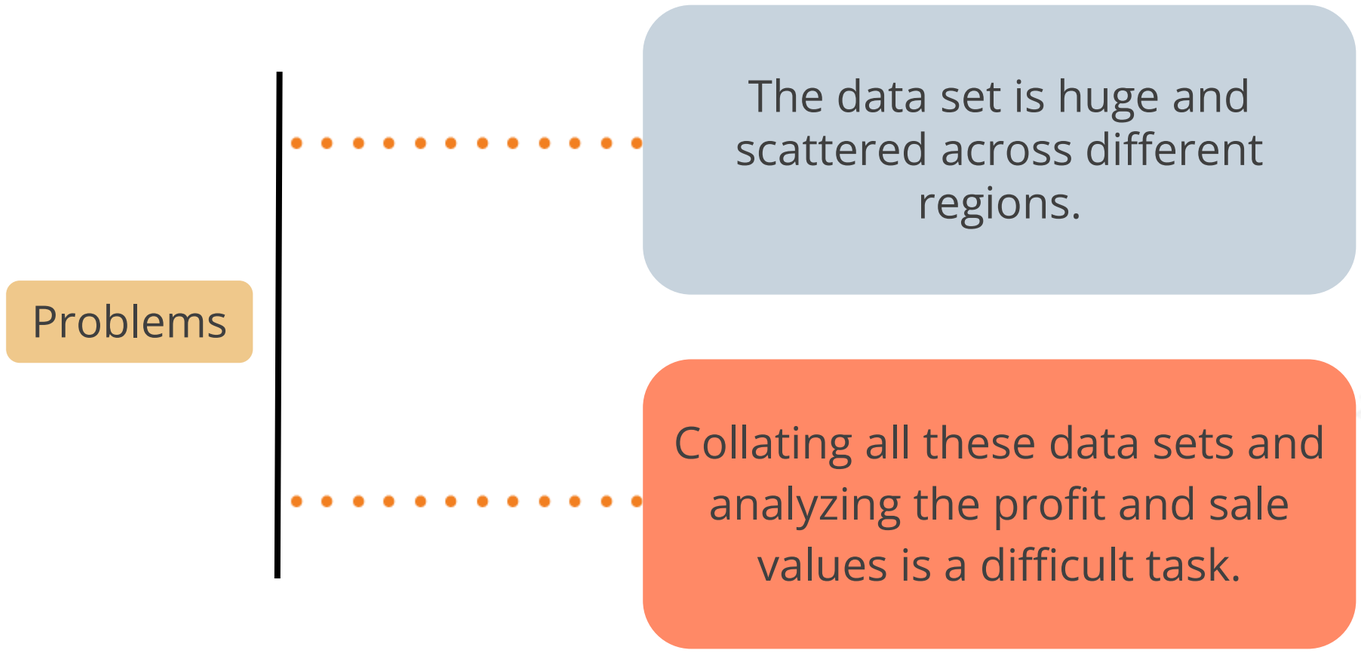
Dashboarding: Example

A large automobile component manufacturer is looking for a detailed analysis of profit or sales across various regions in a product-wise manner.



Automobile component manufacturer

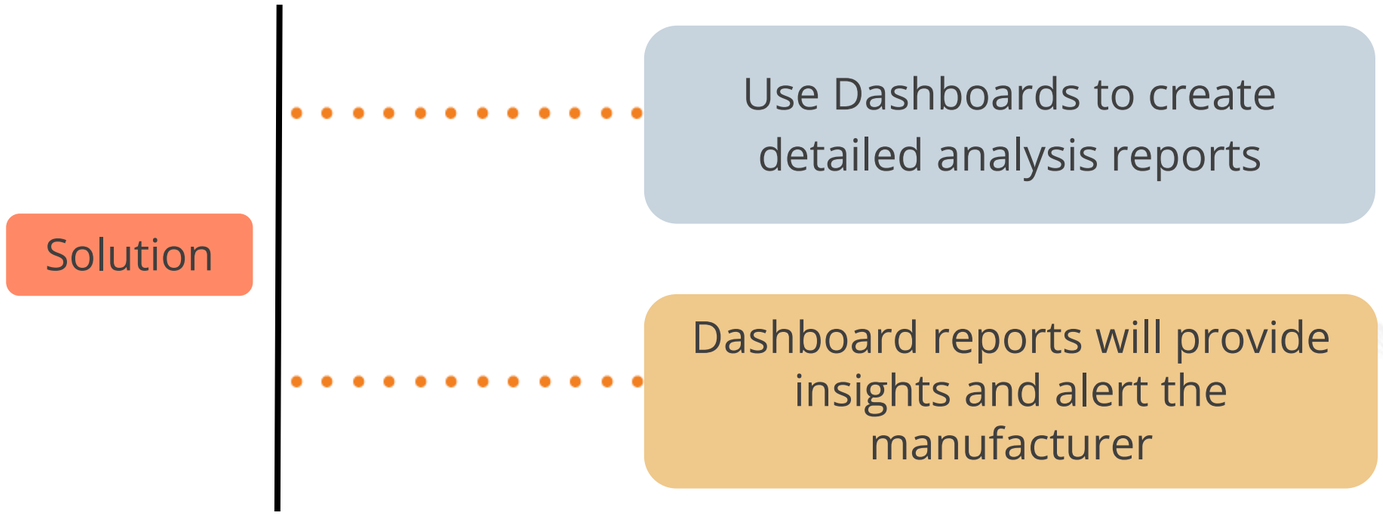
Dashboarding: Example



Dashboarding: Example

Using dashboards, the data visualization tool of Excel, the following outputs can be created:

Dashboarding: Example



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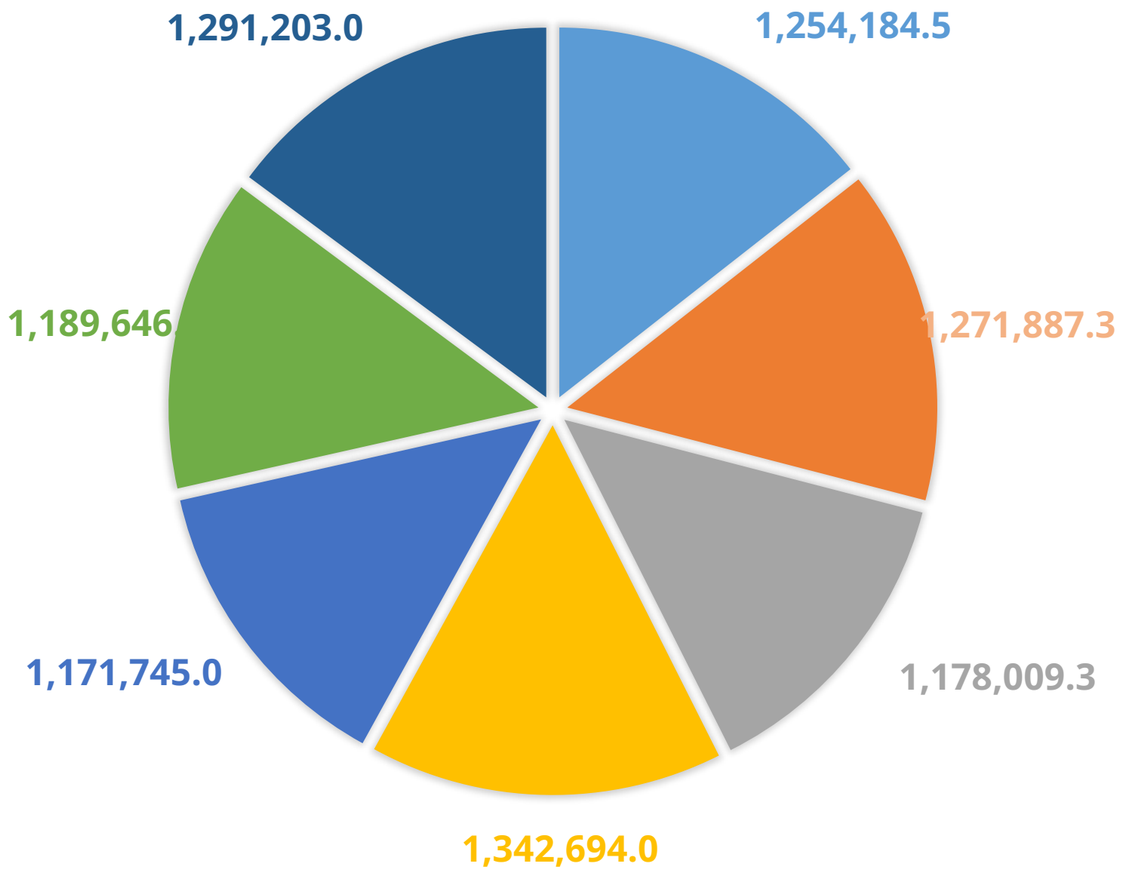
Creating Charts in Excel

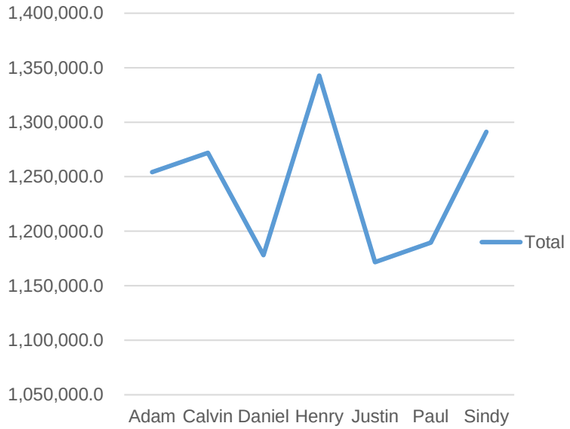
Why Use Charts?

Charts represent data graphically, making it easy to analyze comparisons and trends.

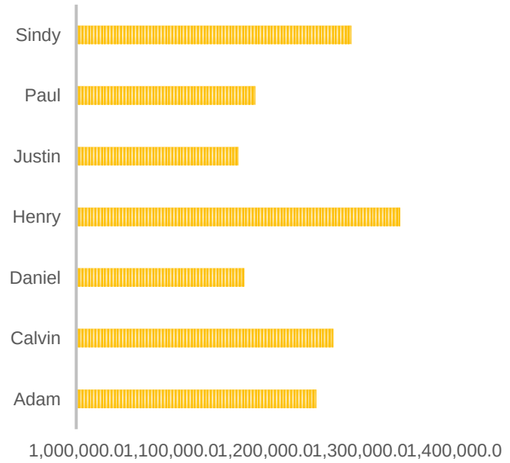


Charts: Types

Line Chart

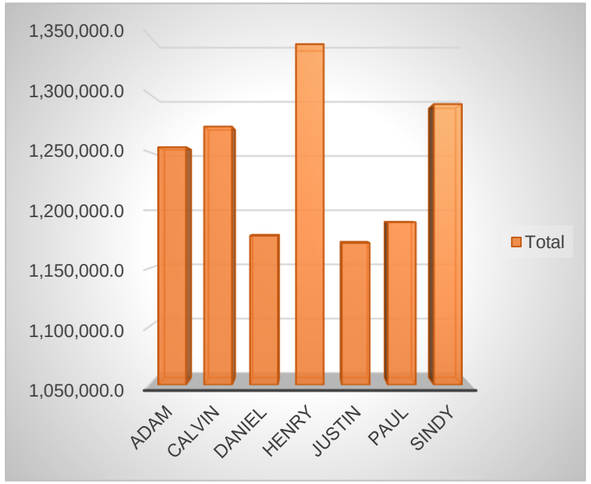


Column Chart

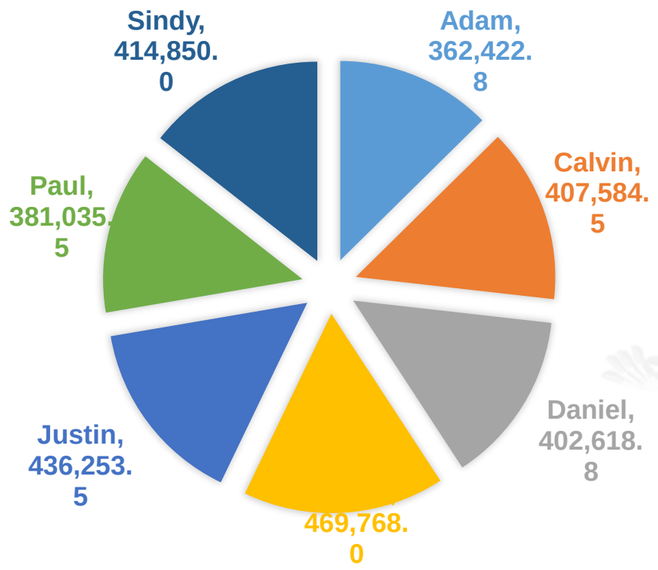


Charts: Types

Bar Chart



Pie Chart



Charts: Types

Column Chart

Works with various data types and performs comparisons between them

Line Chart

Depicts trends in data and illustrates its progression over time

Pie Chart

Compares proportion of each category, where each category is shown as a slice of a pie

Bar Chart

Compares data by displaying values either horizontally or vertically with respect to a categorical value

Assisted Practice: Create Charts in Excel

Problem statement:

Demonstrate How to Create Charts in Excel

ASSISTED PRACTICE

Assisted Practice Guidelines

Steps to follow:

Step 1: Open the Excel file

Step 2: Create a chart

ASSISTED PRACTICE

Assisted Practice: Apply Chart Formatting

Problem statement:

Demonstrate how to apply chart formatting in Excel.

ASSISTED PRACTICE

Assisted Practice Guidelines

Steps to follow:

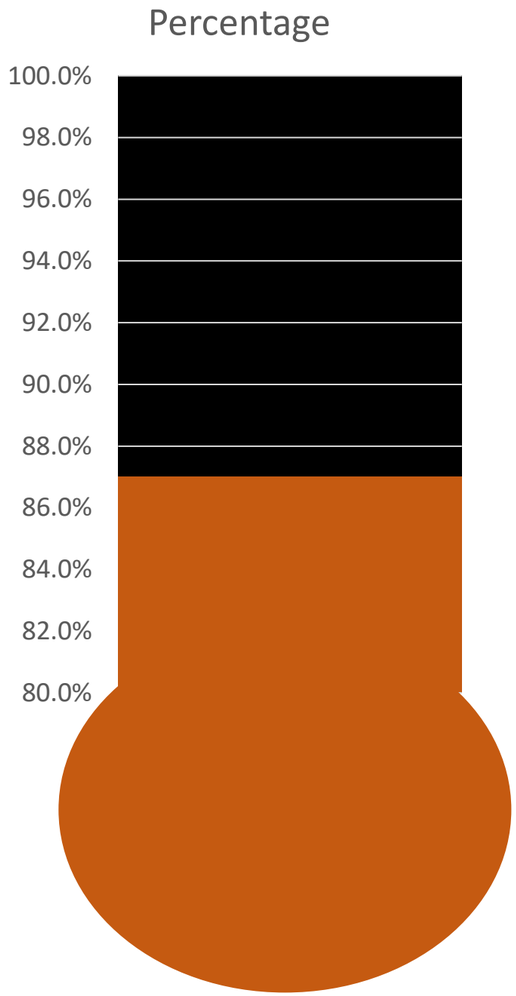
Step 1: Open the Excel file

Step 2: Create a chart and apply formatting

ASSISTED PRACTICE

Thermometer Chart

Thermometer Chart: Introduction



A thermometer chart is used to represent data containing the actual and target value.

This chart shows how much has been achieved from the target.

Assisted Practice: Create a Thermometer Chart

Problem statement:

Demonstrate how to create a thermometer chart in Excel.

ASSISTED PRACTICE

Assisted Practice Guidelines

Steps to follow:

Step 1: Open the Excel file

Step 2: Create a thermometer chart

ASSISTED PRACTICE

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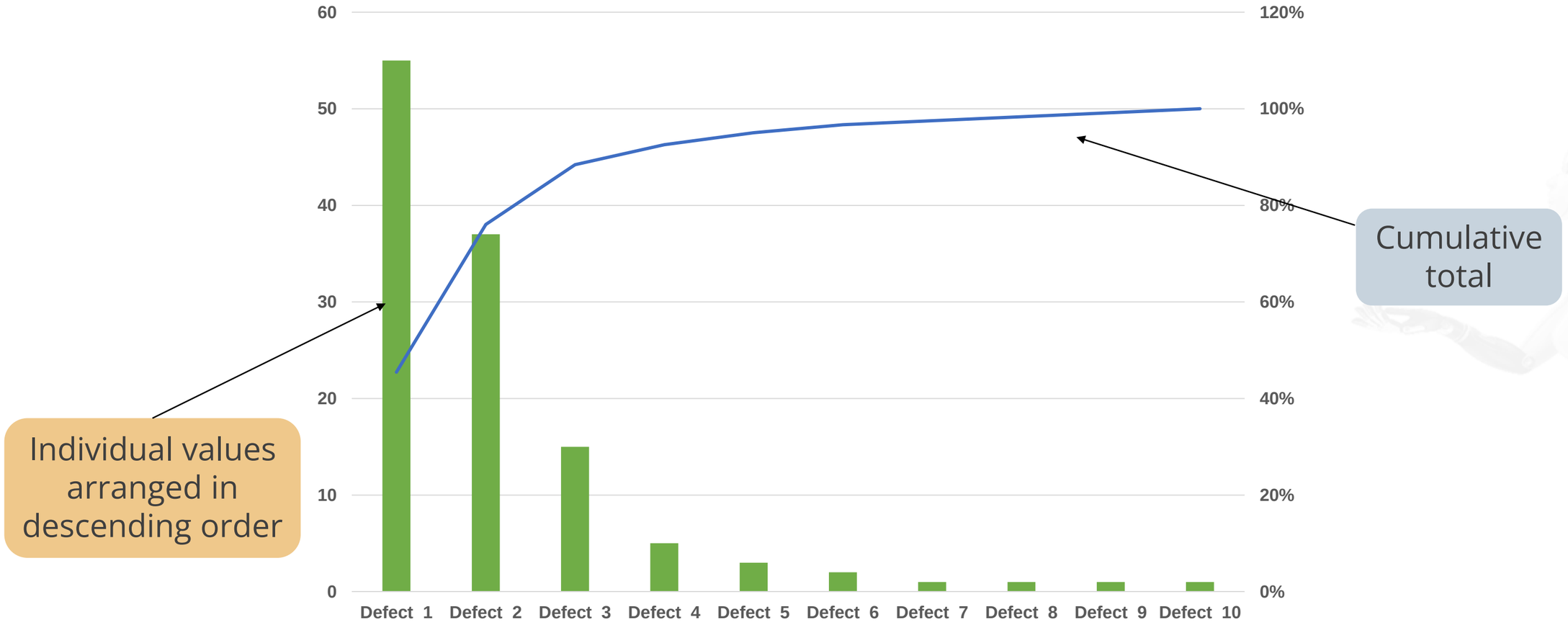
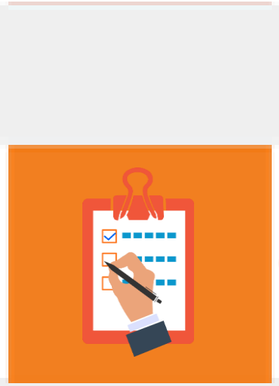
Pareto Chart

Pareto Chart: Introduction

A pareto chart contains both a column chart and a line graph.



Pareto Chart: Introduction



The purpose of the pareto chart is to highlight the most important factor among a set of factors.

It is used as a basic tool for quality control. It allows us to easily determine the common issues.

Assisted Practice: Create a Pareto Chart

Problem statement:

Demonstrate How to Create a Pareto Chart in Excel.

ASSISTED PRACTICE

Assisted Practice Guidelines

Steps to follow:

Step 1: Open the Excel file

Step 2: Create a Pareto chart

ASSISTED PRACTICE

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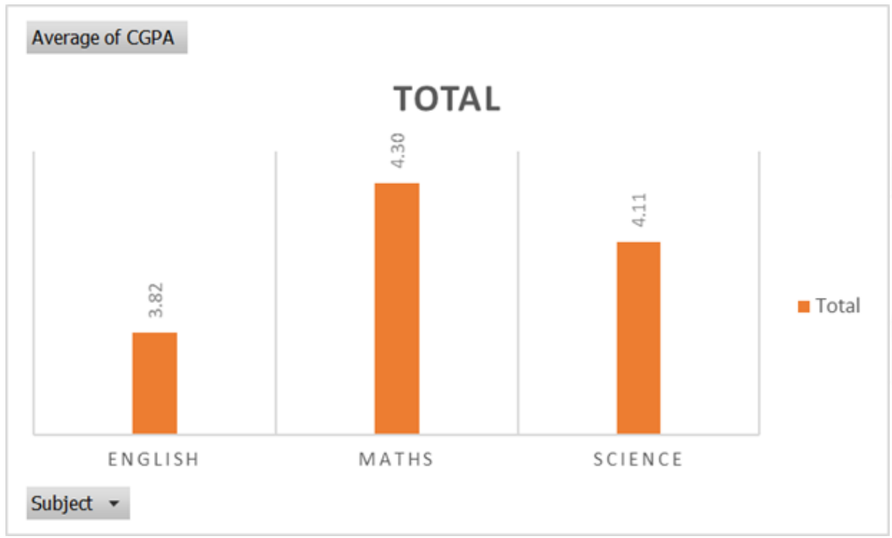
Pivot Chart

simplilearn

Pivot Chart

It is a virtual representation of a pivot table.

Subject	Average of CGPA
English	3.82
Maths	4.30
Science	4.11
Grand Total	**4.08**



Pivot Chart

Pivot tables summarize the base data.

