

NCI Technologies presents:

Microsoft[®] Office Excel[®] 2007 Training

Create a chart

Course contents

- Overview: Charts make data visual
- Lesson 1: Create a basic chart
- Lesson 2: Customize your chart

Each lesson includes a list of suggested tasks and a set of test questions.

Overview: Charts make data visual



A chart gets your point across—fast. With a chart, you can transform worksheet data to show comparisons, patterns, and trends.

So instead of having to analyze columns of worksheet numbers, you can see at a glance what the data means.

This course presents the basics of creating charts in Excel 2007.

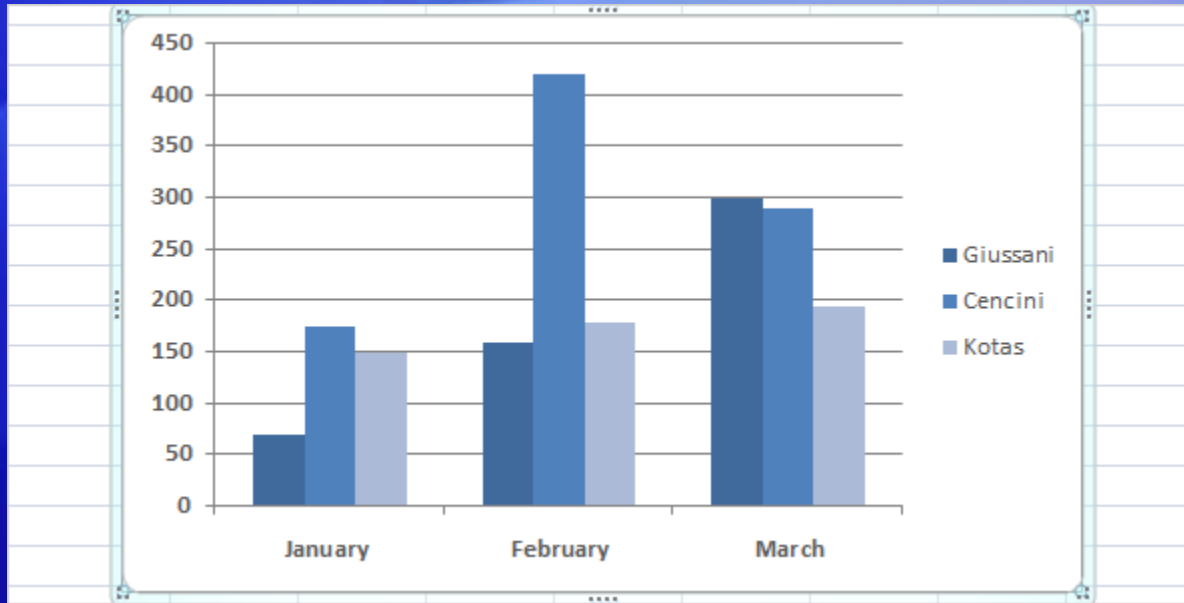
Course goals

- Learn how to create a chart using the new Excel 2007 commands.
- Find out how to make changes to a chart after you create it.
- Develop an understanding of basic chart terminology.

Lesson 1

Create a basic chart

Create a basic chart



Here's a basic chart in Excel, which you can put together in about 10 seconds.

After you create a chart, you can easily add new elements to it such as chart titles or a new layout.

In this lesson you'll find out how to create a basic chart and learn how the text and numbers from a worksheet become the contents of a chart. You'll also learn a few other chart odds and ends.

Create your chart

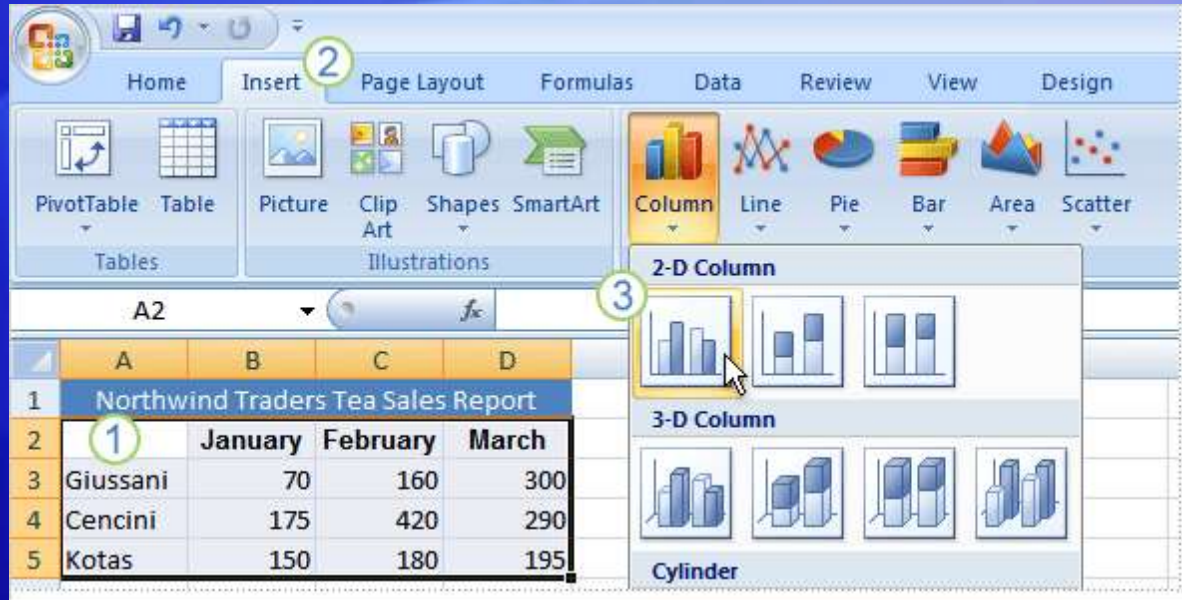
The screenshot shows the Microsoft Excel interface. The 'Insert' tab is selected, and the 'Column' chart type is chosen from the 'Charts' group. A dropdown menu is open, showing '2-D Column' and '3-D Column' options. The '2-D Column' option is selected, and a sub-menu is open showing various 2-D column chart styles. A red circle '1' highlights the data table, a red circle '2' highlights the 'Insert' tab, and a red circle '3' highlights the '2-D Column' chart style.

