



Microsoft®
Excel 2016 Intermediate
 Quick Reference Card

Chart Elements



Chart Options

Chart Types

- Column:** Used to compare different values vertically side-by-side. Each value is represented in the chart by a vertical bar.
- Line:** Used to illustrate trends over time (days, months, years). Each value is plotted as a point on the chart and values are connected by a line.
- Pie:** Useful for showing values as a percentage of a whole when all the values add up to 100%. The values for each item are represented by different colors.
- Bar:** Similar to column charts, except they display information in horizontal bars rather than in vertical columns.
- Area:** Similar to line charts, except the areas beneath the lines are filled with color.
- XY (Scatter):** Used to plot clusters of values using single points. Multiple items can be plotted by using different colored points or different point symbols.
- Stock:** Effective for reporting the fluctuation of stock prices, such as the high, low, and closing points for a certain day.
- Surface:** Useful for finding optimum combinations between two sets of data. Colors and patterns indicate values that are in the same range.

Charts

Create a Chart: Select the cell range that contains the data you want to chart. Click the **Insert** tab on the ribbon. Click a chart type button in the Charts group and select the chart you want to insert.

Move or Resize a Chart: Select the chart you want to manipulate. Place the cursor over the chart's border and, with the 4-headed arrow showing, click and drag to move it. Or, click and drag a sizing handle to resize it.

Change the Chart Type: Select the chart you want to change and click the **Design** tab on the ribbon. Click the **Change Chart Type** button and select a different chart from the available options. Or, right-click the chart and select **Change Chart Type** from the menu.

Filter a Chart: With the chart you want to filter selected, click the **Filter** button next to it. Deselect the items you want to hide from the chart view and click the **Apply** button.

Insert a Sparkline: Select the cell range that contains the data you want to chart and click the **Insert** tab on the ribbon. Select the sparkline you want to insert from the Sparkline group. Select the cell or cell range where you want to add the sparkline and click **OK**.

Charts

Insert a Trendline: Select the chart where you want to add a trendline. Click the **Design** tab on the ribbon and click the **Add Chart Element** button. Select **Trendline** from the menu.

Print and Distribute

Set the Page Size: Click the **Page Layout** tab. Click the **Size** button and select the page size desired for the worksheet.

Set the Print Area: Select the cell range you want to print. Click the **Page Layout** tab, click the **Print Area** button, and select **Set Print Area**.

Print Titles, Gridlines, and Headings: Click the **Page Layout** tab. Click the **Print Titles** button and use the dialog box to set which items you wish to print.

Add a Header or Footer: Click the **Insert** tab on the ribbon and click the **Header & Footer** button. Add the desired information to the header and footer fields that appear in the worksheet.

Adjust Margins and Orientation: Click the **Page Layout** tab. Click the **Margins** button to select from a list of common page margins. Click the **Orientation** button to choose from either Portrait or Landscape orientation.

Additional Chart Elements

Data Labels: Display values from the cells of the worksheet on the plot area of the chart.

Data Table: A table added next to the chart that shows the worksheet data the chart is illustrating.

Error Bars: Help you quickly identify standard deviations and error margins.

Trendline: Identifies the trend of the current data, not actual values. Can also identify forecasts for future data.

Intermediate Formulas

Reference Other Worksheets: To reference another worksheet in a formula, add '!' after the sheet name in the formula, for example: =FebruarySales!B4.

Reference Other Workbooks: To reference another workbook in a formula, add brackets '[']' around the file name in the formula, for example: =[FebruarySales.xlsx]Sheet1!\$B\$4.

Order of Operations: When calculating a formula, Excel performs operations in the following order: Parentheses, Exponents, Multiplication and Division, and finally Addition and Subtraction (as they appear left to right). Use this mnemonic device to help you remember the order of operations:

Please	Parentheses
Excuse	Exponents
My	Multiplication
Dear	Division
Aunt	Addition
Sally	Subtraction

Concatenate Text: Use the CONCATENATE function =CONCATENATE(text1,text2,...) to join the text from multiple cells into a single cell. Use the arguments within the function to define the text you want to combine as well as any spaces or punctuation.

The Payment Function: Use the PMT function =PMT(rate,nper,pv,...) to calculate a loan amount. Use the arguments within the function to define the loan rate, number of periods, and present value and Excel calculates the payment amount.

Date Functions: Date functions are used to add a specific date to a cell. Some common date functions in Excel include:

Date	=DATE(year,month,day)
Today	=TODAY()
Now	=NOW()

Display Worksheet Formulas: Click the **Formulas** tab on the ribbon and then click the **Show Formulas** button. Click the **Show Formulas** button again to turn off the formula view.

Manage Data

Export Data: Click the **File** tab. At the left, select **Export** and click **Change File Type**. Select the file type you want to export the data to and click **Save As**.

Use Flash Fill: Click in the cell to the right of the cell(s) where you want to extract or combine data. Start typing the data in the column. When a pattern is recognized, Excel predicts the remaining values for the column. Press **Enter** to accept the Flash Fill values.