Subject	Average of CGPA
English	3.82
Maths	4.30
Science	4.11
Grand Total	**4.08**

Pivot Chart: Example

The table below shows sales data by region.

	A	B	C	D	E	F	G	H
1	**Dates**	**Order ID**	**Product**	**Salesman**	**Region**	**No. Customers**	**Net Sales**	**Profit / Loss**
2	1-Jan-12	1111	Product1	Adam	North	8	7,164.0	844.2
3	2-Jan-12	1112	Product2	Adam	North	8	6,528.0	3,376.6
4	3-Jan-12	1113	Product3	Adam	West	8	2,520.0	2,280.0
5	5-Jan-12	1115	Product2	Adam	West	10	9,660.0	1,737.4
6	6-Jan-12	1116	Product3	Adam	Middle	10	11,550.0	854.7
7	7-Jan-12	1117	Product1	Adam	Middle	7	7,896.0	2,565.4
8	8-Jan-12	1118	Product2	Adam	Middle	7	8,095.5	1,063.2

Steps to Create a Pivot Chart

Step 1: Press control + A to select all data

	A	B	C	D	E	F	G	H
1	**Dates**	**Order ID**	**Product**	**Salesman**	**Region**	**No. Customers**	**Net Sales**	**Profit / Loss**
2	1-Jan-12	1111	Product1	Adam	North	8	7,164.0	844.2
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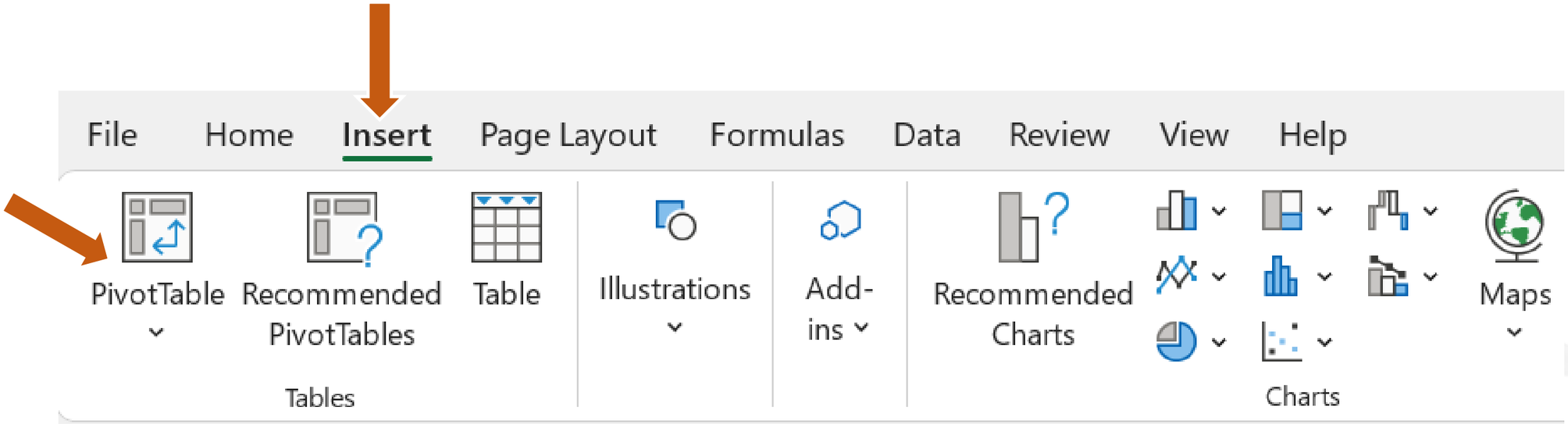
8	8-Jan-12	1118	Product2	Adam	Middle	7	8,095.5	1,063.2

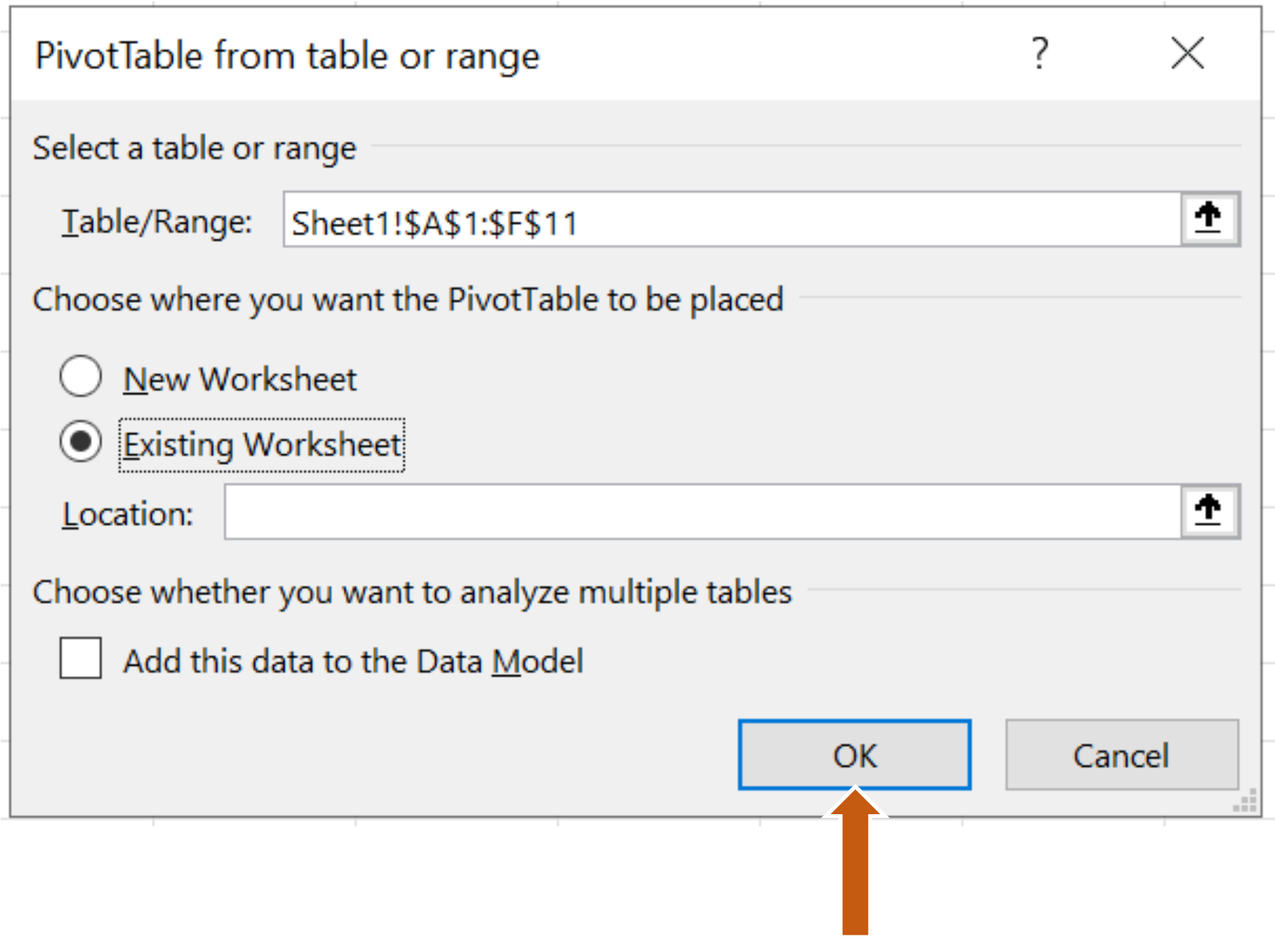
Steps to Create a Pivot Chart

Step 2: Click on the Insert tab and then on PivotTable

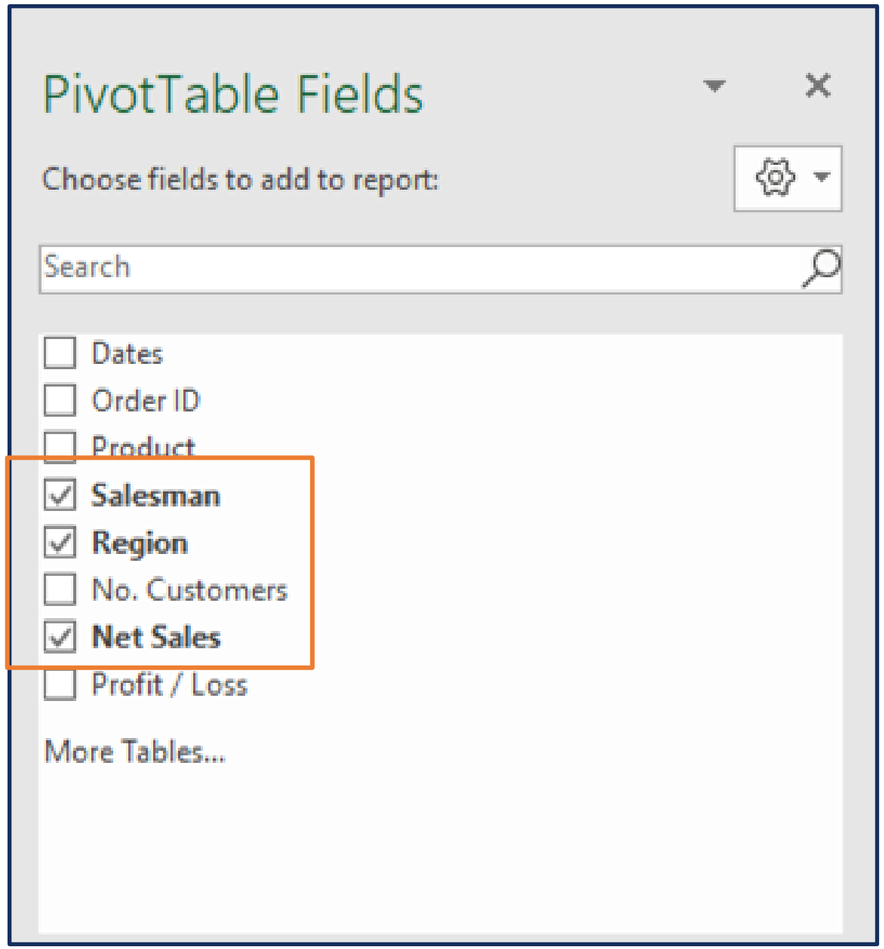


Steps to Create a Pivot Chart

Step 3: Click OK in the dialog box

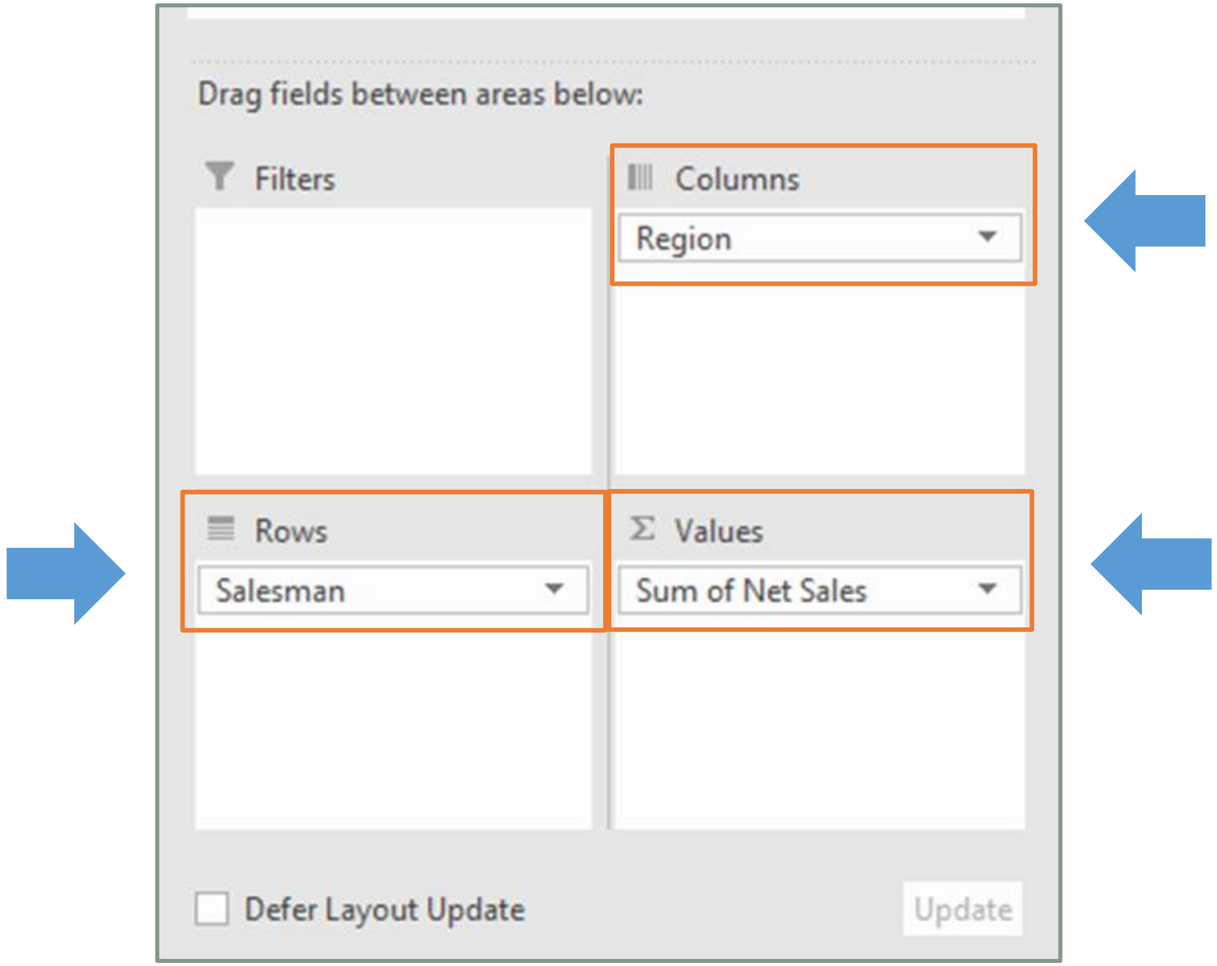


Steps to Create a Pivot Chart



Step 4: In the PivotTable Fields, choose Salesman, Region, and Net Sales

Steps to Create a Pivot Chart



Step 5: Set up columns as Region, rows as Salesman, and values as the Sum of Net Sales

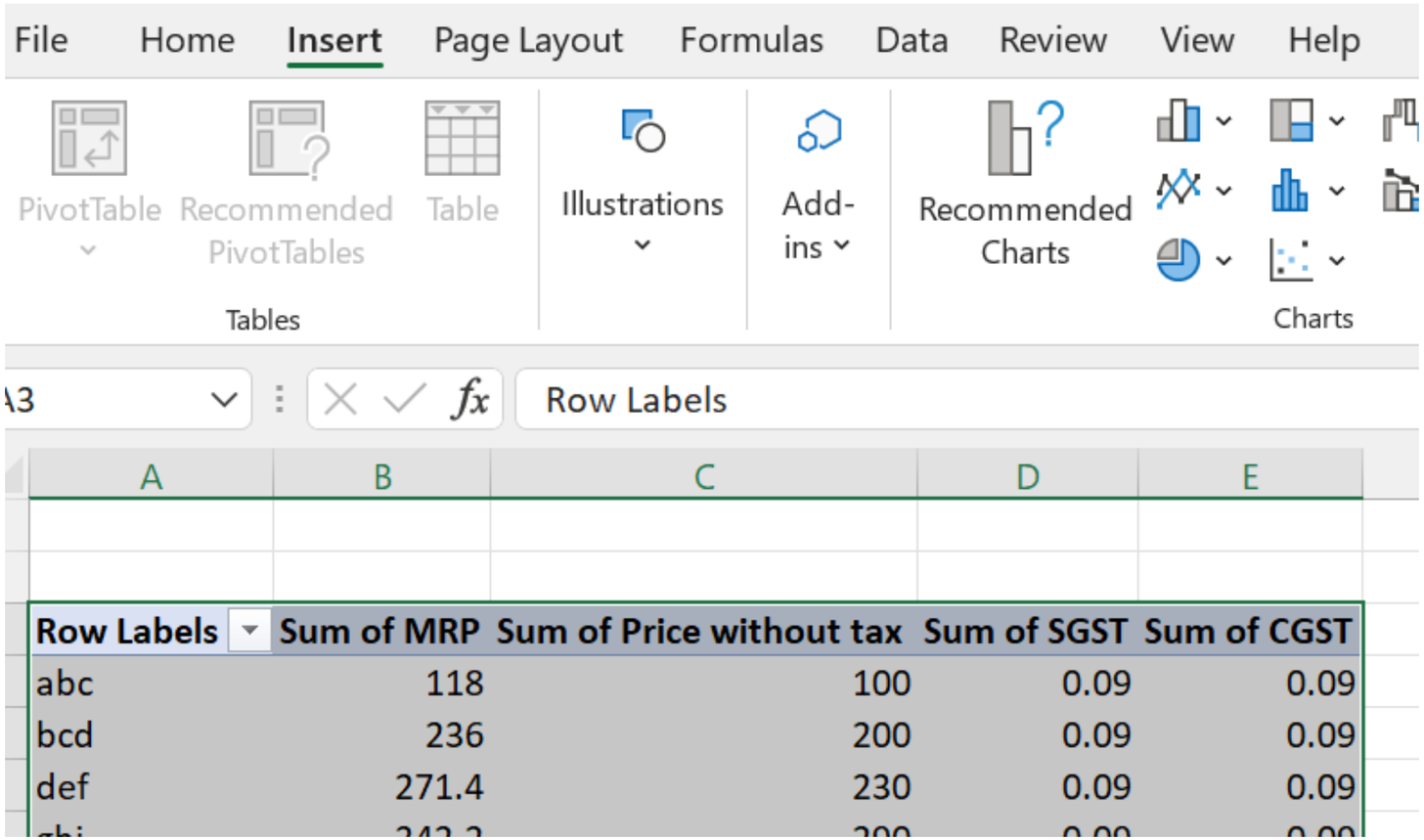
Steps to Create a Pivot Chart

As a result, we get this customized pivot table.

Sum of Net Sales	Column Labels			
Row Labels	Middle	North	West	Grand Total
Adam	362422.75	439782.25	451979.5	1254184.5
Calvin	407584.5	439990	424312.75	1271887.25
Daniel	402618.75	418069.25	357321.25	1178009.25
Henry	469768	445709.25	427216.75	1342694
Justin	436253.5	376208.5	359283	1171745
Paul	381035.5	402402.75	406208.25	1189646.5
Sindy	414850	450827	425526	1291203
Grand Total	**2874533**	**2972989**	**2851847.5**	**8699369.5**