	A	B	C	D
1	Northwind Traders Tea Sales Report			
2	1	January	February	March
3	Giussani	70	160	300
4	Cencini	175	420	290
5	Kotas	150	180	195

Here's a worksheet that shows how many cases of Northwind Traders Tea were sold by each of three salespeople in three months.

You want to create a chart that shows how each salesperson compares against the others, month by month, for the first quarter of the year.

Create your chart



The picture shows the steps for creating the chart.

- 1 Select the data that you want to chart, including the column titles (January, February, March) and the row labels (the salesperson names).
- 2 Click the **Insert** tab, and in the **Charts** group, click the **Column** button.

Create your chart

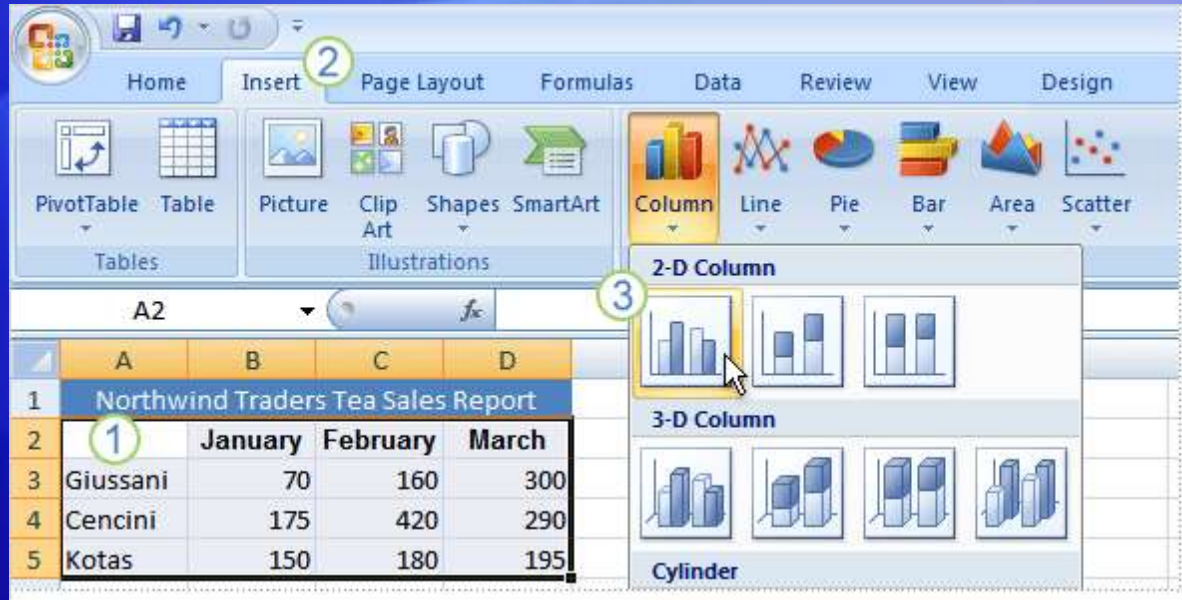


The picture shows the steps for creating the chart.

- 3 You'll see a number of column chart types to choose from. Click **Clustered Column**, the first column chart in the **2-D Column** list.

That's it. You've created a chart in about 10 seconds.

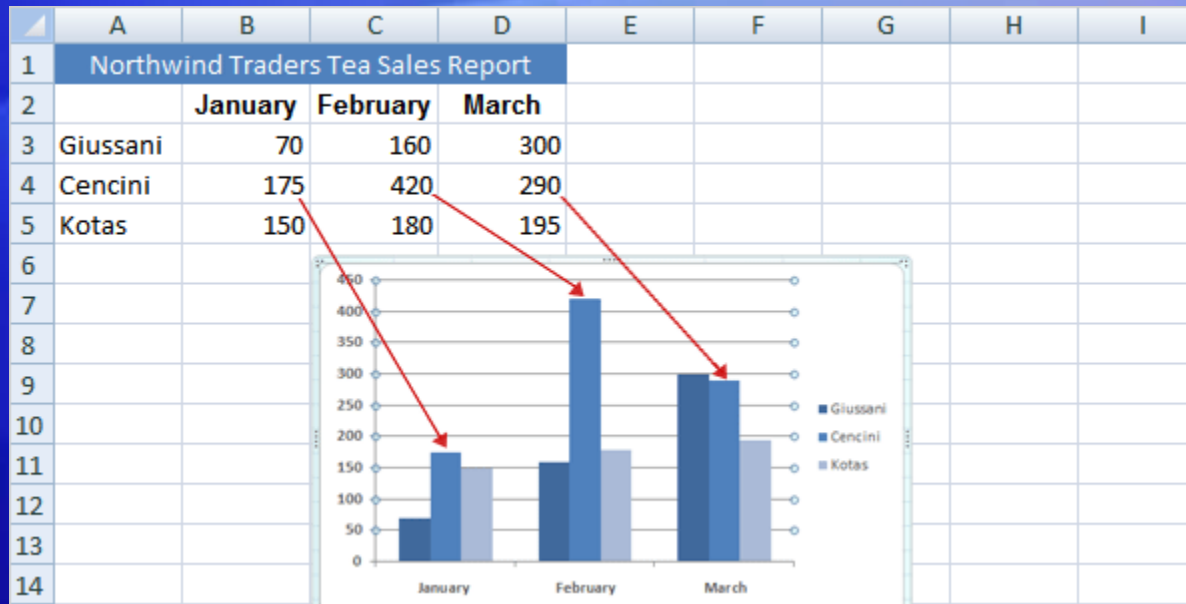
Create your chart



If you want to change the chart type after creating your chart, click inside the chart.