Manage Data

Use the Quick Analysis Tools: Select the cell range you want to summarize. Click the **Quick Analysis** button that appears. Select the analysis tool you want to use. Choose from formatting, charts, totals, tables, or sparklines.

Outline and Subtotal: Click the **Data** tab on the ribbon and click the **Subtotal** button. Use the dialog box to define which column you want to subtotal and the calculation you want to use. Click **OK**. **Note:** The column you are subtotaling must be sorted alphabetically. After the subtotals are applied, outline buttons appear to the left of the data.

Import Data: Click the **Data** tab on the ribbon. In the Get External Data group, select the source from which you want to import data. Locate the file with data to import and click **Import**.

Tables

	A	B	C	D
1	Excursion	Jan	Feb	Mar
2	Beijing	6,010	7,010	6,520
3	Las Vegas	35,250	28,125	37,455
4	México DF	20,850	17,200	27,010
5	Paris	33,710	29,175	35,840
6	Tokyo	12,510	14,750	11,490
7	Total	108,330	96,260	118,315

Format a Cell Range as a Table: Select the cells you want to apply table formatting to. Click the **Format as Table** button in the Styles group of the Home tab and select a table format from the gallery.

Sort Data: Select a cell in the column you want to sort. Click the **Sort & Filter** button on the Home tab. Select a sort order or select **Custom Sort** to define specific sort criteria.

Filter Data: Click the filter arrow for the column you want to filter. Uncheck the boxes for any data you want to hide. Click **OK**.

Add Table Rows or Columns: Select a cell in the row or column next to where you want to add blank cells. Click the **Insert** button list arrow on the Home tab. Select either **Insert Table Rows Above** or **Insert Table Columns to the Left**.

Table Style Options: Click any cell in the table. Click the **Design** tab on the ribbon and select an option in the Table Style Options group.

Remove Duplicate Values: Click any cell in the table and click the **Data** tab on the ribbon. Click the **Remove Duplicates** button. Select which columns you want to check for duplicates and click **OK**.

Insert a Slicer: With any cell in the table selected, click the **Design** tab on the ribbon. Click the **Insert Slicer** button. Select the columns you want to use as slicers and click **OK**.

Intermediate Formatting

Apply Conditional Formatting: Select the cells you want to format. On the **Home** tab, click the **Conditional Formatting** button. Select a conditional formatting category and then the rule you want to use. Specify the format to apply and click **OK**.

Apply Cell Styles: Select the cell(s) you want to format. On the Home tab, click the **Cell Styles** button and select a style from the menu. You can also select **New Cell Style** to define a custom style.

Create a Custom Cell Style: Apply the desired formatting to a cell in the worksheet. Click the **Cell Styles** button on the Home tab. Select **New Cell Style** in the menu. In the dialog box, the formatting from the selected cell is captured. Enter a name for the custom style and click **OK**.

Find and Replace Formatting: Click the **Find & Select** button on the Home tab. Select **Replace** from the menu. In the dialog box, click the **Options** button and define the formatting criteria for the data you want to find and the data you want to replace it with. Click **Replace** or **Replace All** and then click the **OK** button.

Apply a Workbook Theme: Click the **Page Layout** tab on the ribbon. Click the **Themes** button and select a theme from the menu.

Collaborate with Excel

Add a Cell Comment: Click the cell where you want to add a comment. Click the **Review** tab on the ribbon and click the **New Comment** button. Type your comment and then click outside of it to save the text.

Share a Workbook: Click the **Review** tab on the ribbon. Click the **Share Workbook** button and, in the dialog box, check the **Allow changes by more than one user** check box. Click **OK** and then click **OK** again to save the workbook.

Enable Track Changes: Click the **Review** tab on the ribbon. Click the **Track Changes** button and select **Highlight Changes**. Check the **Track changes while editing** check box. Click **OK** and then click **OK** again to save the workbook.

Protect a Worksheet: Before protecting a worksheet, you need to unlock any cells you want to remain editable after the protection is applied. Then, click the **Review** tab on the ribbon and click the **Protect Sheet** button. Select what you want to remain editable after the sheet is protected. If you wish, add a password to unprotect the sheet and click the **OK** button.

Add a Workbook Password: Click the **File** tab and select **Save As**. Click **Browse** to select a save location. Click the **Tools** button in the dialog box and select **General Options**. Set a password to open and/or modify the workbook. Click **OK**.

Interactive Training for 300+ Skills

Start your free trial today: www.customguide.com

Office for Windows

Access
Excel
Office 365
OneNote
Outlook
PowerPoint
Word

Productivity

OneDrive
Project
Salesforce
SharePoint
Skype for Business
Windows 10
...and more!

Google Suite

Google Docs
Google Drive
Google Sheets
Google Slides

Office for Mac

Excel
PowerPoint
Word

Also Available

Spanish Editions

Courses Include:

- ✔ Interactive Tutorials
- ✔ Skill Assessments
- ✔ Customizable Courseware
- ✔ Quick References

Trusted Partner of 3,000+ Organizations