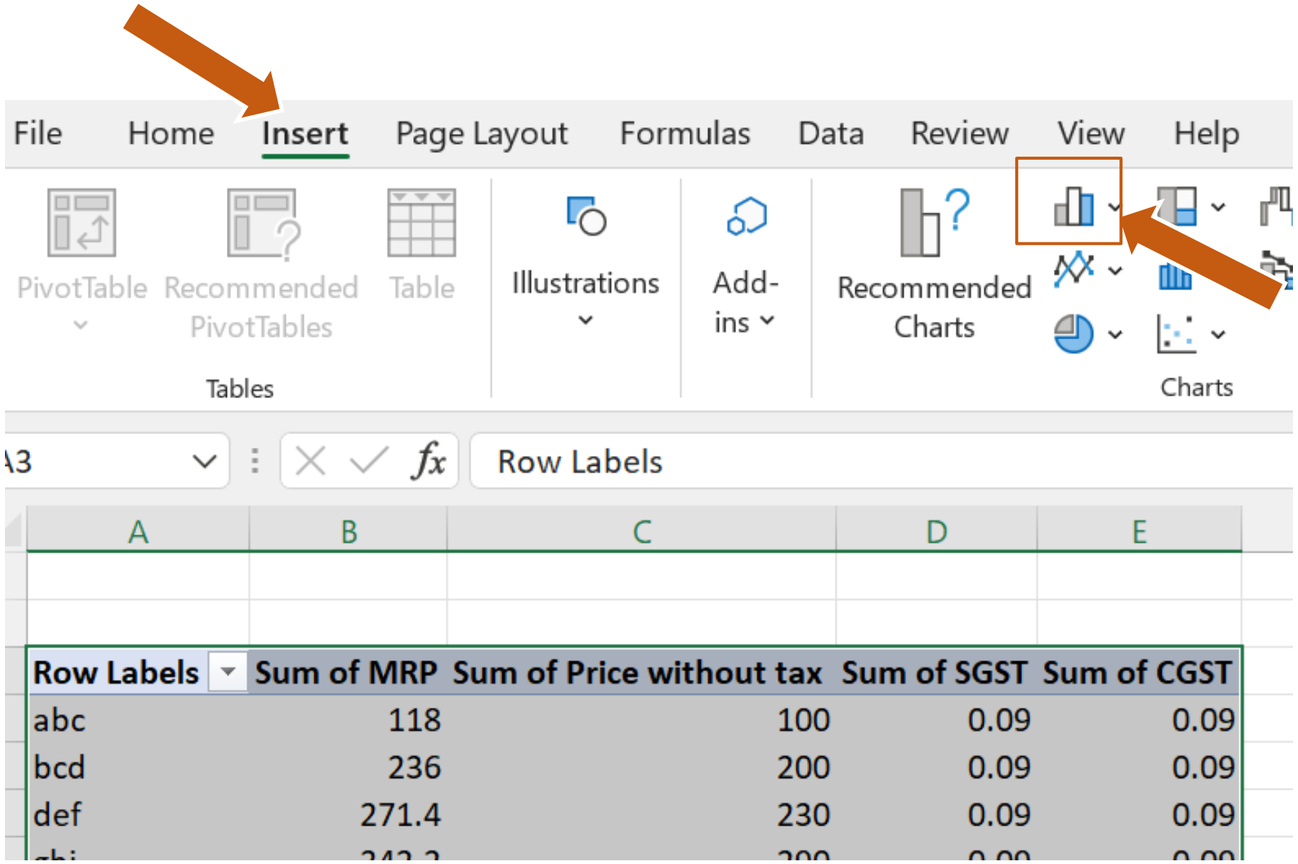
Steps to Create a Pivot Chart

Step 6: Press Control + A to select all data



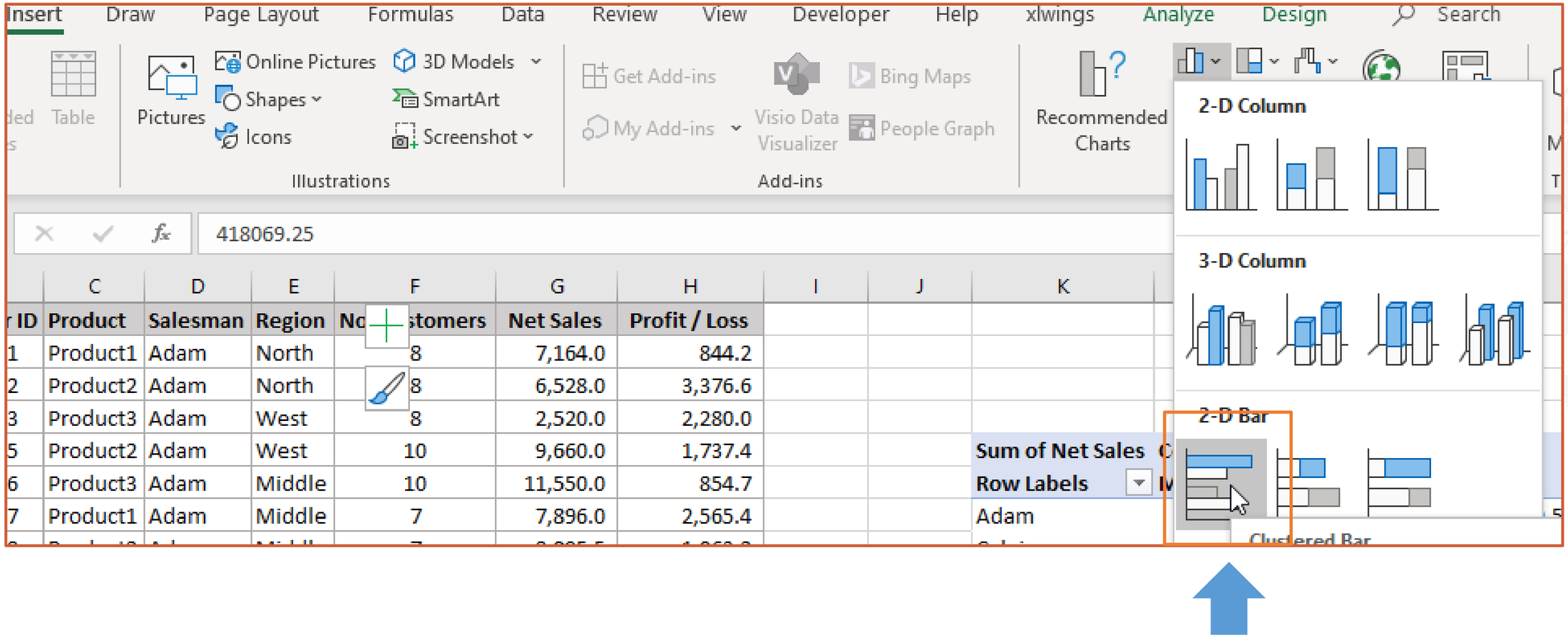
Steps to Create a Pivot Chart

Step 7: Go to the Insert tab, click on **Insert column or bar chart** icon



Steps to Create a Pivot Chart

Step 8: Click on the Clustered Bar chart



ID	Product	Salesman	Region	Customers	Net Sales	Profit / Loss
1	Product1	Adam	North	8	7,164.0	844.2
2	Product2	Adam	North	8	6,528.0	3,376.6
3	Product3	Adam	West	8	2,520.0	2,280.0
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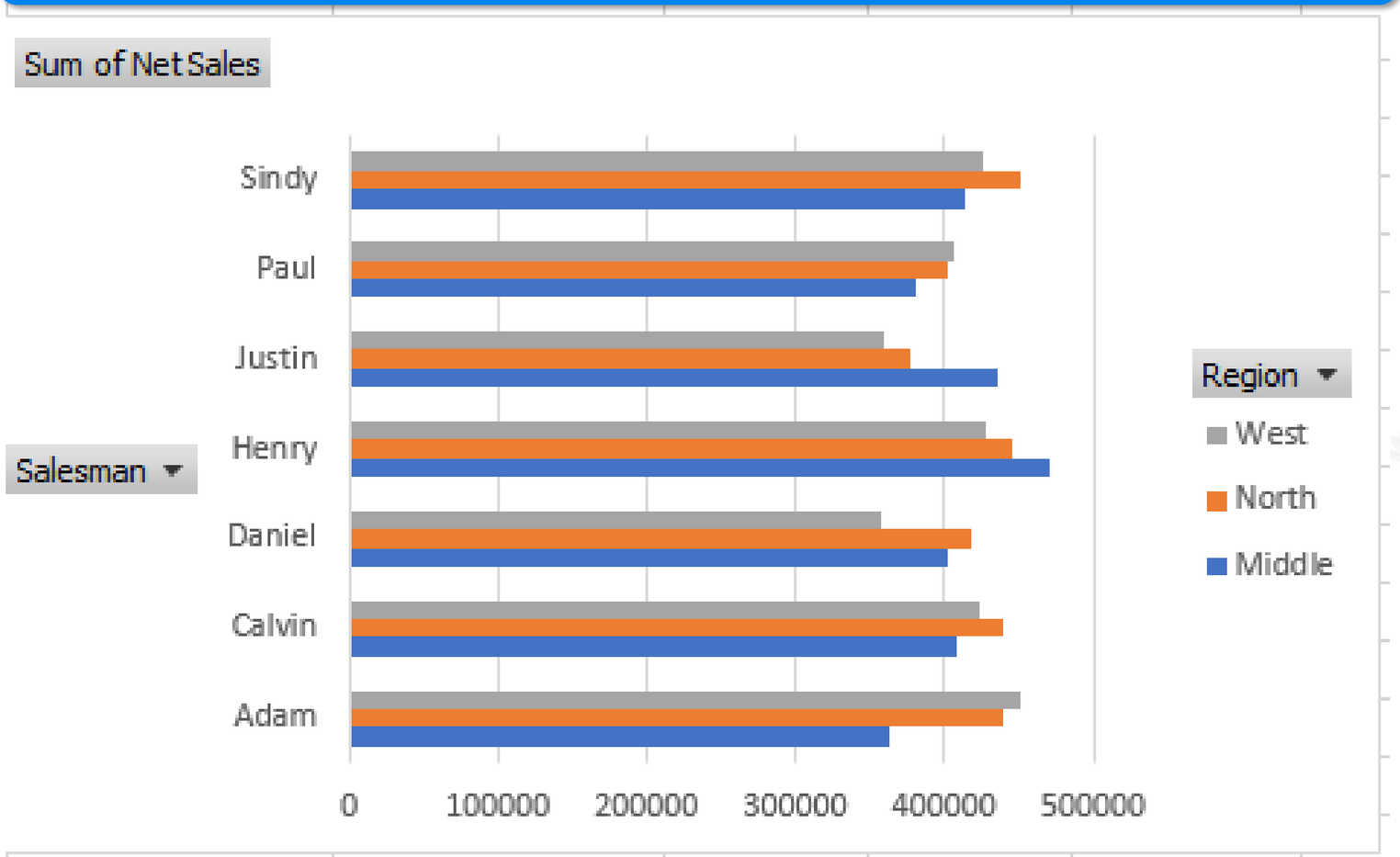
6	Product3	Adam	Middle	10	11,550.0	854.7
7	Product1	Adam	Middle	7	7,896.0	2,565.4

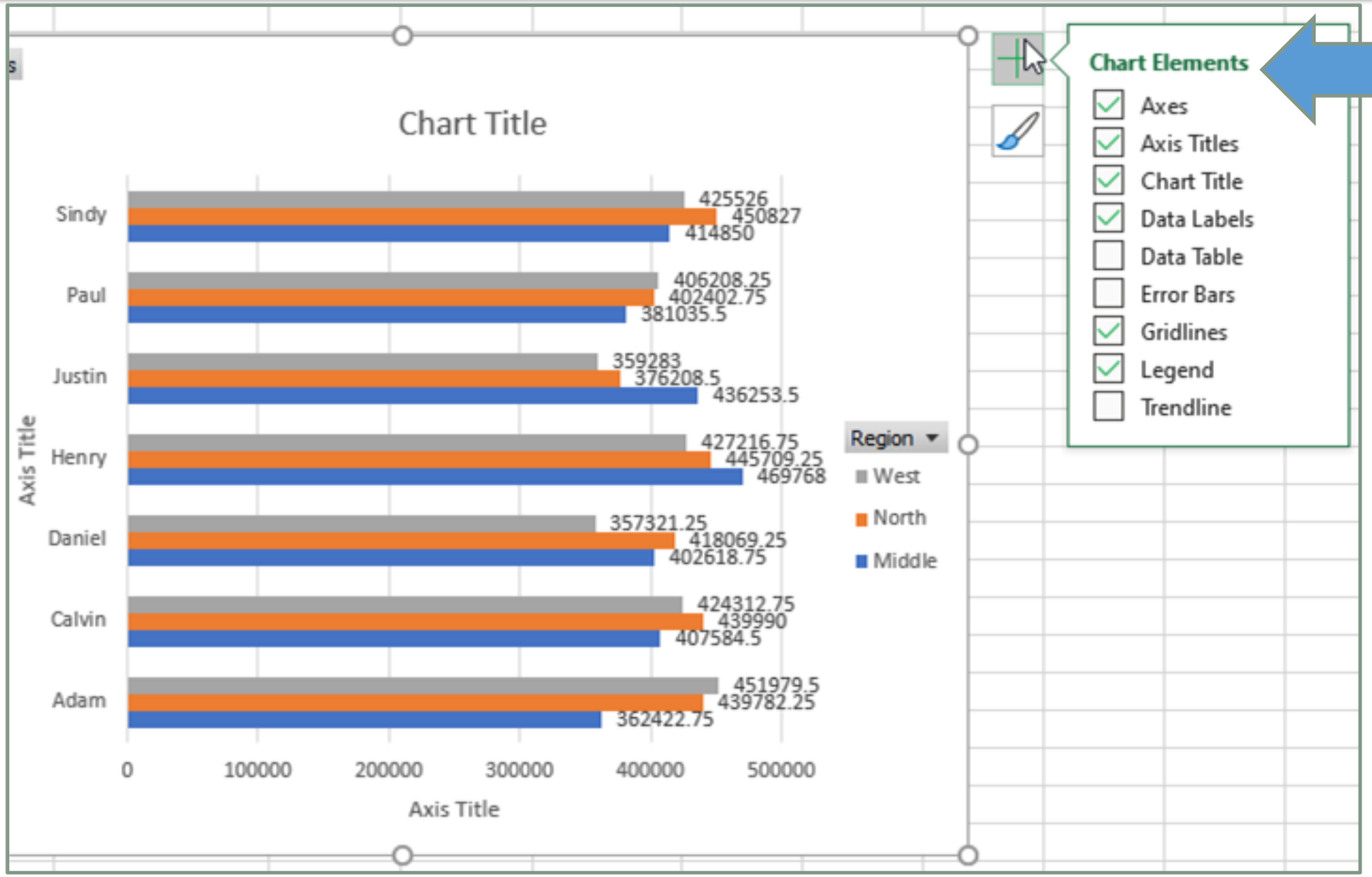
Steps to Create a Pivot Chart

As a result, the Pivot chart will look like the following:



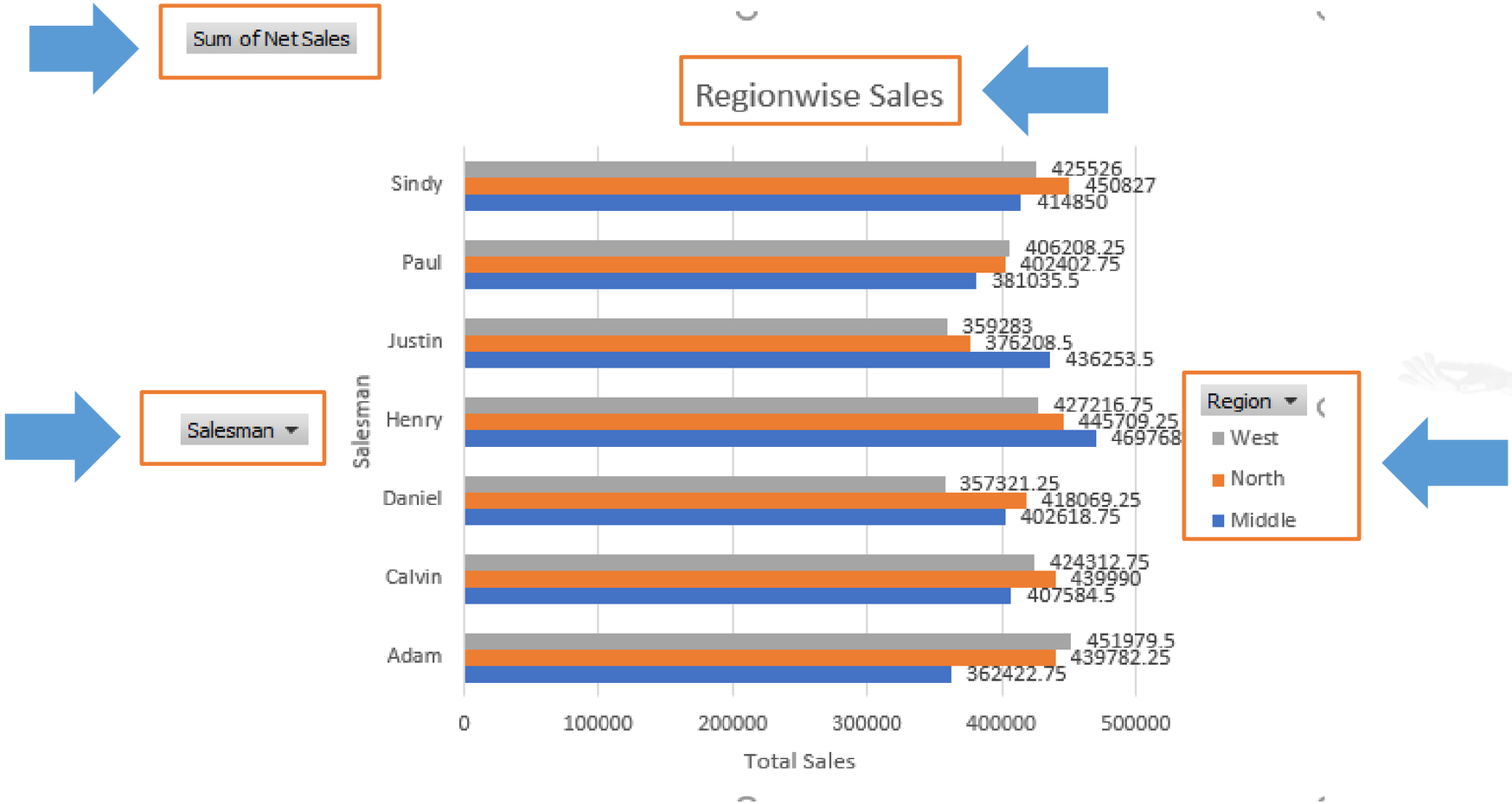
Steps to Create a Pivot Chart

Step 9: Select Chart Elements, Axis Titles, Chart Title, Data Labels, and Legend



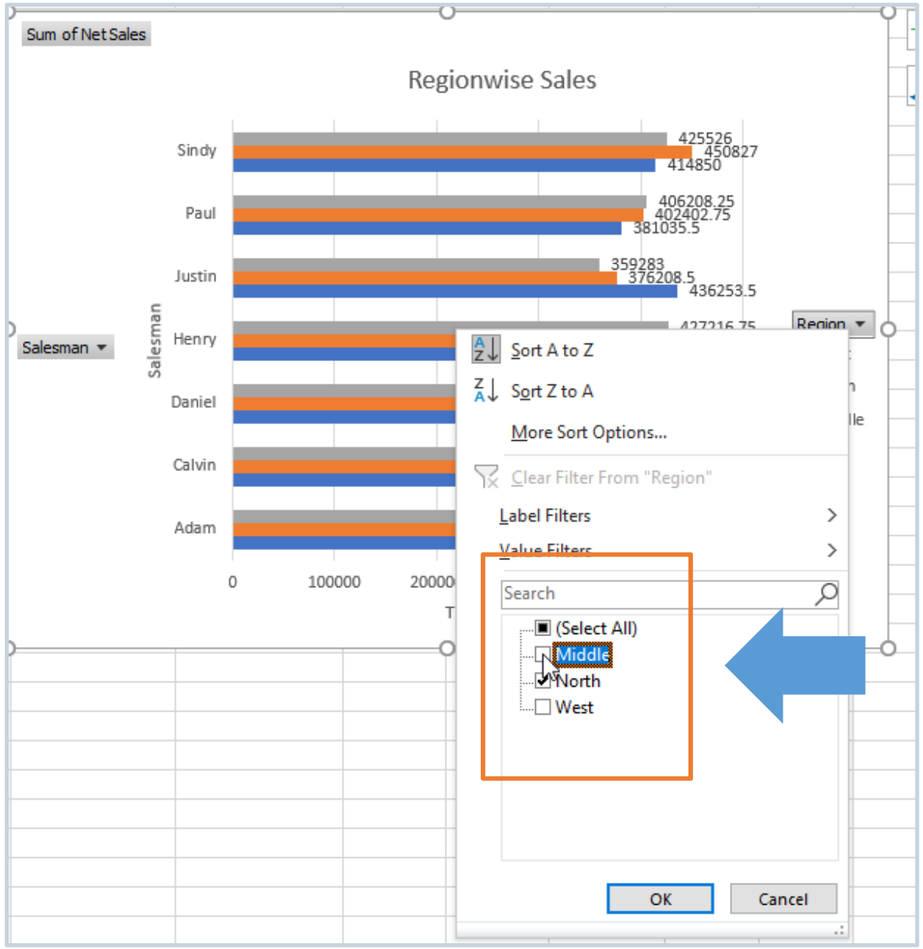
Steps to Create a Pivot Chart

Step 10: Setup the Axis and Chart Title



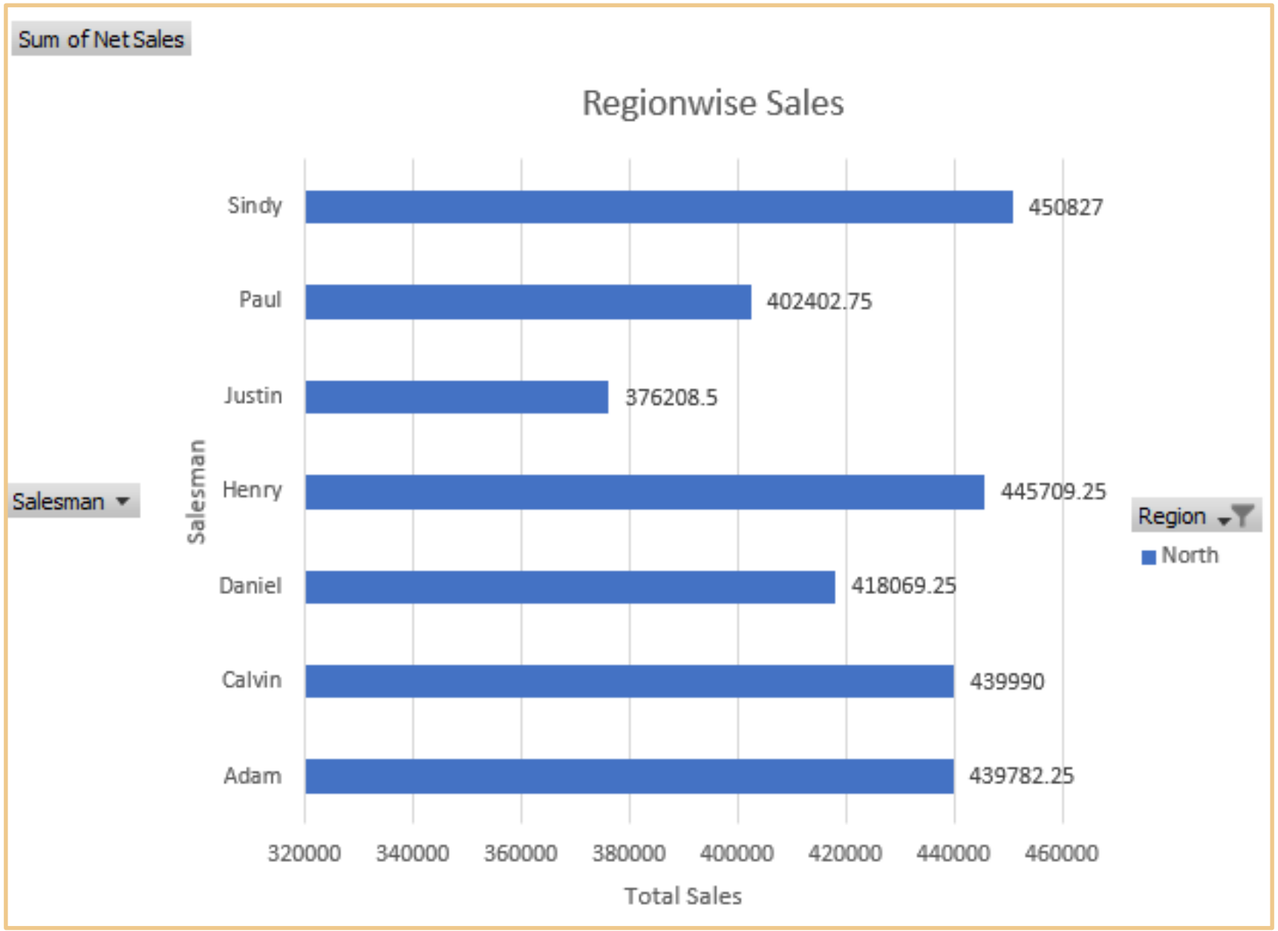
Filter the Chart According to Region

Choose only the North region in the Region drop down and click OK



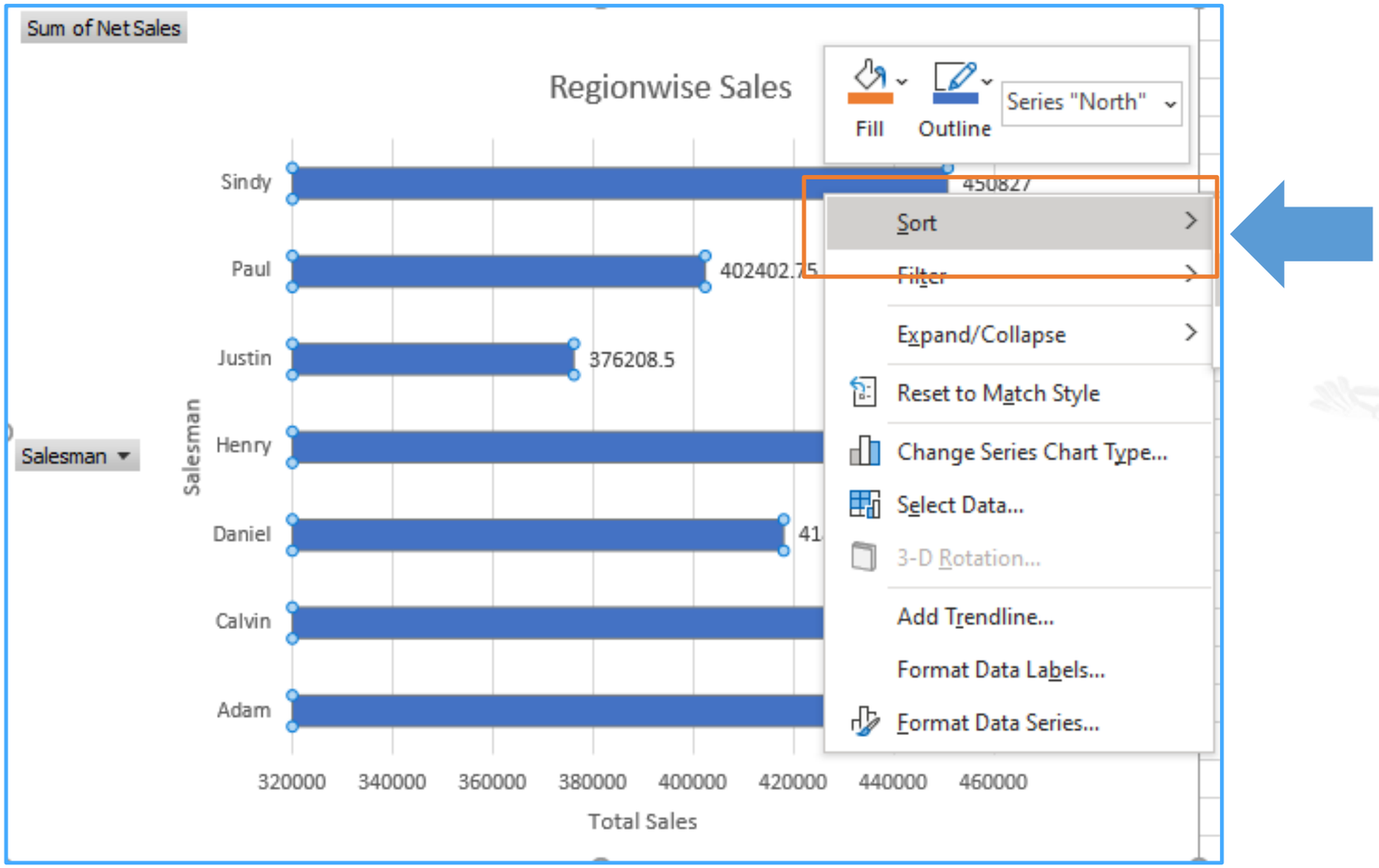
Filter the Chart According to Region

Chart for Sales data for North region will look like:



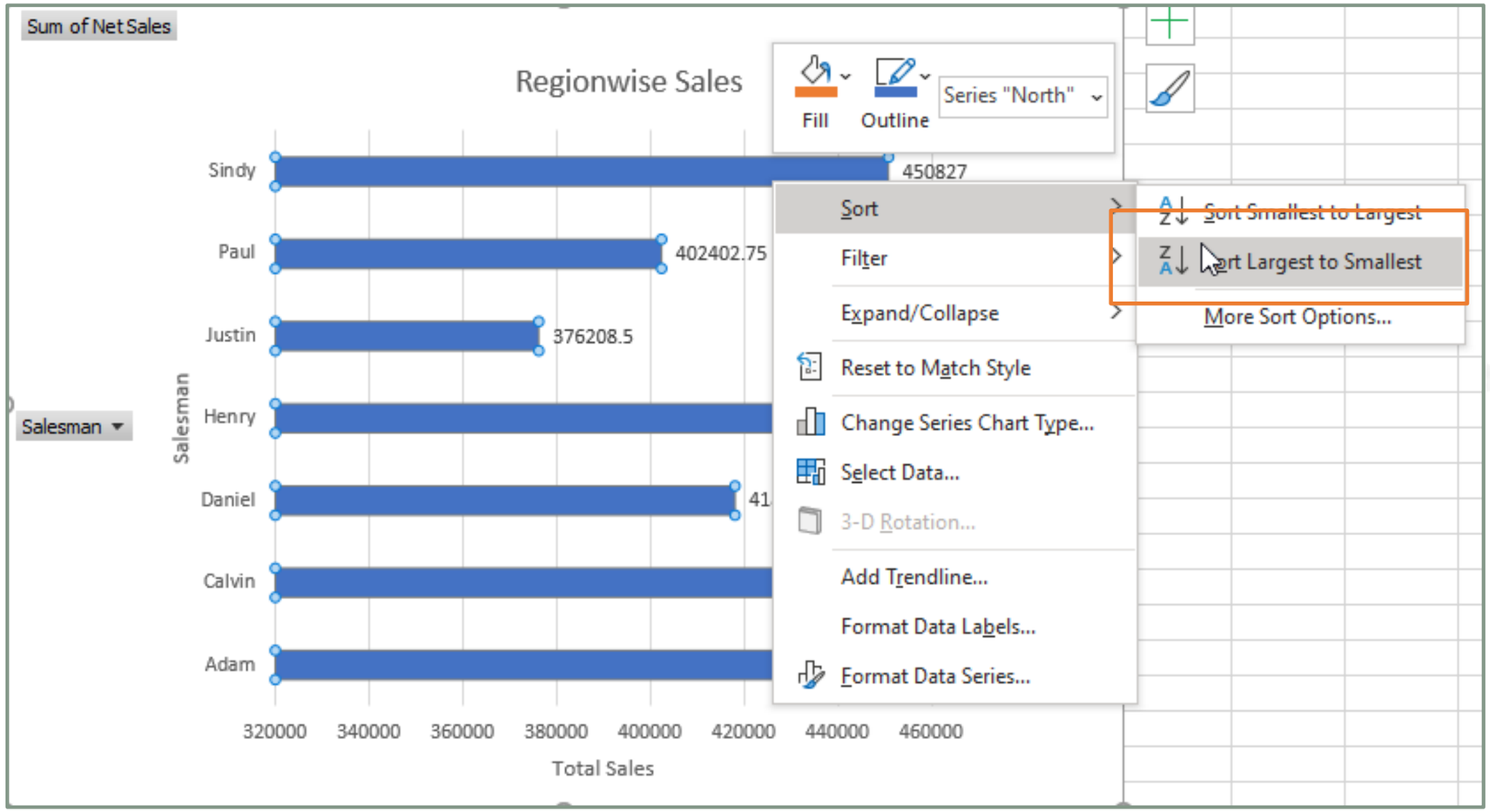
Sort the Chart in Descending Order

Right click on the pivot chart bar and click Sort

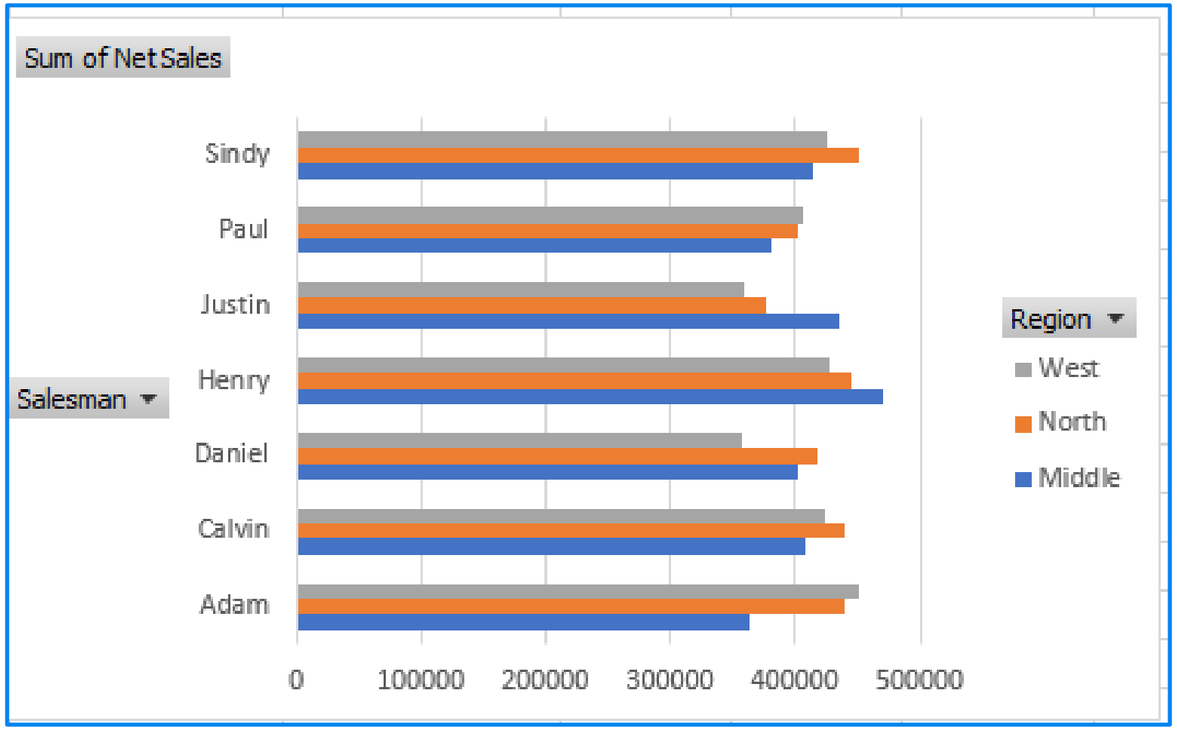


Sort the Chart in Descending Order

Choose Sort Largest to Smallest option



Pivot Chart



- Pivot charts are used to represent summarized data with total and subtotals.
- This is essential for slicing and dicing data to investigate granularity and summing up to larger numbers.

Speedometer Chart

Speedometer

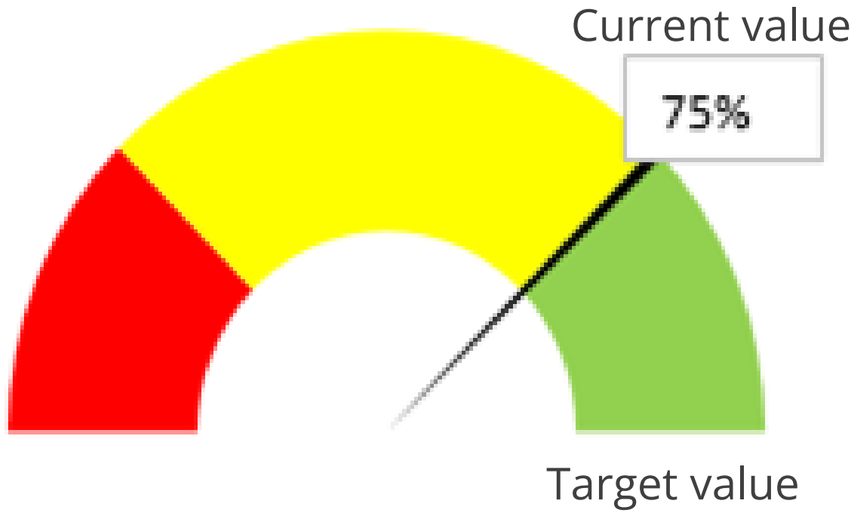
The speedometer chart is based on the speedometer.

The needle points to the current speed.

A speedometer shows the minimum and the maximum speed achieved by a vehicle.

Speedometer Chart

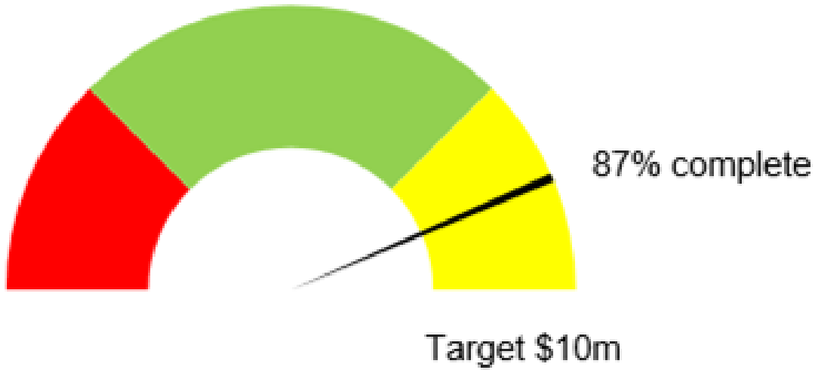
It shows where the users are placed with respect to the target.



Different milestones can be represented with different colors.

Speedometer Chart: Example

Fund-raising status can be represented by a speedometer chart.



Target value: 10 million Dollars
Raised: 8.69 million Dollars

The graphic depicts the attained aim of 87 percent.

Create a Speedometer Chart

Steps to Create a Speedometer Chart

Values	Pie
25	87
50	1
25	113
100	

- Step 1: Create a data set
- Enter 25, 50, 75, 100 in **Values** column, which will be constant.

Steps to Create a Speedometer Chart

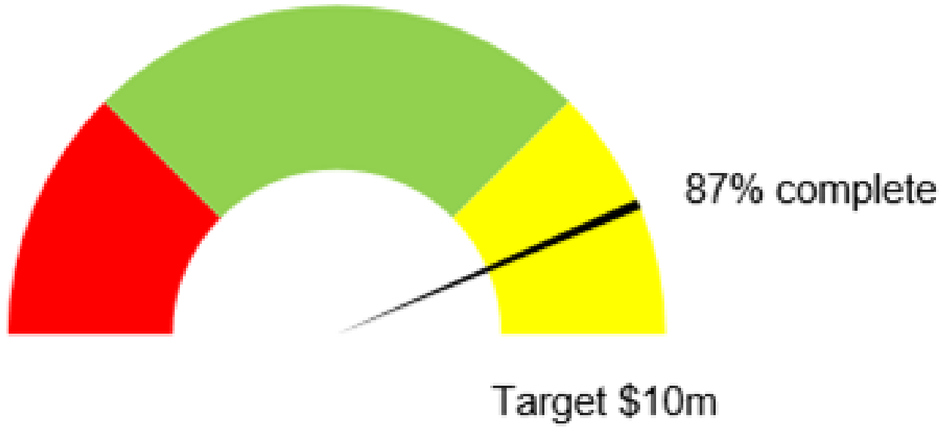
Step 2: Enter the pie values for the pointer

Values	Pie
25	87
50	1
25	113
100	

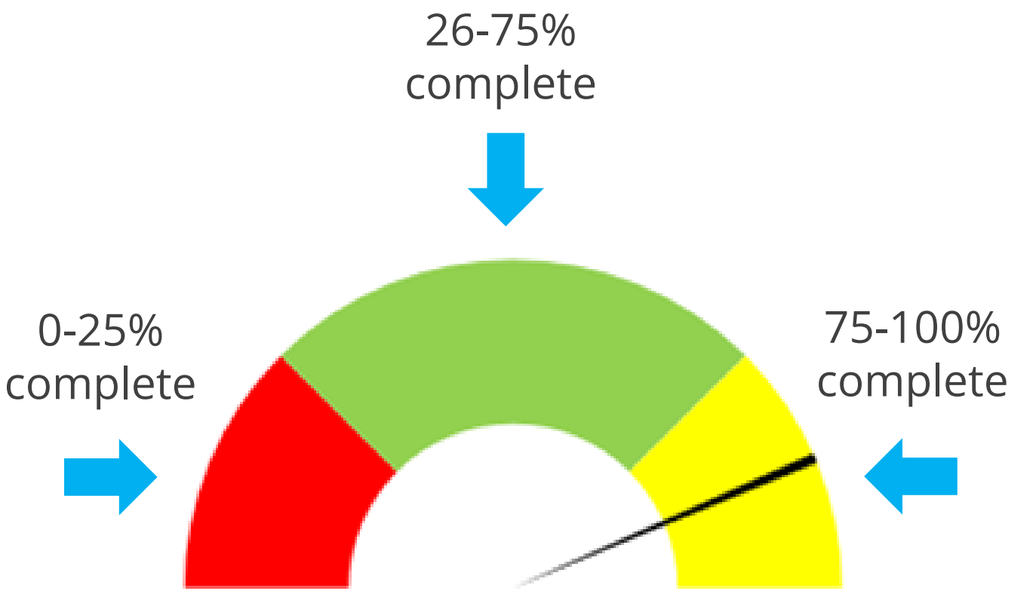
Pointer value

Pointer size

200 – pointer value



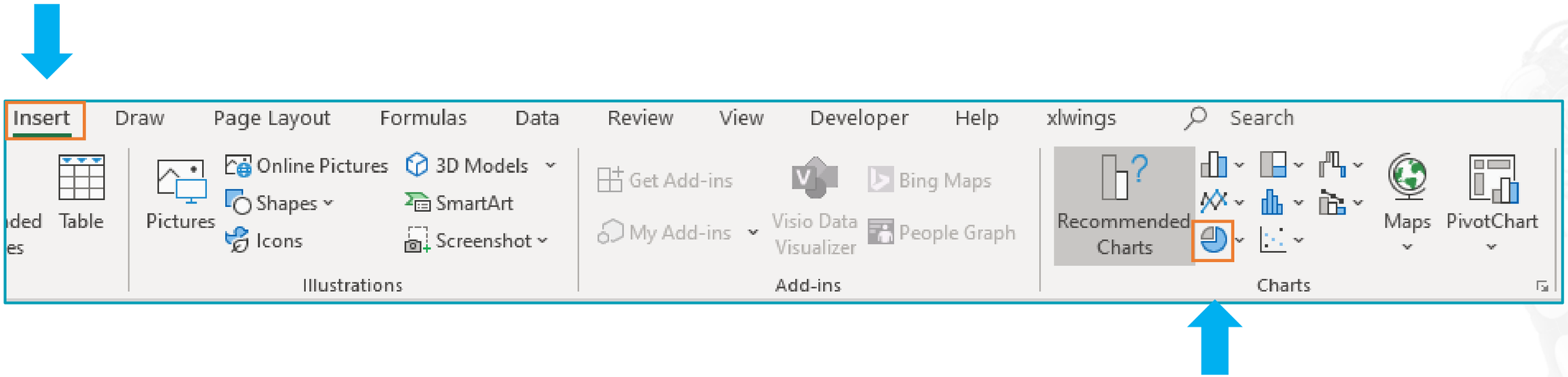
Steps to Create a Speedometer Chart



- The first three values are the lengths of respective bars in the chart.
- The fourth value is the maximum value achievable, which is 100.