On the **Design** tab under **Chart Tools**, in the **Type** group, click **Change Chart Type**. Then select the chart type you want.

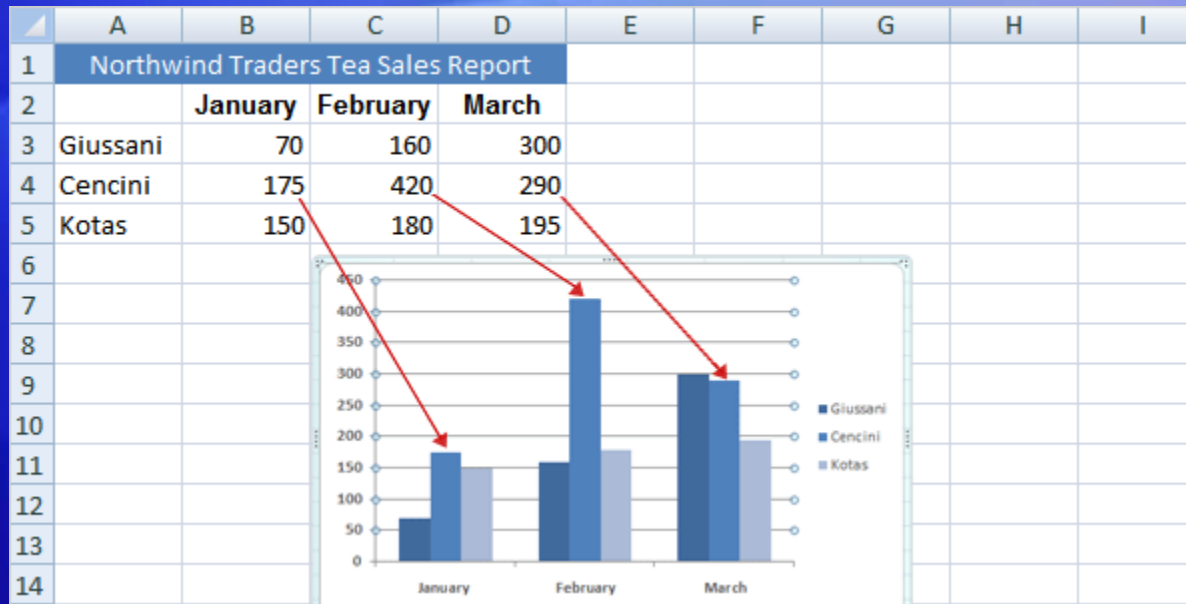
How worksheet data appears in the chart



Here's how your new column chart looks.

It shows you at once that Cencini (represented by the middle column for each month) sold the most tea in January and February but was outdone by Giussani in March.

How worksheet data appears in the chart

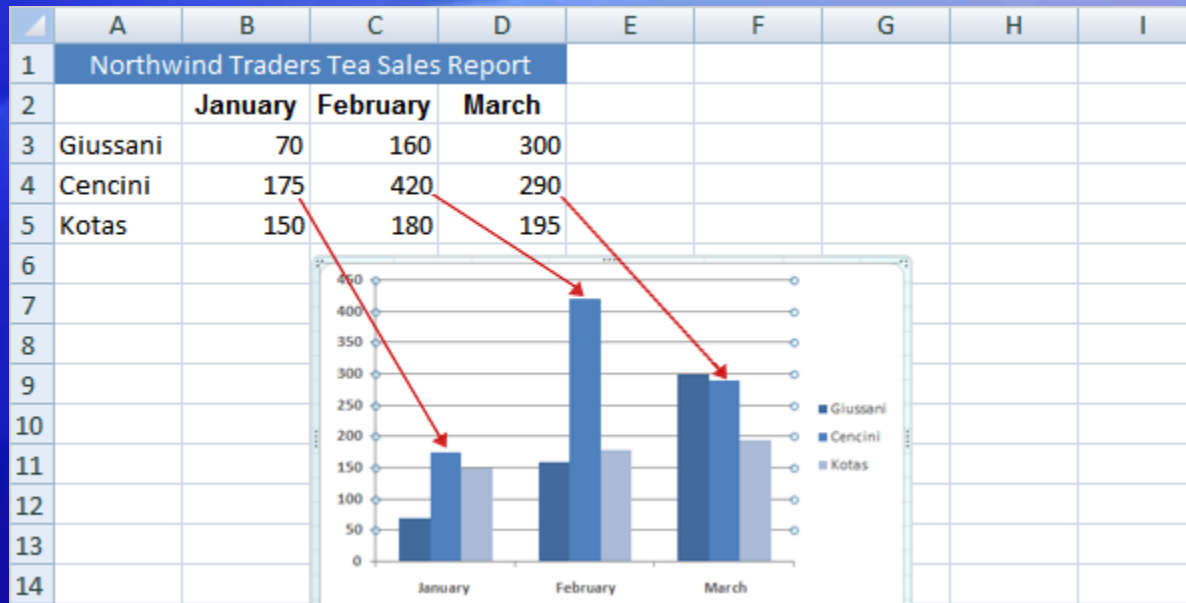


Data for each salesperson appears in three separate columns, one for each month.

The height of each chart is proportional to the value in the cell that it represents.

So the chart immediately shows you how the salespeople stack up against each other, month by month.

How worksheet data appears in the chart

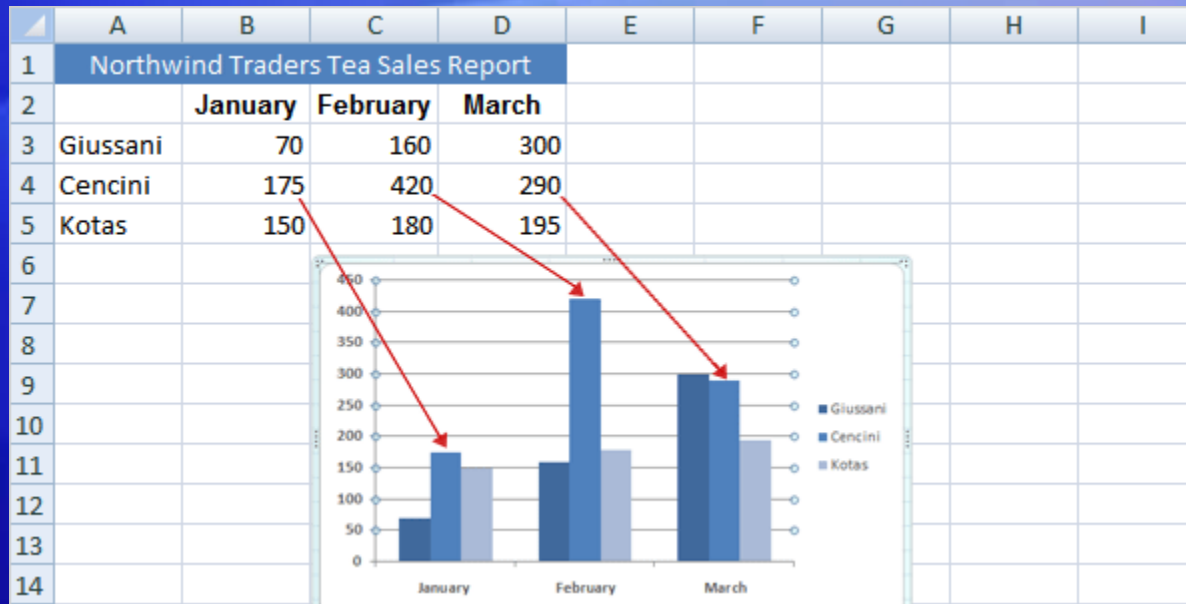


Each row of salesperson data has a different colour in the chart.

The chart legend, created from the row titles in the worksheet (the salesperson names), tells which colour represents the data for each salesperson.

Giussani data, for example, is the darkest blue, and is the left-most column for each month.

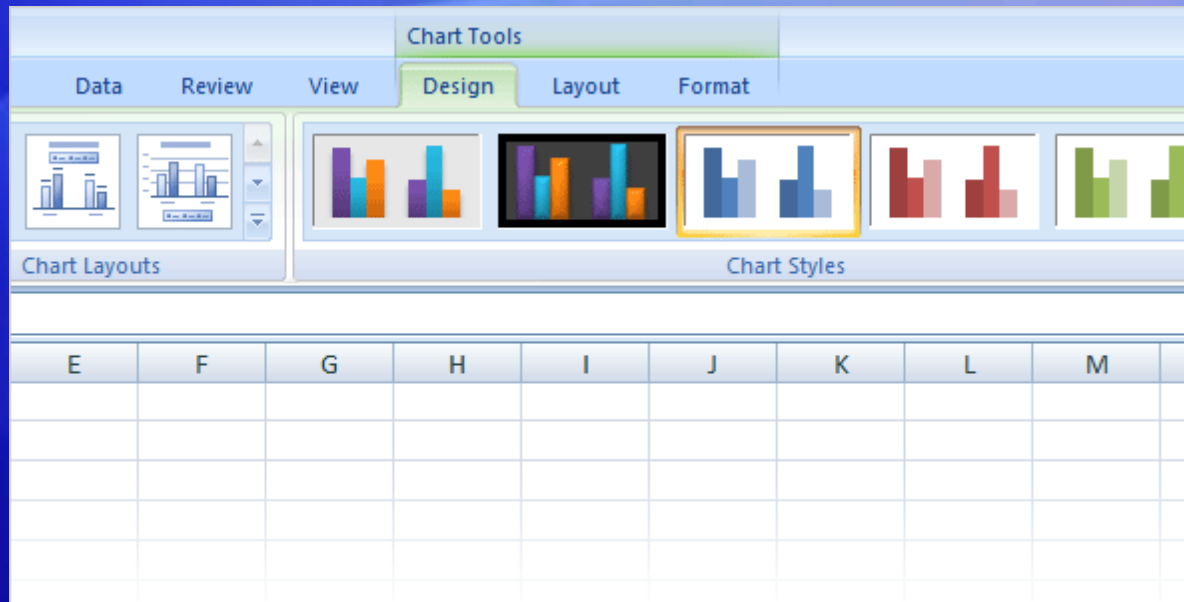
How worksheet data appears in the chart



The column titles from the worksheet—January, February, and March—are now at the bottom of the chart.

On the left side of the chart, Excel has created a scale of numbers to help you to interpret the column heights.