Steps to Create a Speedometer Chart

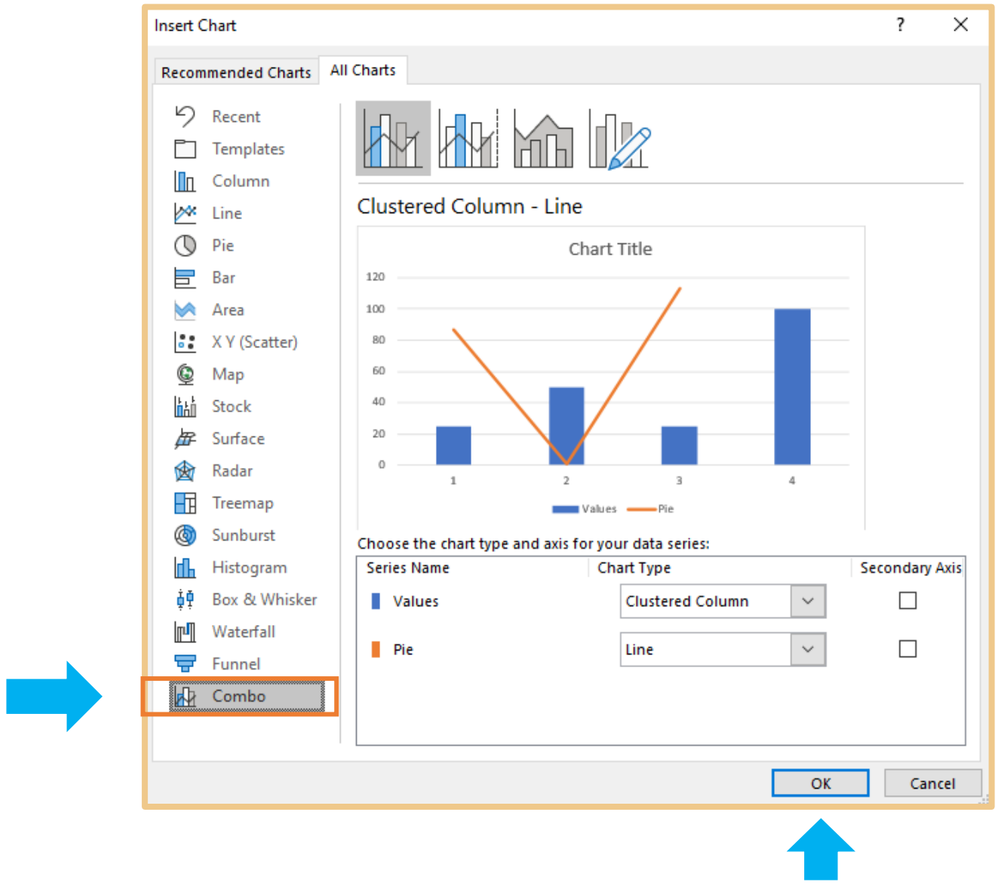
Step 3: Click on the Insert tab and charts group



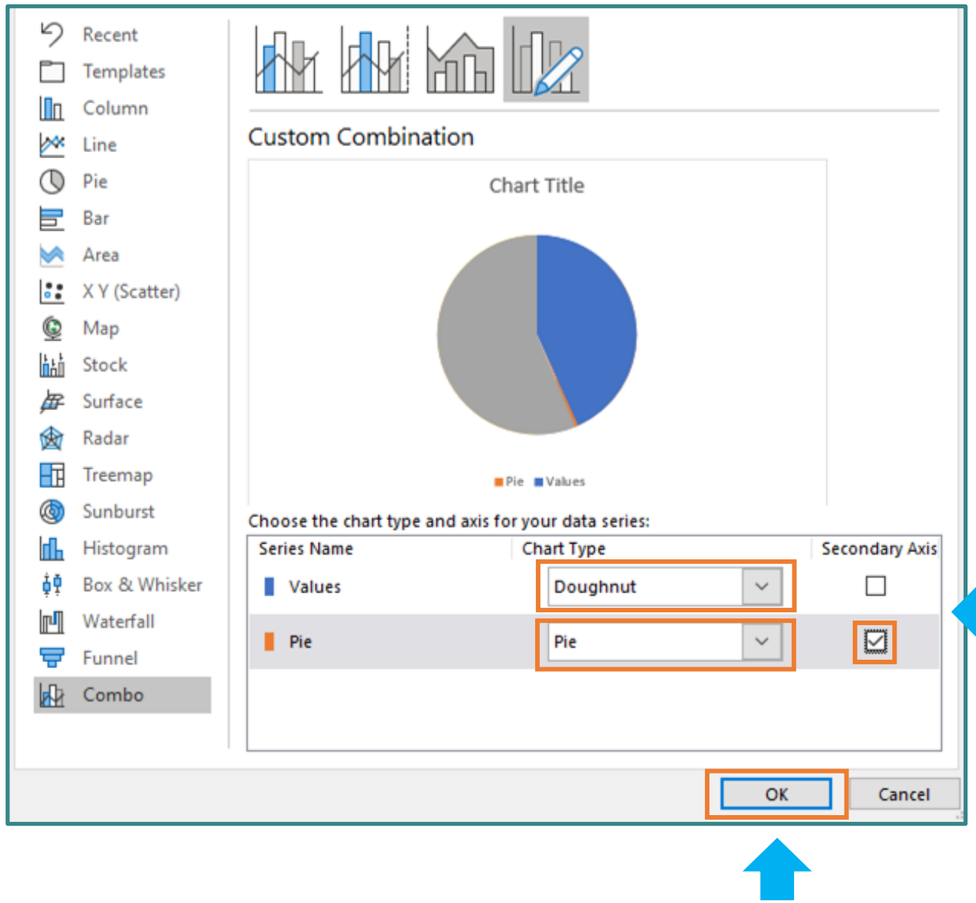
Step 4: Click on More pie charts option

Steps to Create a Speedometer Chart

Step 5: Click on Combo in the dialog box and click OK



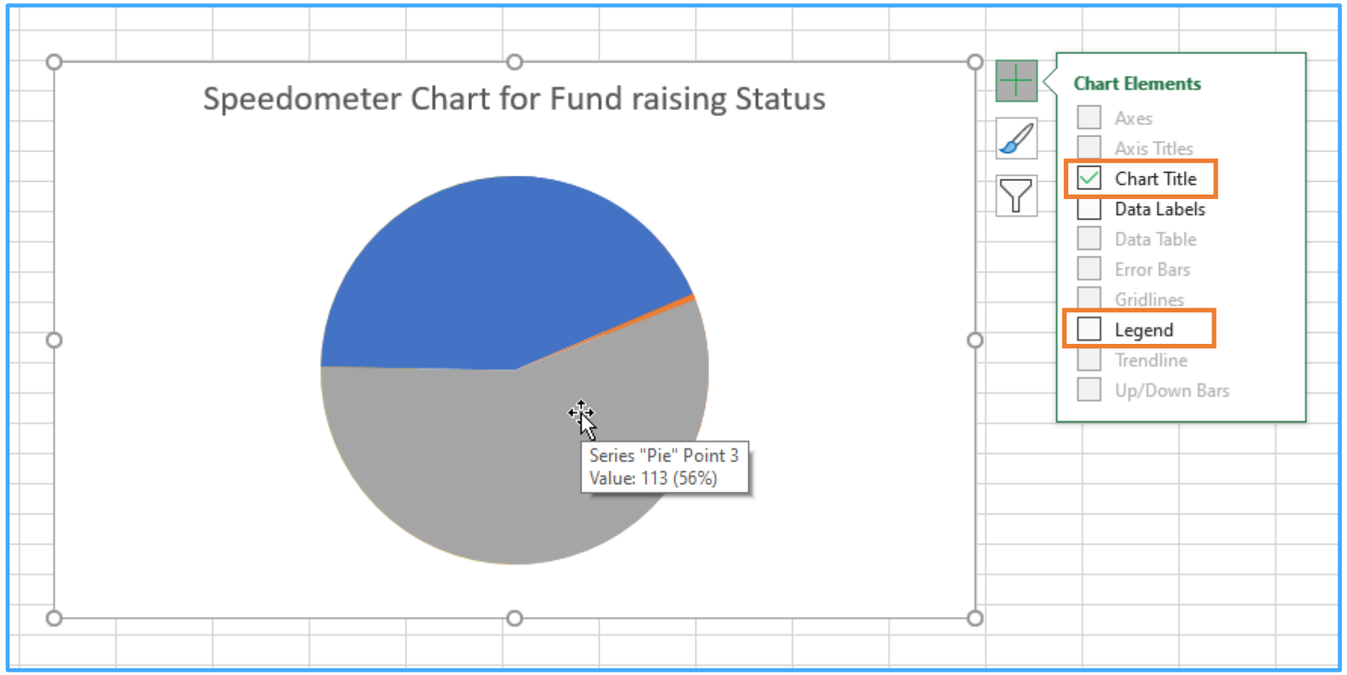
Steps to Create a Speedometer Chart



Step 6:

- Select Chart Type for Values as **Doughnut**
- Select Chart type for Pie as **Pie**
- Make **Pie** chart the secondary axis
- Click **OK**

Steps to Create a Speedometer Chart

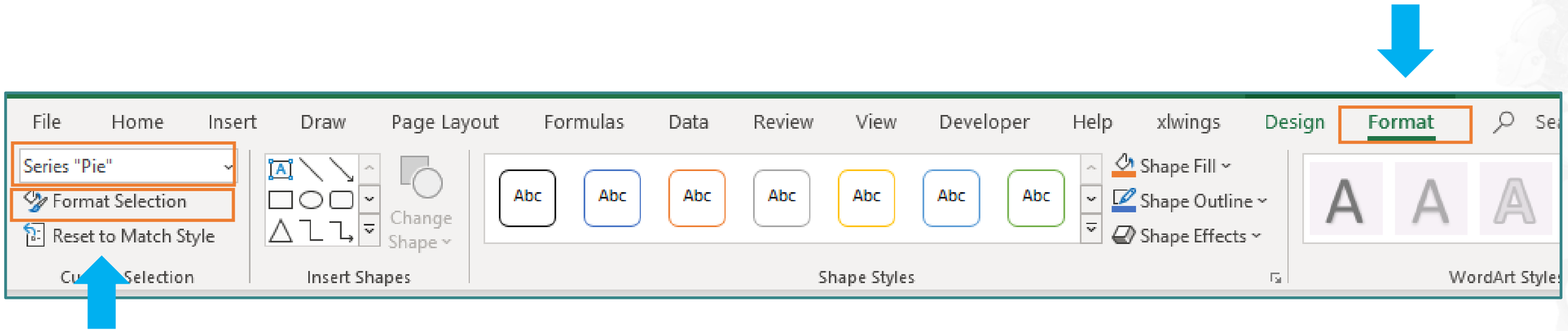


Step 7:

Select Chart Elements, click the checkbox next to Chart Title, and remove Legend

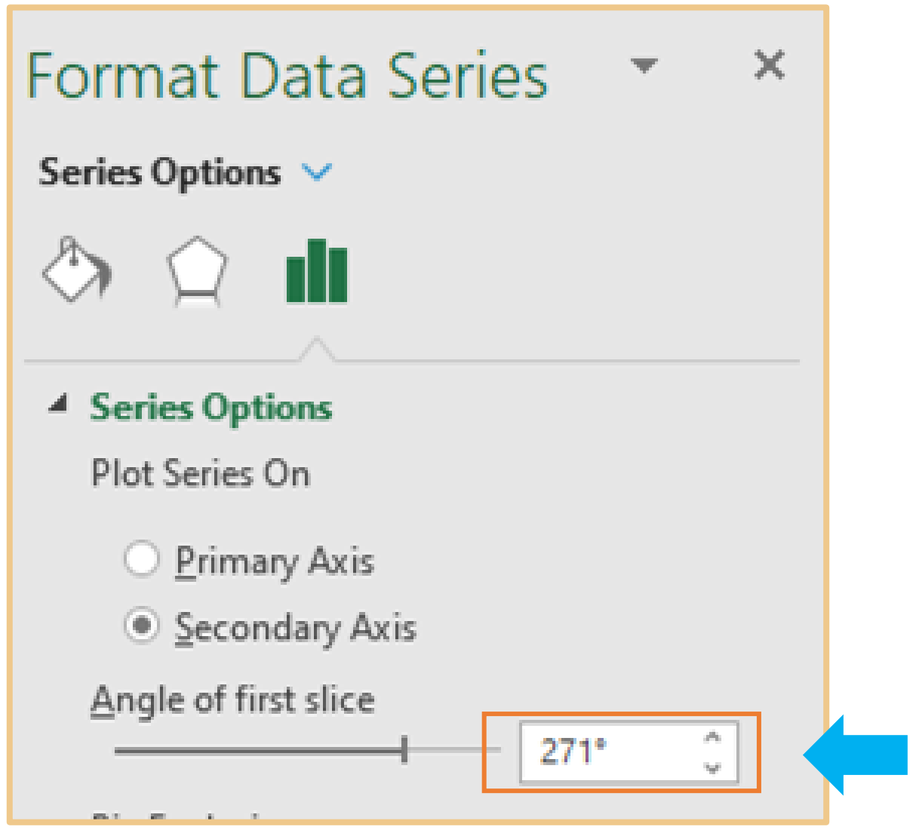
Steps to Create a Speedometer Chart

Step 8: Click on the Format tab and choose **Series 'Pie'**

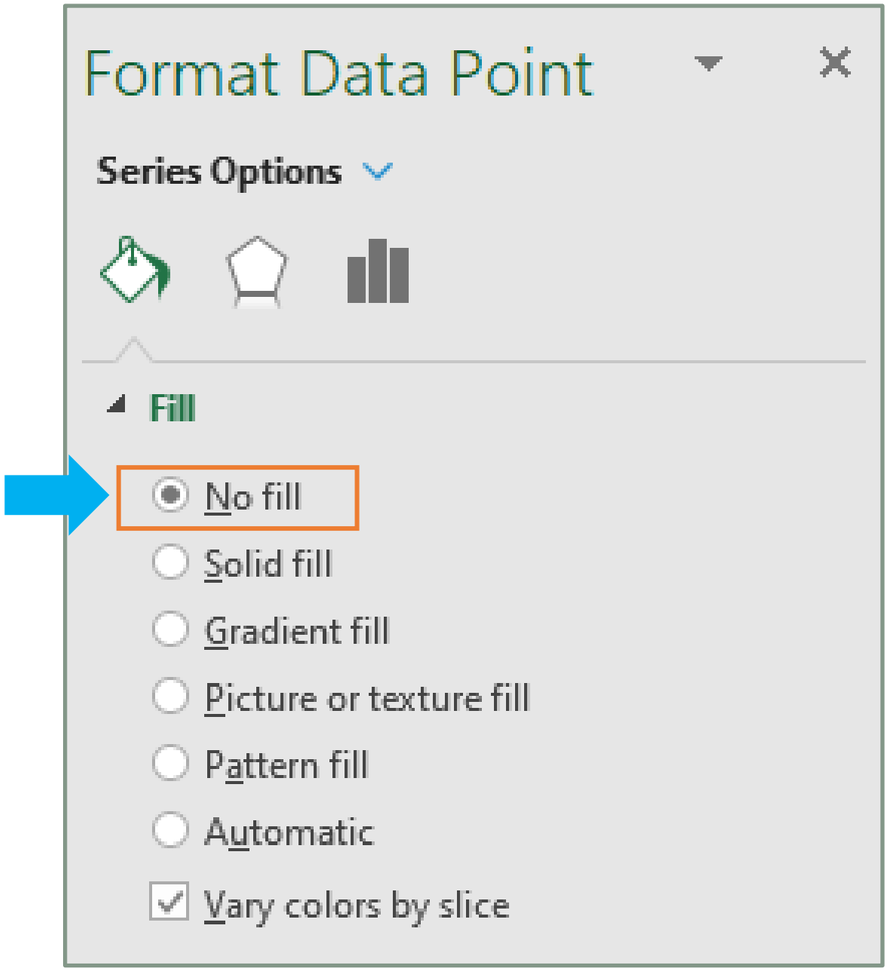


Steps to Create a Speedometer Chart

Step 9: Change **Angle of the first slice** to 271 degrees



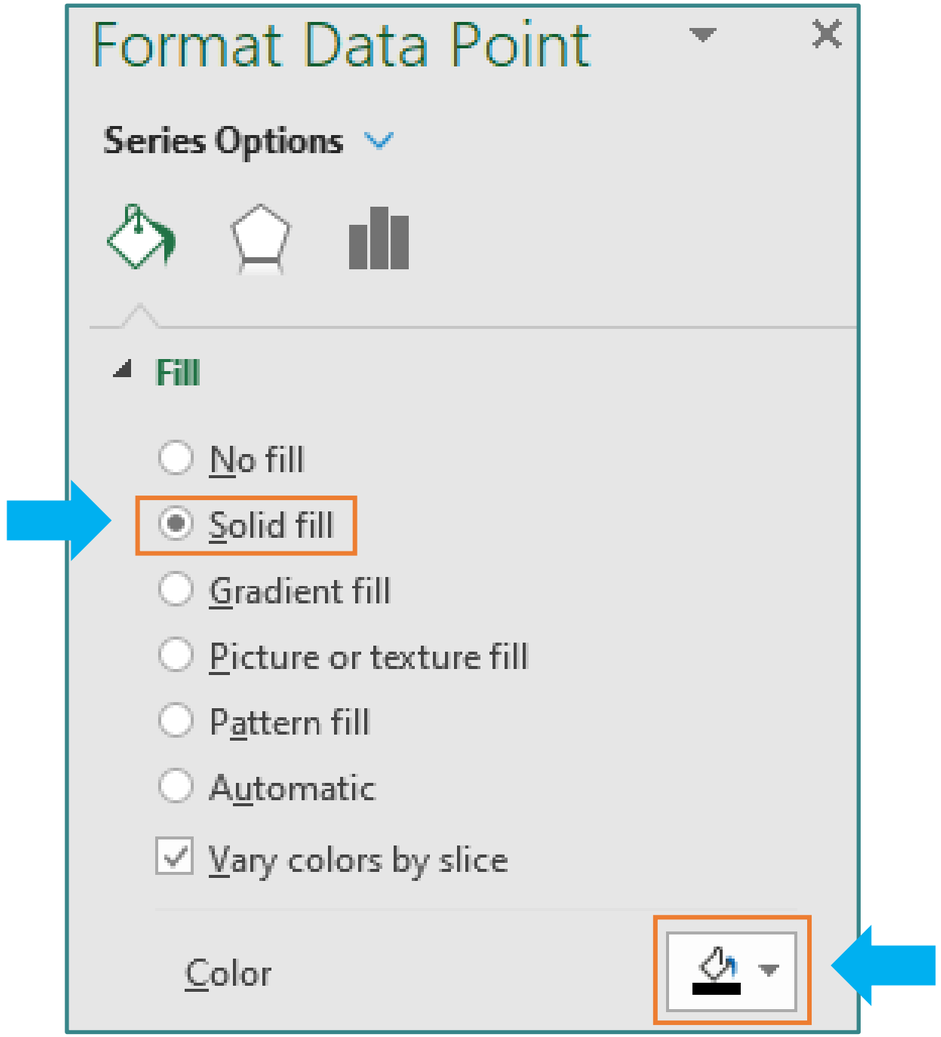
Steps to Create a Speedometer Chart



Step 10:

- Click control + right arrow to see Series ‘Pie’ Point 1
- Choose Series Option as **No Fill**

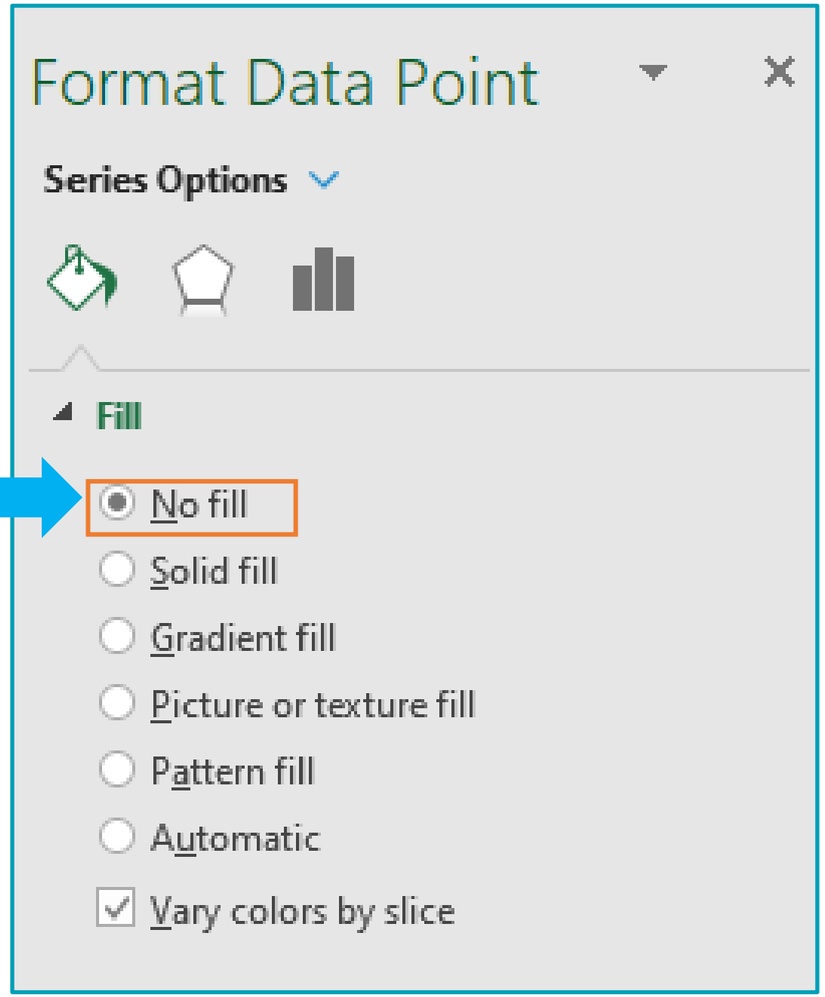
Steps to Create a Speedometer Chart



Step 11:

- Click on Control + right arrow to see Series ‘Pie’ Point 2
- Change Fill to **Solid fill** and color to **black**