Chart Tools: Now you see them, now you don't

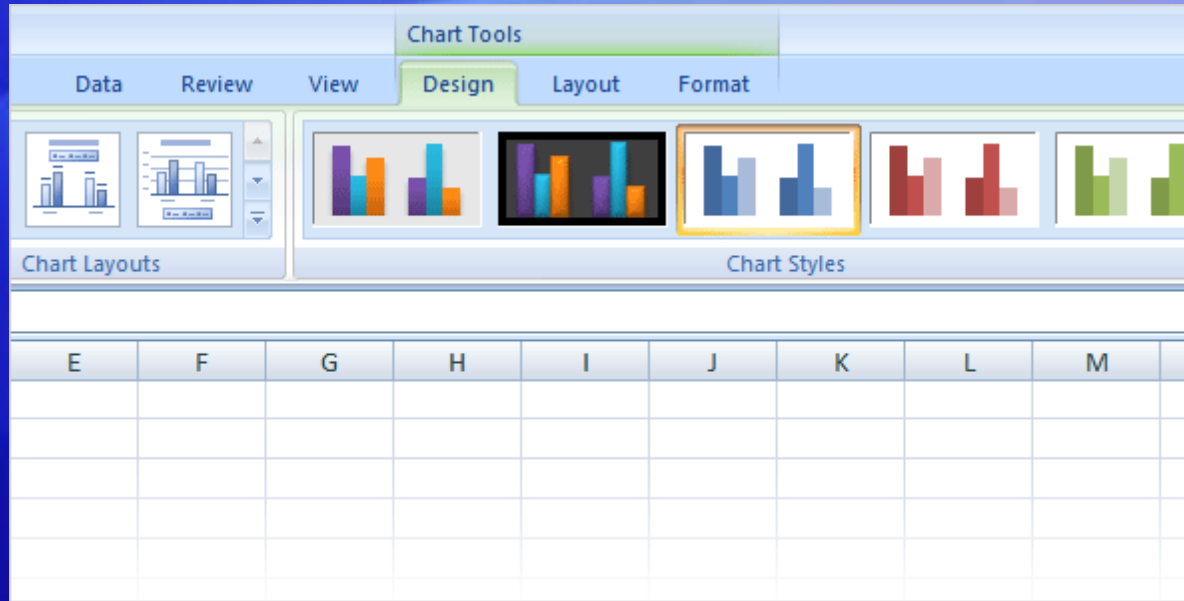


Before you do more work with your chart, you need to know about the **Chart Tools**.

After your chart is inserted on the worksheet, the **Chart Tools** appear on the Ribbon with three tabs: **Design**, **Layout**, and **Format**.

On these tabs, you'll find the commands you need to work with charts.

Chart Tools: Now you see them, now you don't



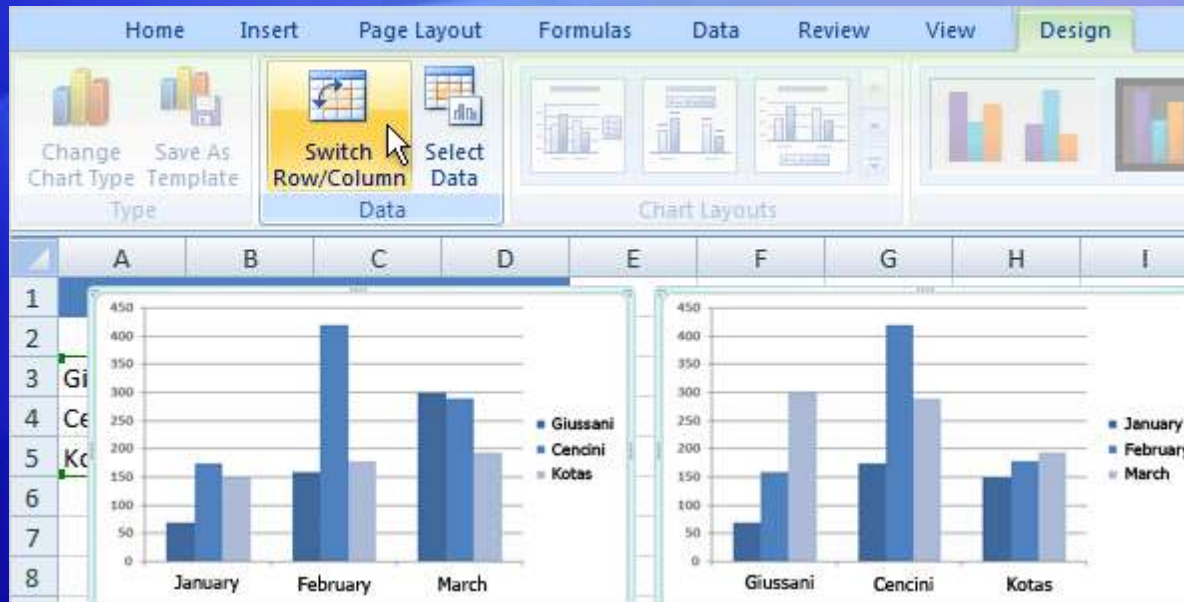
When you complete the chart, click outside it. The **Chart Tools** go away.

To get them back, click inside the chart. Then the tabs reappear.

So don't worry if you don't see all the commands you need at all times.

Take the first steps either by inserting a chart (using the **Charts** group on the **Insert** tab), or by clicking inside an existing chart. The commands you need will be at hand.

Change the chart view

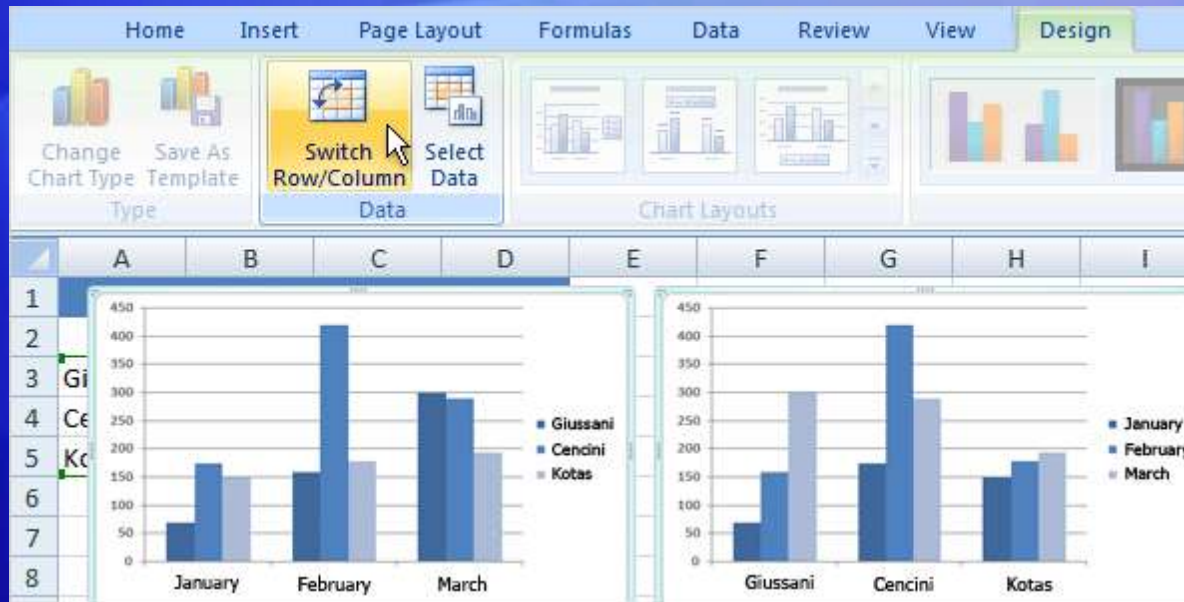


You can do more with your data than create one chart.

You can make your chart compare data another way by clicking a button to switch from one chart view to another.

The picture shows two different views of the same worksheet data.

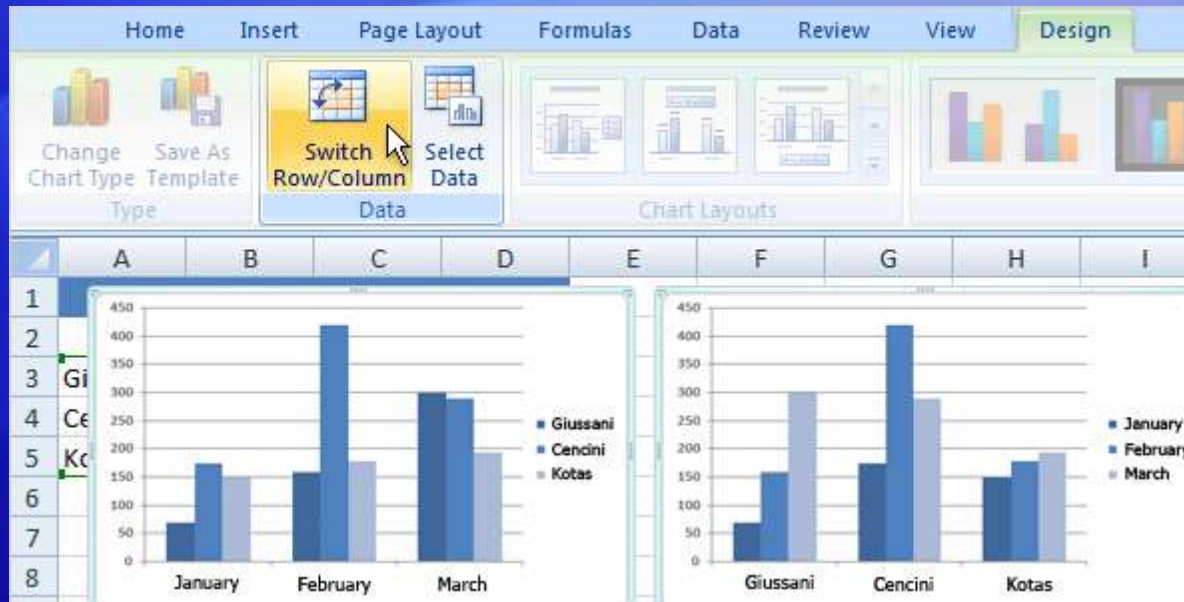
Change the chart view



The chart on the left is the chart you first created, which compares salespeople to each other.

Excel grouped data by worksheet columns and compared worksheet rows to show how each salesperson compares against the others.

Change the chart view

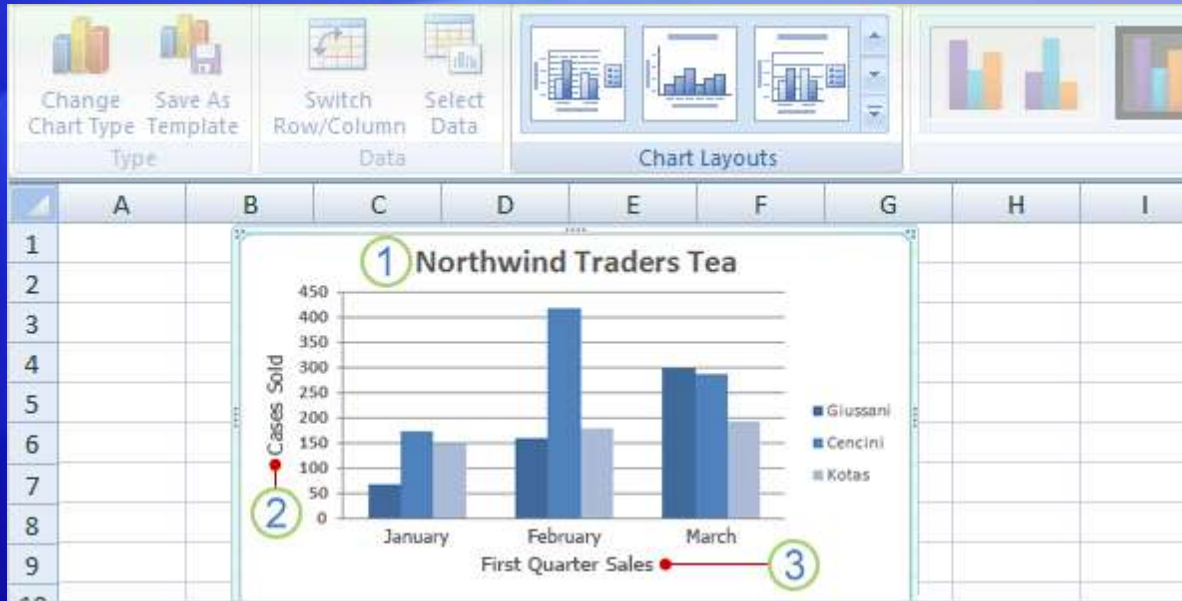


But another way to look at the data is to compare sales for each salesperson, month over month.

To create this view of the chart, click **Switch Row/Column** in the **Data** group on the **Design** tab.