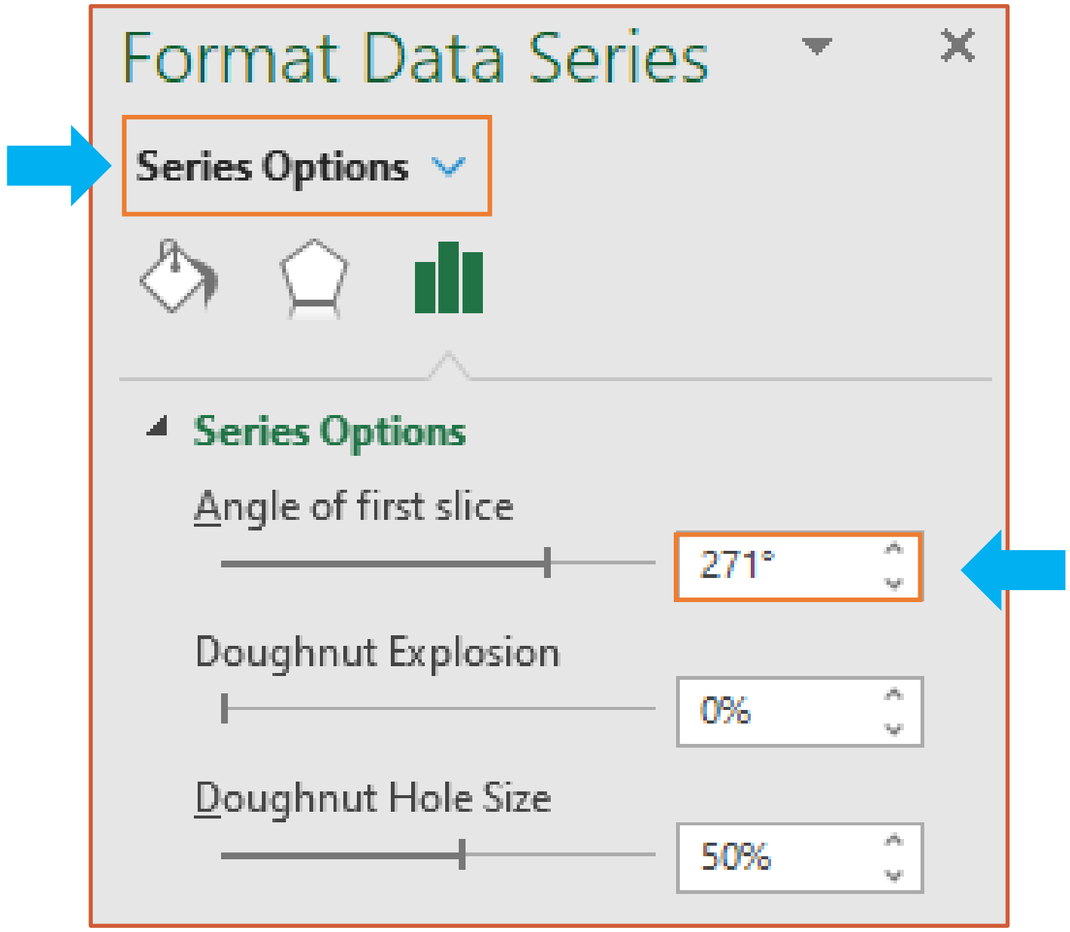
Steps to Create a Speedometer Chart



Step 12:

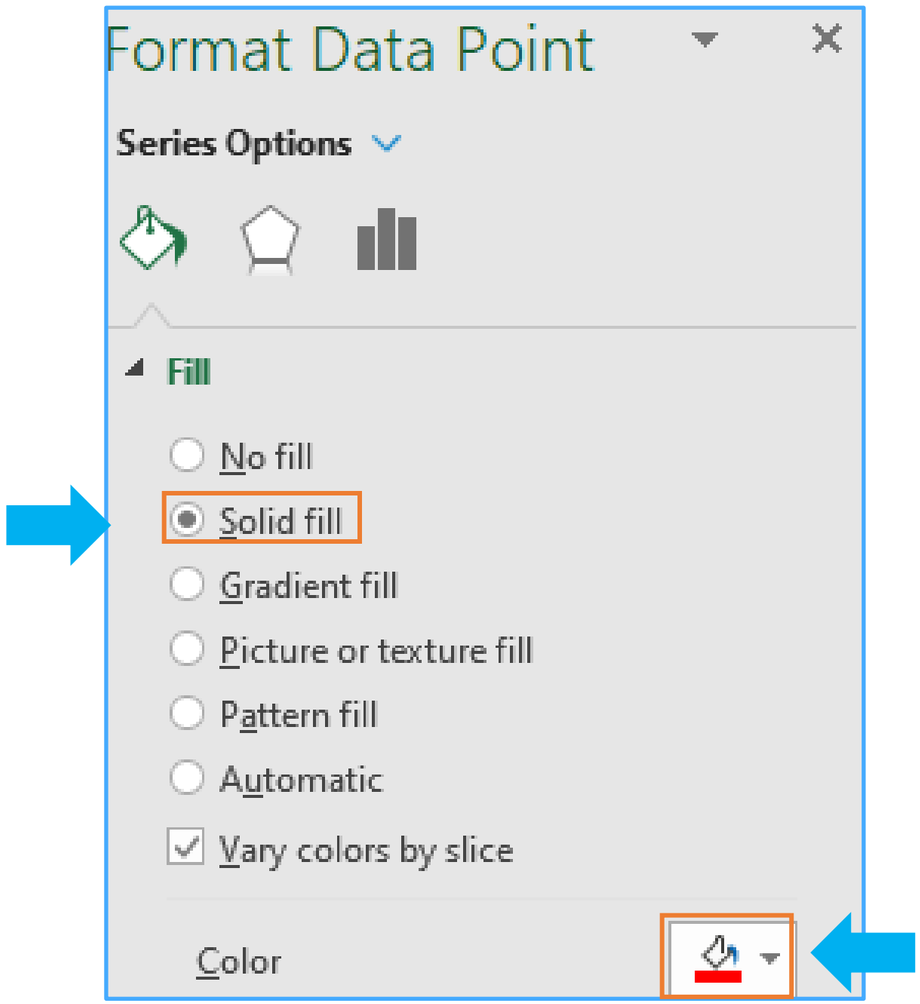
- Click on Control + right arrow to see Series ‘Pie’ Point 3
- Change Fill to **No fill**

Steps to Create a Speedometer Chart



Step 13:
Change series options to Series ‘Values’ and choose **Angle of the slice** as 271 degrees

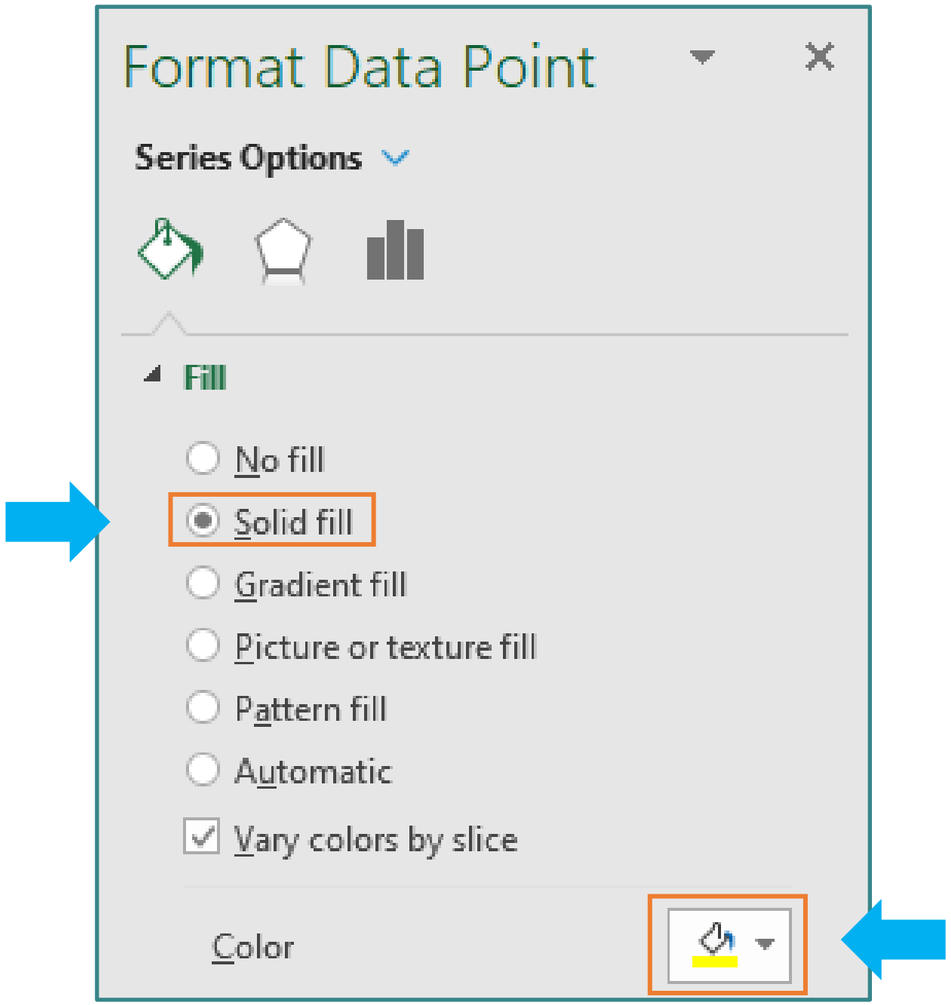
Steps to Create a Speedometer Chart



Step 14:

- Click on Control + right arrow to see Series 'Value' Point 1
- Change Fill to Solid fill and color to red

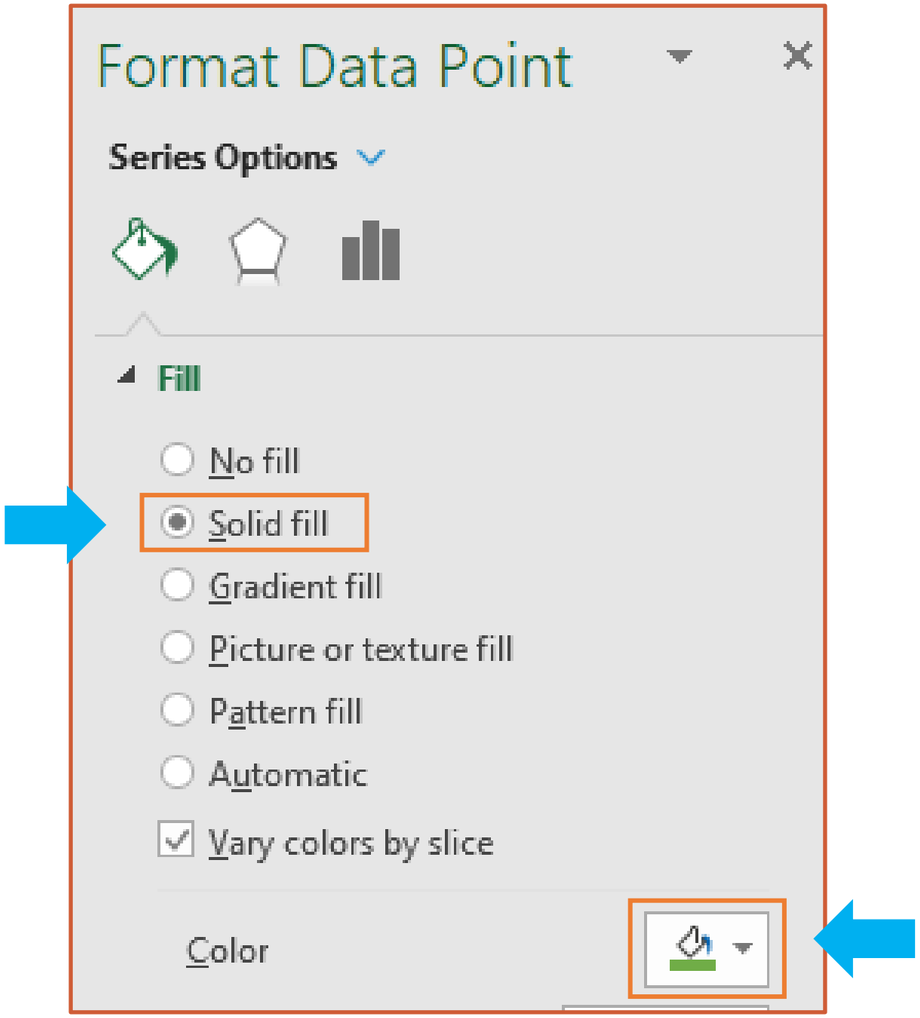
Steps to Create a Speedometer Chart



Step 15:

- Click on Control + right arrow to see Series 'Value' Point 2
- Change Fill to Solid fill and color to yellow

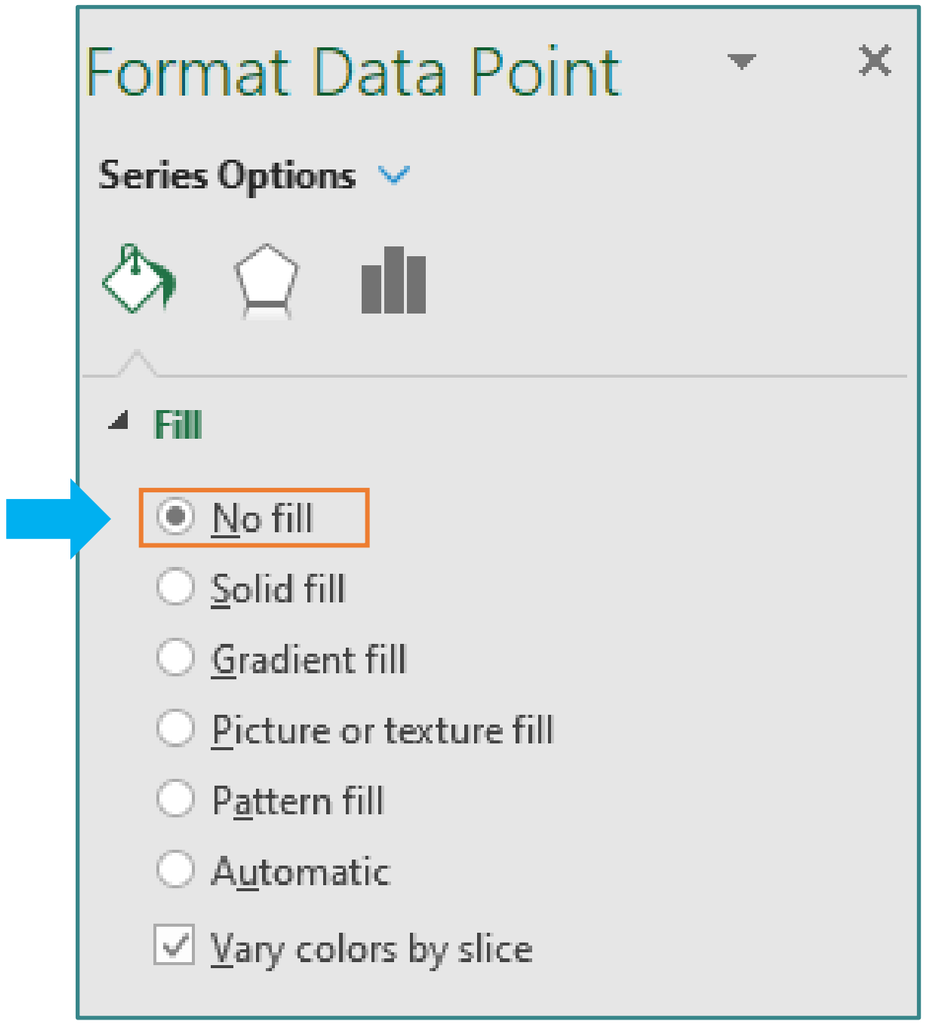
Steps to Create a Speedometer Chart



Step 16:

- Click on Control + right arrow to see Series 'Value' Point 3
- Change Fill to Solid fill and color to green

Steps to Create a Speedometer Chart

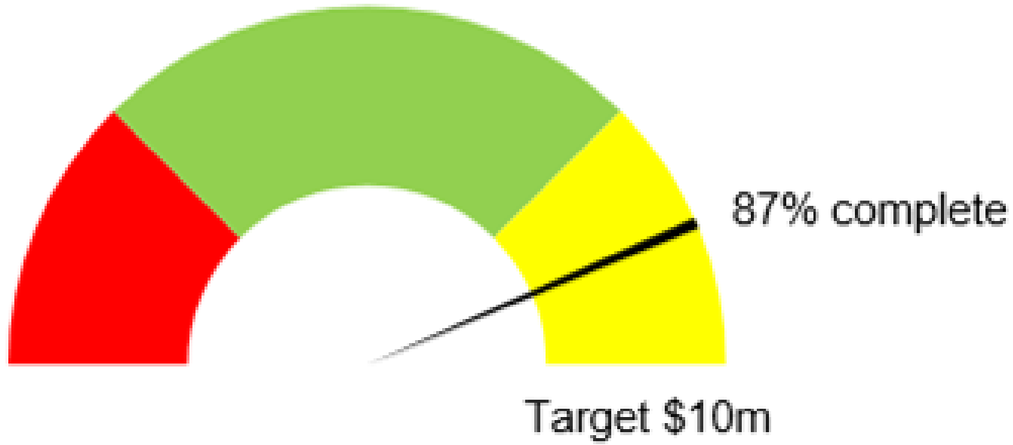


Step 17:

- Click on Control + right arrow to see Series ‘Value’ Point 4
- Change Fill to **No fill**

Steps to Create a Speedometer Chart

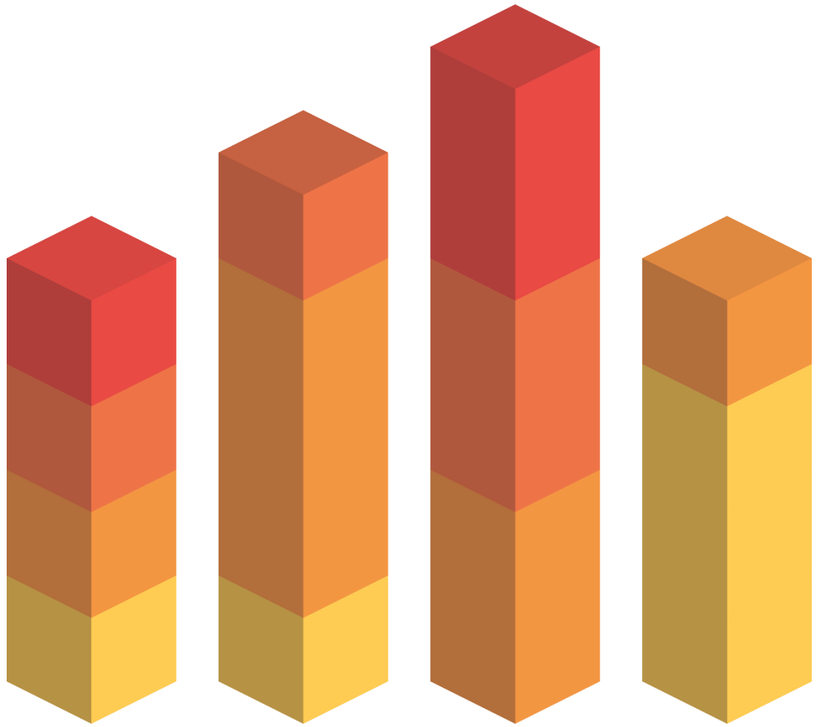
As a result, the Speedometer chart will look like the following:



Stacked Column Chart

Stacked Column Chart

A stacked column chart is like a column or bar chart.



Multiple y-axis values can be stacked together for the same x-axis values.

Stacked Column Chart

Different color coding is used for different types of y values.

When to Use a Stacked Column Chart?

This chart can be used when we want to have a categorical set of values in x-axis and a set of numerical values in y-axis with different groups.

- We can stack the CGPAs of students in different subjects and find the total CGPA using a stacked column chart.
- This is useful to understand the distribution of markings of students in different subjects.

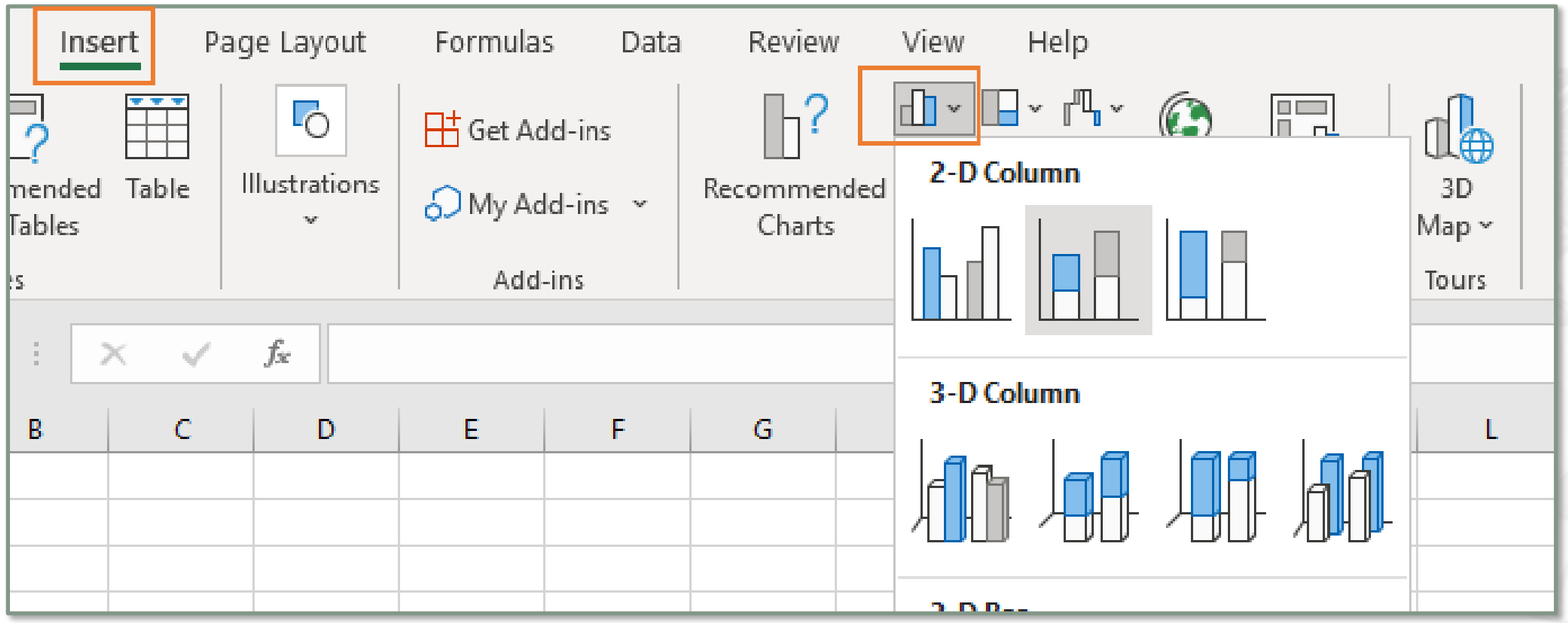
How to Create a Stacked Column Chart?

Step1: Choose the data to include in the chart

	A	B	C	D
1	**Name**	**Maths**	**English**	**Science**
2	Albert Dane	4.8	4.8	4.3
3	Alison Cox	4.3	3.4	4.2
4	Anise Jeff	4.2	3.5	4.1
5	Beatrice Cane	3.4	3.6	4.6
6	Danish Xavier	3.9	3.5	4.5
7	Hassan Alburi	4.6	3.6	3.8
8	James Alan	4.8	3.9	3.9
9	Rada Hofman	4.1	3.5	3.7
10	Xavier Alex	4.6	4.6	3.9

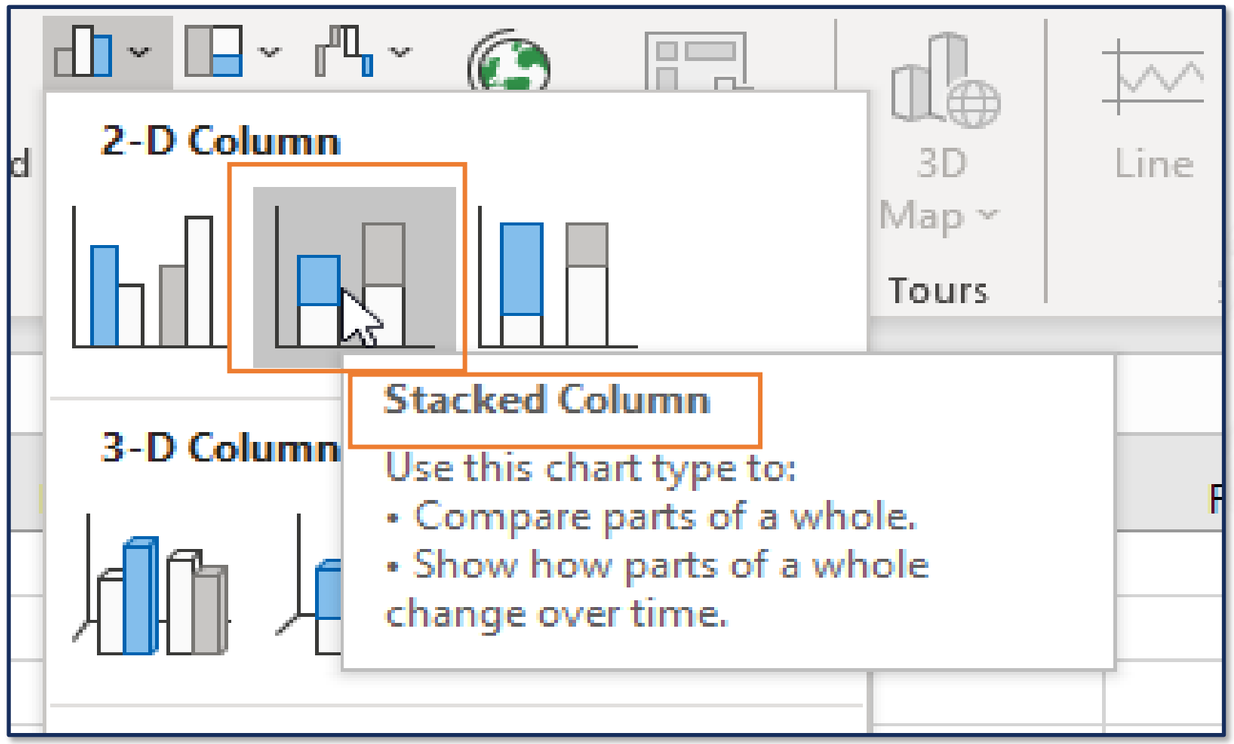
How to Create a Stacked Column Chart?

Step2: Click on Stacked 2-D chart under Insert tab



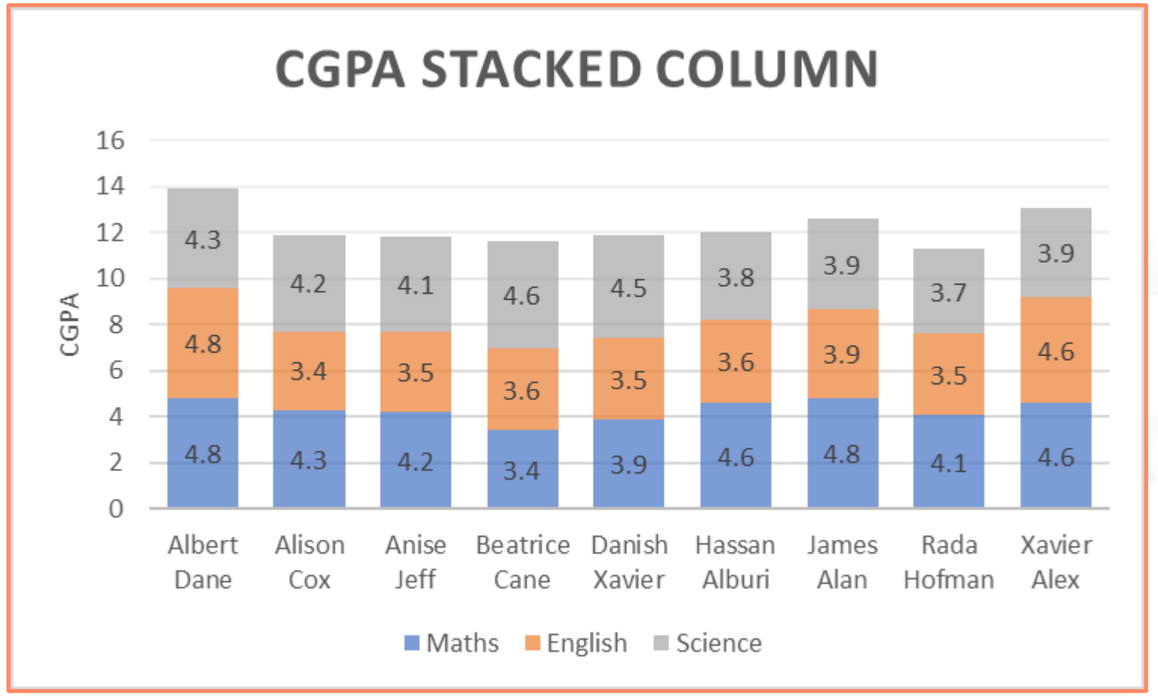
How to Create a Stacked Column Chart?

Step3: Go to Stacked 2-D column and select Stacked Column chart



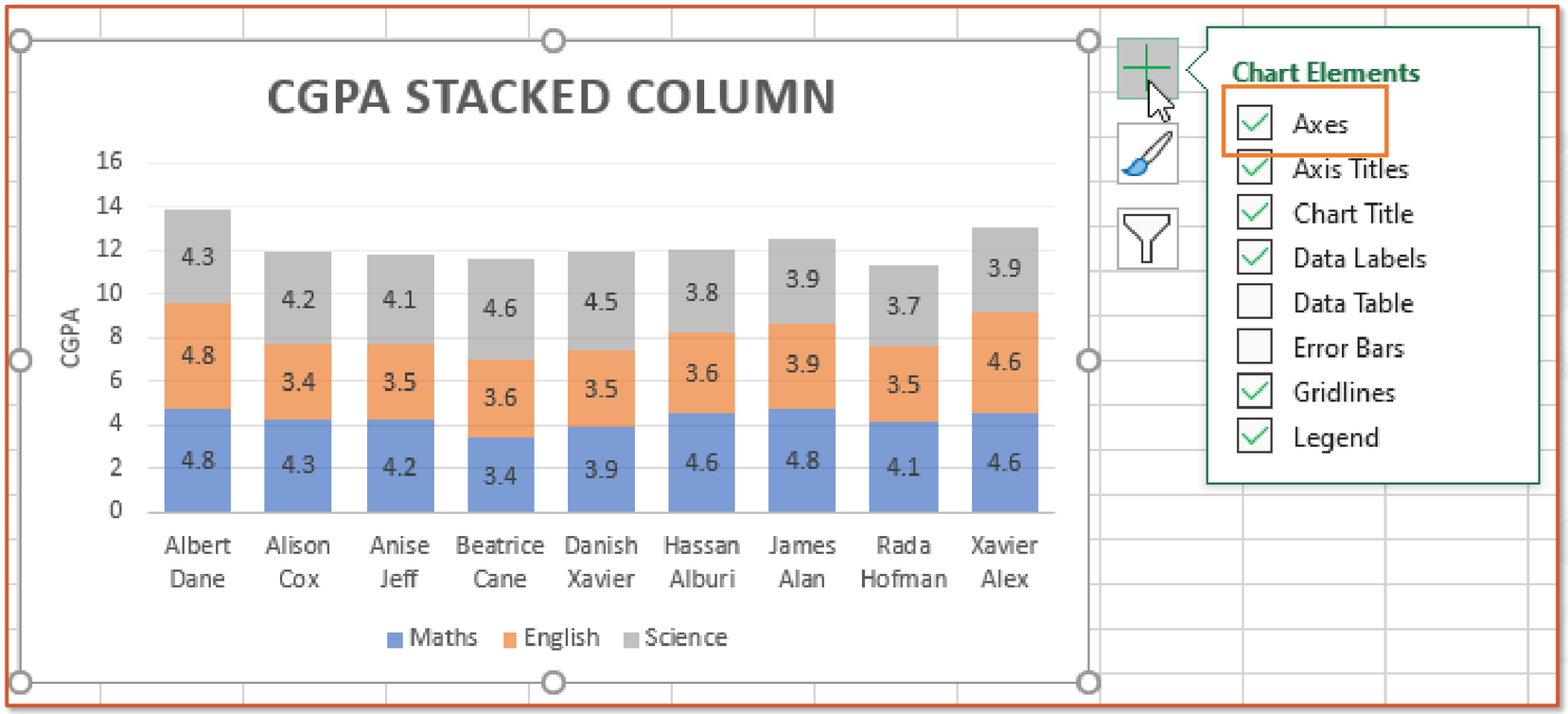
How to Create a Stacked Column Chart?

The result for stacked column chat will look like following:



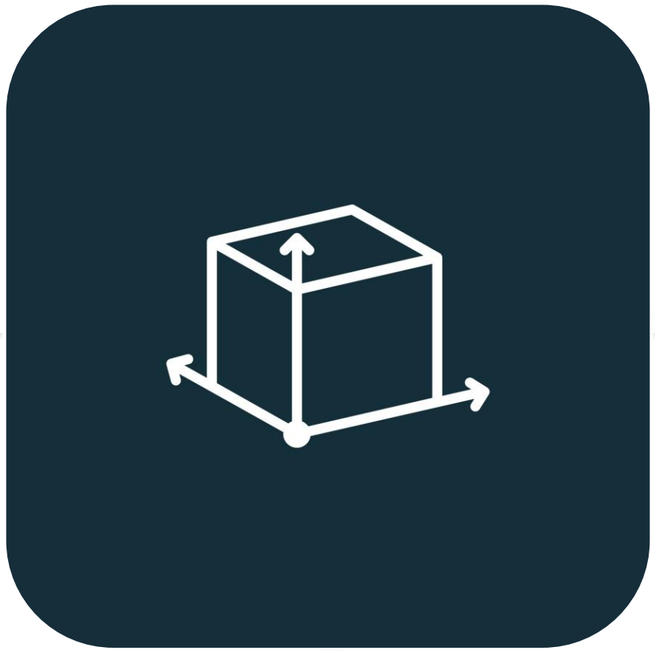
How to Create a Stacked Column Chart?

Step 4: Click on Axes to show the X and Y axes



Bar Chart vs. Stacked Column Chart

Bar chart holds a categorical value in the x-axis and a set of numerical values in the y-axis.



This is particularly useful when we represent grouped data with individual data elements in y-axis.

Stacked column chart holds multiple numerical columns in y-axis with different color coding's.

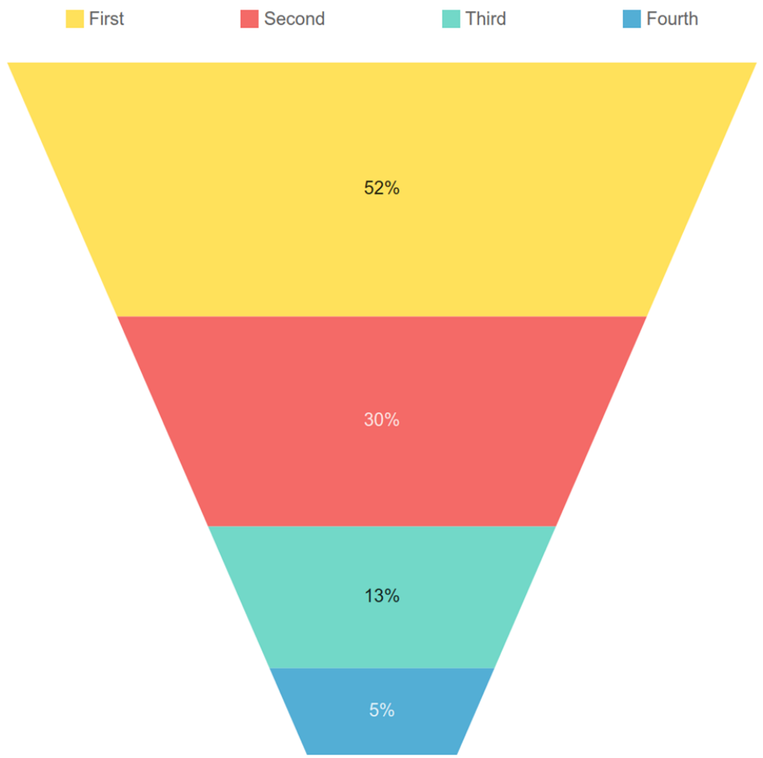
Funnel Chart

Funnel Chart

- A funnel chart is very similar to a stacked horizontal column chart.
- The bars are ordered in accordance with the stages of a process.
- The name funnel describes that the data flows through a funnel of processes.

Funnel Chart

It is used to represent stages in a sales process and show the amount of potential revenue for each stage.



Funnel Chart

The number of defects can be found in a project in different phases.

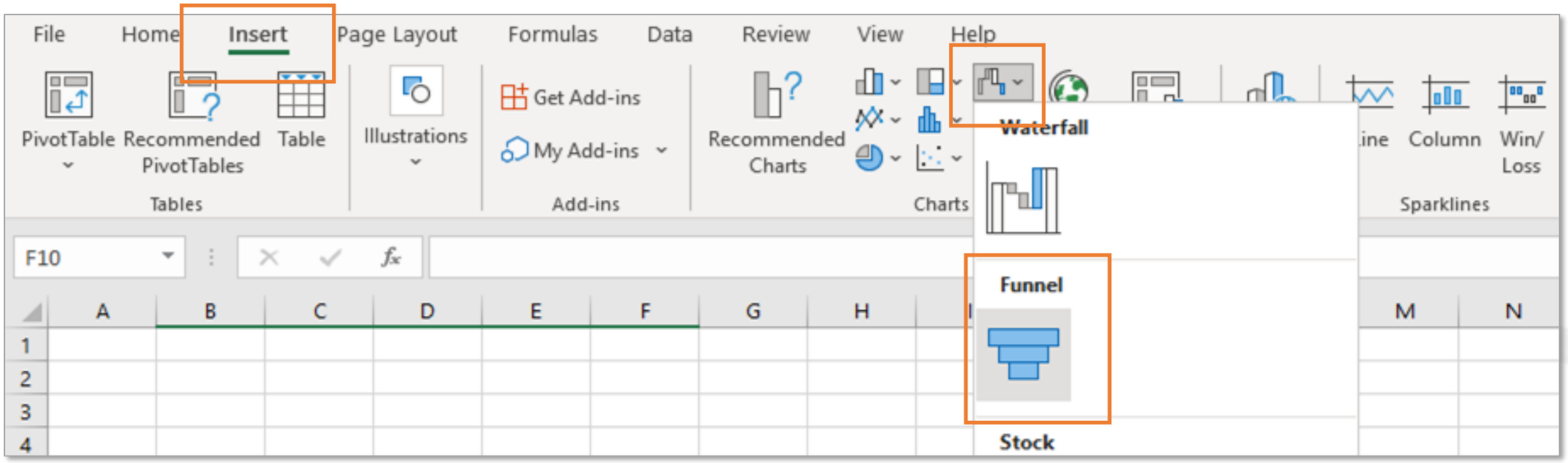
How to Create a Funnel Chart?

The funneling of defects is shown in the given funnel chart.

Stage	Number of defects
Unit testing in development	47
Functional testing	23
Integration testing	14
User acceptance testing	6
Production testing	2

How to Create a Funnel Chart?

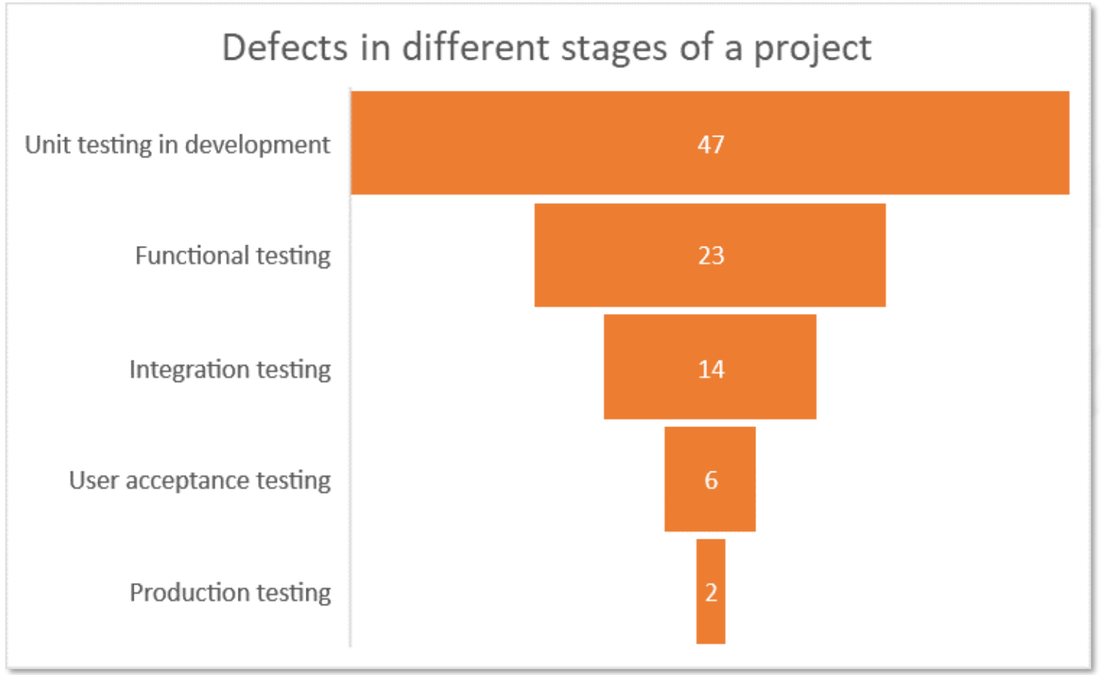
Choose the data and go to Insert. Then click on More charts and select Funnel chart



How to Create a Funnel Chart?

The resultant chart will look like this:

Excel automatically groups the count of defects in the decreasing order and displays the phases like a funnel.



Funnel Chart vs. Stacked Horizontal Bar Chart

- The difference between a funnel chart and a stacked horizontal bar chart is that in the stacked chart there is no ordering of numeric values.
- In the funnel chart the values are arranged in decreasing order and the bars are centered in the plot.