In the chart on the right, data is grouped by rows and compares worksheet columns. So now your chart says something different: It shows how each salesperson did, month by month, compared against themselves.

Add chart titles



It's a good idea to add descriptive titles to your chart, so that readers don't have to guess what the chart is about.


You can give a title to the chart itself, as well as to the chart axes, which measure and describe the chart data.

This chart has two axes. On the left side is the vertical axis, which is the scale of numbers by which you can interpret the column heights. The months of the year at the bottom are on the horizontal axis.

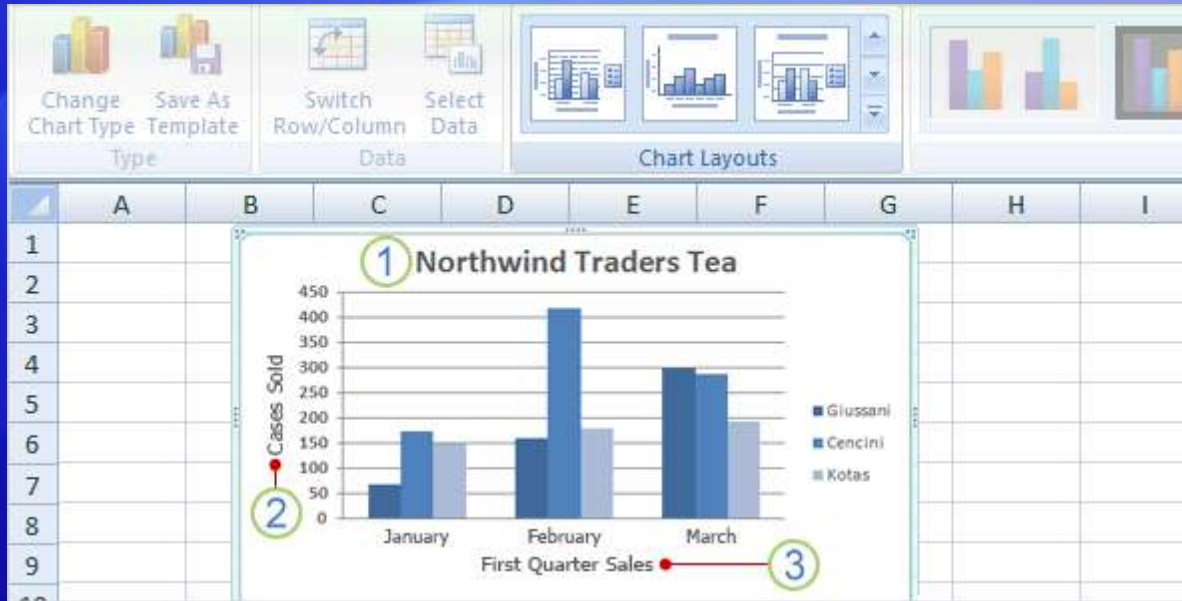
Add chart titles



A quick way to add chart titles is to click the chart to select it, and then go to the **Charts Layout** group on the **Design** tab.

Click the **More** button  to see all the layouts. Each option shows different layouts that change the way chart elements are laid out.

Add chart titles



The picture shows Layout 9, which adds placeholders for a chart title and axes titles.

You type the titles directly in the chart.

- 1 The title for this chart is **Northwind Traders Tea**, the name of the product.
- 2 The title for the vertical axis on the left is **Cases Sold**.
- 3 The title for the horizontal axis at the bottom is **First Quarter Sales**.

Suggestions for practice

1. Create a chart.
2. Look at chart data in different ways.
3. Update chart data.
4. Add titles.
5. Change chart layouts.
6. Change the chart type.

Test 1, question 1

You've created a chart. Now you need to compare data another way. To do this, you must create a second chart. (Pick one answer.)

1. True.
2. False.

Test 1, question 1: Answer

False.

You can quickly create another view of your worksheet data by clicking the **Switch Row/Column** button on the **Design** tab.

Test 1, question 2

You create a chart. But later on you don't see the Chart Tools. What do you do to get them back? (Pick one answer.)

1. Create another chart.
2. Click the **Insert** tab.
3. Click inside the chart.

Test 1, question 2: Answer

Click inside the chart.

The **Chart Tools** will then be at hand with three tabs: **Design**, **Layout**, and **Format**.

Test 1, question 3

You can't change the chart type after you create a chart. (Pick one answer.)

1. True.
2. False.

Test 1, question 3: Answer

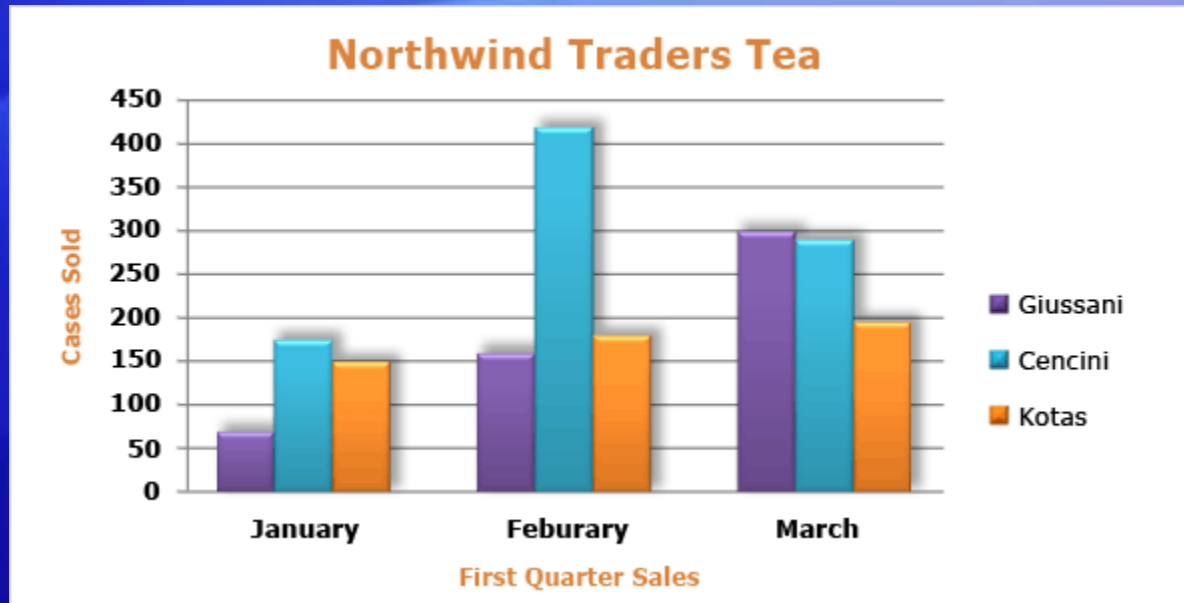
False.