DATA AND
ARTIFICIAL INTELLIGENCE

Chart with Combo Box

Dynamic Charts

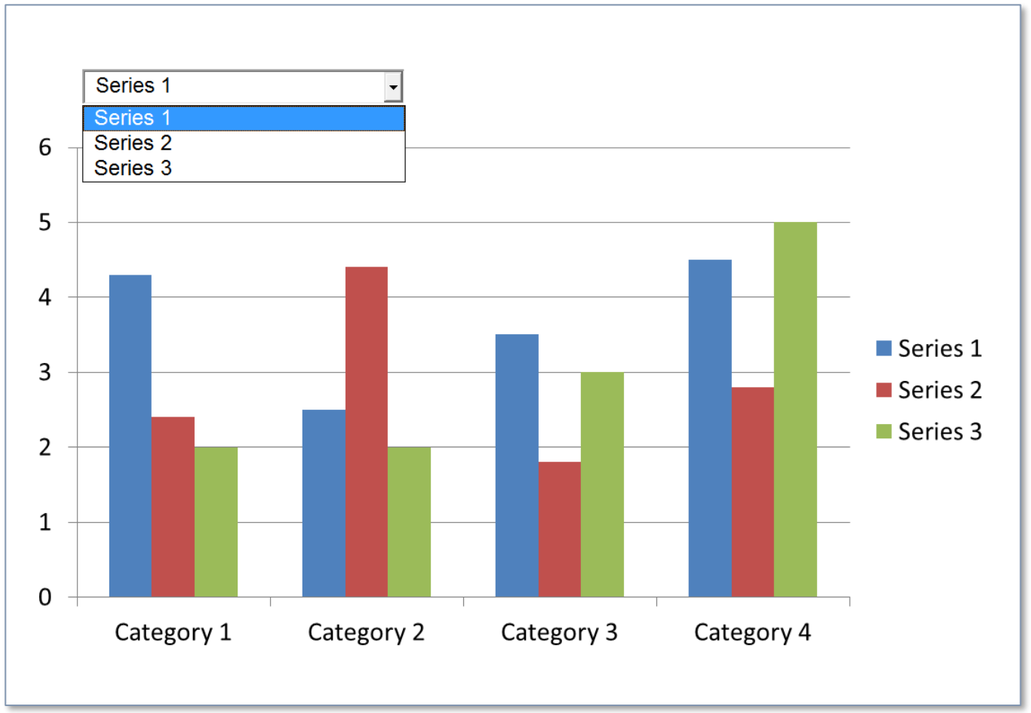
Dynamic charts in Excel allows us to interact with the chart and changes visualizations based on criteria.

Chart with Combo Box

Chart with Combo box is used to show different types of information on a single chart, such as actuals against a target

Chart with Combo Box

A combo box chart has a dropdown list of values to choose the x-axis variables from the data table and dynamically changes the chart based on the chosen value.



Source: https://stackoverflow.com/questions/38270750/is-it-possible-to-control-charts-in-powerpoint-using-combo-box

Chart with Combo Box

The CGPA of students are stored for three subjects. Based on the dropdown chosen, the bar graph changes data to show a subject chosen.

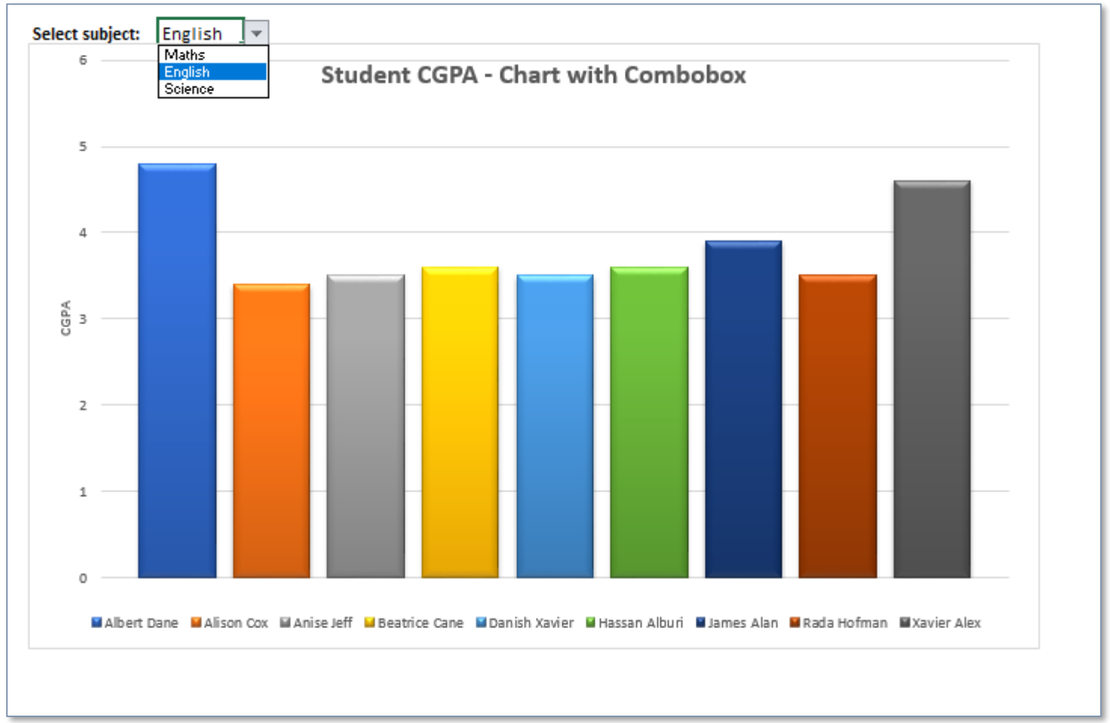
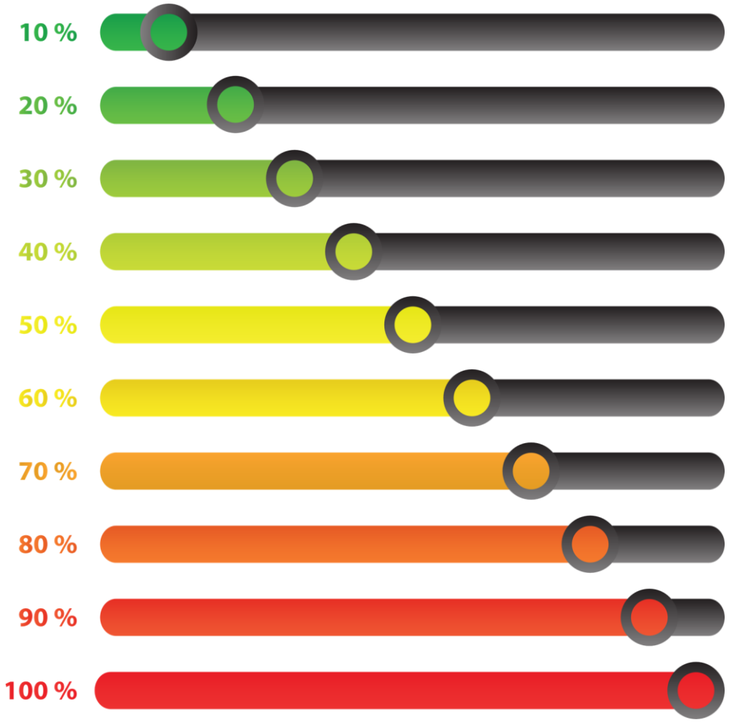


Chart with Scrollbar

Chart with Scrollbar

Form controls can be used to dynamically change the appearance of Excel charts.



One such control is by using scrollbar, which can change the data as shown in the chart.

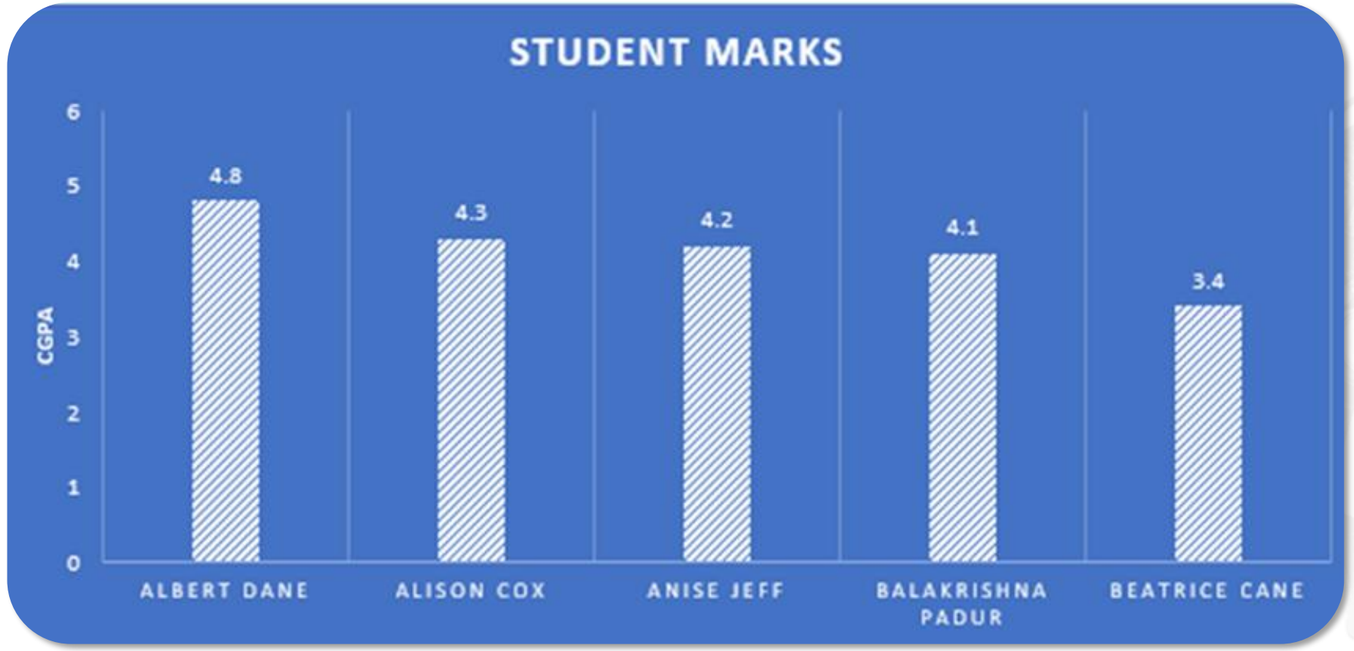
Chart with Scrollbar

- A scroll control is added to provide a view of the chart by moving vertically or horizontally.
- This is useful if the size of the chart is large, with large number of data elements in the data set.

Chart with Scrollbar

The marks of 25 students are available, but only five are visible at a time.

The scrollbar enables to scroll horizontally to view the data of other students as well.



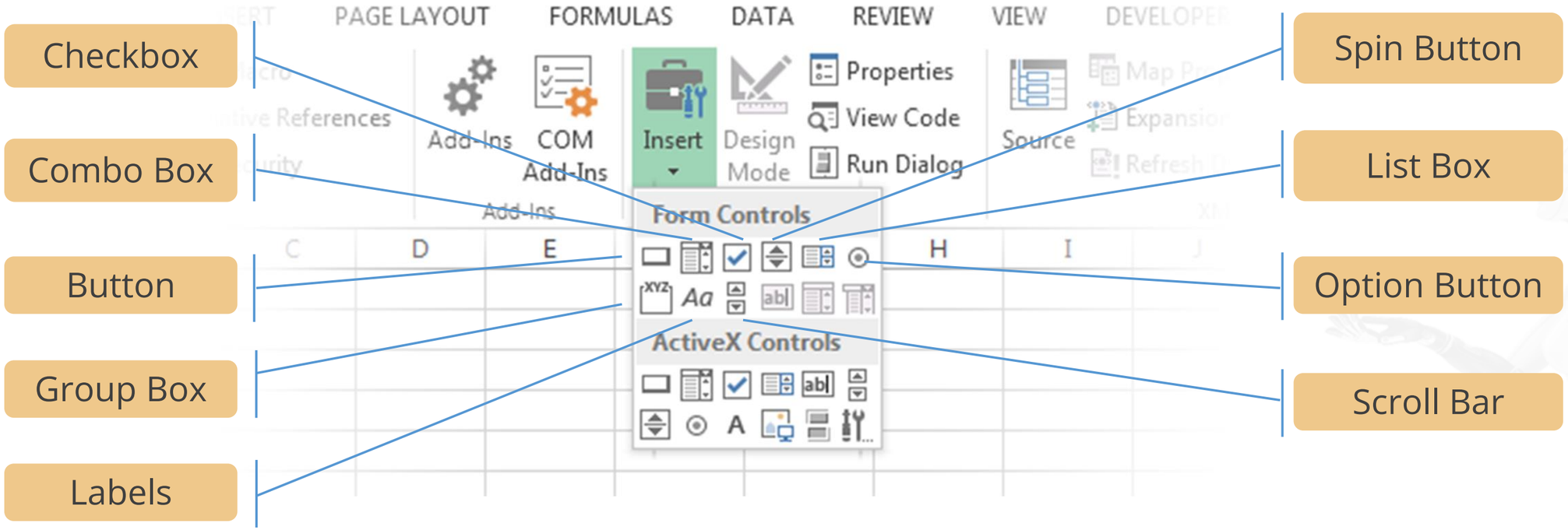
Scroll bar

DATA AND
ARTIFICIAL INTELLIGENCE

Form Controls in Excel

Introduction

Form controls are objects that allow one to interact with their data in excel.



Excel provides several form controls, which are useful for selecting items from a list.

Assisted Practice: Install Developer Tab

Problem statement:

Demonstrate How to Install Developer Tab to Use Various Form Controls in Excel.

ASSISTED PRACTICE

Assisted Practice Guidelines

Steps to follow:

Step 1: Open the Excel file

Step 2: Install the Developer Tab

ASSISTED PRACTICE

Assisted Practice: Create Interactive Dashboards Using Combo Box

Problem statement:

Demonstrate How to Create Interactive Dashboards Using Combo Box.

ASSISTED PRACTICE

Assisted Practice Guidelines

Steps to follow:

Step 1: Open the Excel file

Step 2: Create an interactive dashboard with Combo Box

ASSISTED PRACTICE

Assisted Practice: Create Interactive Dashboards Using Checkbox

Problem statement:

Demonstrate How to Create Interactive Dashboards Using Checkbox.

ASSISTED PRACTICE

Assisted Practice Guidelines

Steps to follow:

Step 1: Open the Excel file

Step 2: Create interactive dashboard with Checkbox

ASSISTED PRACTICE

Assisted Practice: Create Interactive Dashboards Using Scroll Bar

Problem statement:

Demonstrate How to Create Interactive Dashboards Using Scroll Bar in Excel.

ASSISTED PRACTICE

Assisted Practice Guidelines

Steps to follow:

Step 1: Open the Excel file

Step 2: Create an interactive dashboard with Scrollbar

ASSISTED PRACTICE

Key Takeaways

- Dashboard reports help users to analyze the data and take the appropriate actions.
- Charts allow us to represent the data graphically, making it easy to highlight comparisons and trends.
- The thermometer chart depicts how much of your target you have achieved.
- A pareto chart contains a line graph, which represents the cumulative total, and a bar chart, which represents the individual values in descending order.
- Form controls are objects that allow you to interact with your data in excel.

Knowledge Check

Knowledge Check

1

The plot area in a chart is _____.

a. The area defined by the vertical and horizontal axes and their opposite sides

b. Vertical axis in the chart

c. The entire chart, including the data series, axes, title, and legends

d. Horizontal axis in the chart

Knowledge Check

1

The plot area in a chart is _____.

a. The area defined by the vertical and horizontal axes and their opposite sides

b. Vertical axis in the chart

c. The entire chart, including the data series, axes, title, and legends

d. Horizontal axis in the chart

The correct answer is **a**

The plot area in a chart is the area defined by the vertical and horizontal axes and their opposing sides.

Knowledge Check

2

The box on the chart that contains the name of each record is the _____.

a. Cell

b. Title

c. Axis

d. Legend

Knowledge Check

2

The box on the chart that contains the name of each record is the _____.

a. Cell

b. Title

c. Axis

d. Legend

The correct answer is **d**

The box on the chart that contains the name of each record is the legend.

Knowledge Check

3

You can interact with your data in an excel worksheet using form controls.

a. True

b. False

Knowledge Check

3

You can interact with your data in an excel worksheet using form controls.

a. True

b. False

The correct answer is **a**

Form controls are objects that allow you to interact with your data in excel.

Knowledge Check

4

How can you update series as a secondary axis in a chart?

a. Right-click on Series, then click Format Data Series, and then select the Secondary Axis radio button

b. Right-click on horizontal axis, then click Format Axis, and then select the Secondary Axis radio button

c. Right-click on plot area, then click Format Plot Area, and then select the Secondary Axis radio button

d. None of the above

Knowledge Check

4

How can you update series as a secondary axis in a chart?

a. Right-click on Series, then click Format Data Series, and then select the Secondary Axis radio button

b. Right-click on horizontal axis, then click Format Axis, and then select the Secondary Axis radio button

c. Right-click on plot area, then click Format Plot Area, and then select the Secondary Axis radio button

d. None of the above

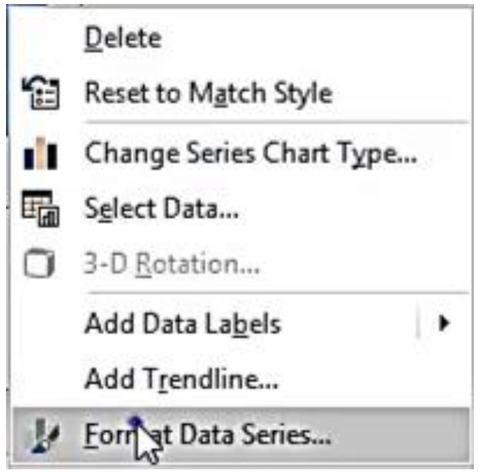
The correct answer is **a**

To update series as a secondary axis in a chart, right-click on Series, then click format data series, and then select the secondary axis radio button.

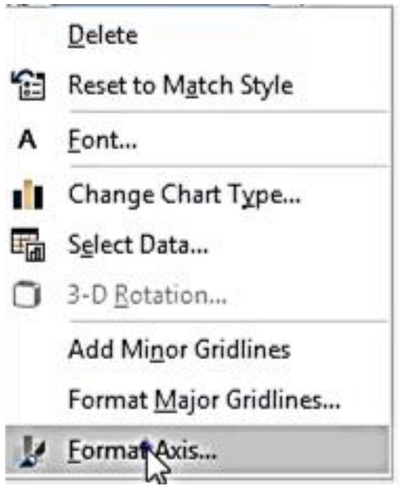
Knowledge Check 5

Which of the following options allows you to set the maximum value of the vertical axis in a thermometer chart?

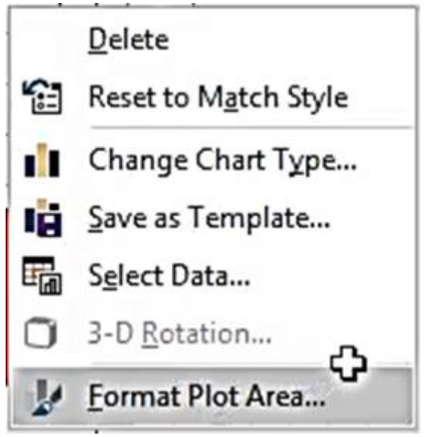
a.



b.



c.

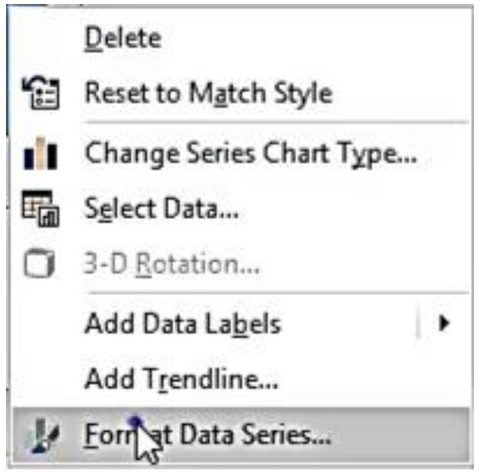


d.

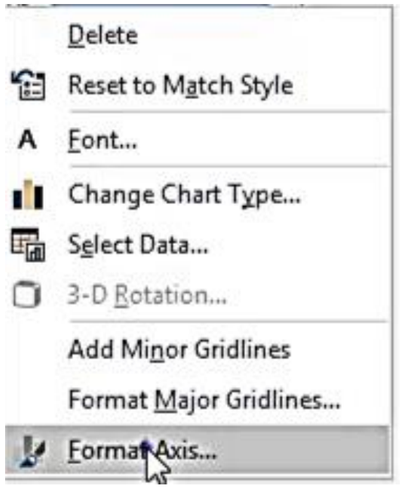
Knowledge Check 5

Which of the following options allows you to set the maximum value of the vertical axis in a thermometer chart?

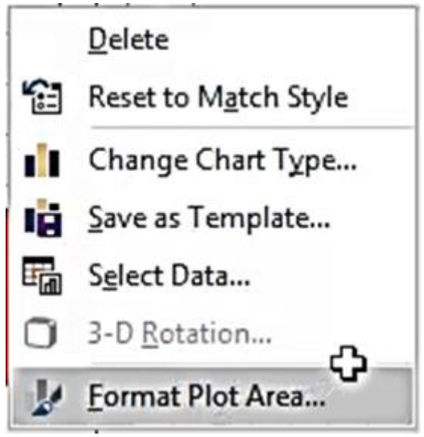
a.



b.



c.



d.

The correct answer is **b**

The Format Axis option allows you to set the maximum value of the vertical axis in a thermometer chart.

Knowledge Check 6

_____ are mainly used to depict trends in data and illustrate its progression over time.

a. Column charts

b. Line charts

c. Pie charts

d. Bar charts

Knowledge Check 6

_____ **are mainly used to depict trends in data and illustrate its progression over time.**

a. Column charts

b. Line charts

c. Pie charts

d. Bar charts

The correct answer is **b**

Line charts are mainly used to depict trends in data and illustrate its progression over time.

Knowledge Check

7

Which of the following tabs allows you to add a combo box in the worksheet?

a. Review tab

b. Insert tab

c. Developer tab

d. Design tab

Knowledge Check

7

Which of the following tabs allows you to add a combo box in the worksheet?

a. Review tab

b. Insert tab

c. Developer tab

d. Design tab

The correct answer is **c**

The developer tab allows you to add a combo box in the worksheet.

Create Interactive Charts and Worksheets with Form Controls

Problem Scenario:

Now that you know the principles of dashboarding, how to create interactive charts, and how to create worksheets with form controls, let us tackle a problem scenario to reinforce the concepts learned. We will provide you a step-by-step guide to do this exercise. Let's start!

UNASSISTED PRACTICE