You can always change the chart type after you create your chart. Click inside the chart. On the **Design** tab, in the **Type** group, Click **Change Chart Type**, and then select another chart type.

Lesson 2

Customise your chart

Customise your chart



After you create your chart, you can customise it to give it a more professional design.

For example, you can give your chart a whole different set of colours by selecting a new chart style.


You can also format chart titles to change them from plain to fancy. And there are many different formatting options you can apply to individual columns to make them stand out.

Change the look of your chart



When you first create your chart, it's in a standard colour.

By using a **chart style**, you can apply different colours to a chart in just seconds.

First, click in the chart. Then on the **Design** tab, in the **Chart Styles** group, click the **More** button  to see all the choices.

Then click the style you want.

Change the look of your chart



When you first create your chart, it's in a standard colour.

By using a **chart style**, you can apply different colours to a chart in just seconds.

Some of the styles change just the colour of the columns.

Others change the colour and add an outline around the columns, while other styles add colour to the plot area (the area bounded by the chart axes). And some styles add colour to the chart area (the entire chart).

Change the look of your chart



If you don't see what you want in the **Chart Styles** group, you can get other colour choices by selecting a different **theme**.

Click the **Page Layout** tab, and then click **Colours** in the **Themes** group.

When you rest the pointer over a colour scheme, the colours are shown in a temporary preview on the chart. Click the one you like to apply it to the chart.

Change the look of your chart



Important

Unlike a chart style, the colours from a theme will be applied to other elements you might add to the worksheet.

For example, a table or a cell style such as a heading will take on the colours of the theme applied to the chart.

Format titles



If you'd like to make the chart or axis titles stand out more, that's also easy to do.

On the **Format** tab, in the **WordArt Styles** group, there are many ways to work with the titles.

The picture shows that one of the options in the group, a text fill, has been added to change the colour.

Format titles



To use a **text fill**, first click in a title area to select it.

Then click the arrow on **Text Fill**  in the **WordArt Styles** group. Rest the pointer over any of the colours to see the changes in the title. When you see a colour you like, select it.

Text Fill also includes options to apply a gradient or a texture to a title.

Format titles



To make font changes, such as making the font larger or smaller—or to change the font face—click **Home**, and then go to the **Font** group.

Or you can make the same formatting changes by using the **Mini toolbar**.

The toolbar appears in a faded fashion after you select the title text. Point at the toolbar and it becomes solid, and then you can select a formatting option.

Format individual columns



There is still more that you can do with the format of the columns in your chart.

In the picture, a shadow effect has been added to each of the columns (an offset diagonal shadow is behind each column).

Format individual columns



Here's how to add a shadow effect to columns.

1. Click one of Giussani's columns. That will select all three columns for Giussani (known as a series).
2. On the **Format** tab, in the **Shape Styles** group, click the arrow on **Shape Effects**.

Format individual columns

Here's how to add a shadow effect to columns.



3. Point to **Shadow**, and then rest the pointer on the different shadow styles in the list.
4. You can see a preview of the shadows as you rest the pointer on each style. When you see one you like, select it.

Format individual columns



The **Shape Styles** group offers plenty of other great formatting options to choose from.

For example, **Shape Effects** offers more than just shadows. You can add bevel effects and soft edges to columns, or even make columns glow.

You can also click **Shape Fill** to add a gradient or a texture to the columns, or click **Shape Outline** to add an outline around the columns.

Add your chart to a PowerPoint presentation



When your chart looks just the way you want and it's ready for a debut, you can easily add it to a Microsoft Office PowerPoint® presentation.

Here's how it works.


1. Copy the chart in Excel.
2. Open PowerPoint 2007.
3. On the slide you want the chart to be on, paste the chart.

Add your chart to a PowerPoint presentation



When your chart looks just the way you want and it's ready for a debut, you can easily add it to a Microsoft Office PowerPoint® presentation.

Here's how it works.

4. In the chart's lower-right corner, the **Paste Options** button  appears. Click the button.

Now you're ready to present your chart.

Suggestions for practice

1. Change the look of a chart.
2. Try out a colour scheme by using a theme.
3. Format the chart title.
4. Format a column.
5. Format other areas of the chart.
6. Add your chart to a PowerPoint presentation.
7. Bonus exercises: Make a pie chart, and save your chart as a template.

Test 2, question 1

If you don't see all the colour options you want for your chart in the Chart Styles group on the Design tab, you have another way to get more colours. (Pick one answer.)

1. True.
2. False.

Test 2, question 1: Answer

True.

You can pick other colours by selecting a theme. Click the **Page Layout** tab, and then click **Colours** in the **Themes** group. Remember that the colours from the themes will be applied to other elements in the worksheet such as a table or cell styles.

Test 2, question 2

What do you do first to add an Excel chart to a PowerPoint 2007 presentation? (Pick one answer.)

1. Click the **Data** tab.
2. Click the **Insert** tab.
3. Copy the chart.

Test 2, question 2: Answer

Copy the chart.

Then open PowerPoint 2007, paste, and it's done.