Designing a Worksheet with Excel

Introduction

Microsoft Office Excel 2003 offers several tools that make your worksheets look attractive and professional. Without formatting, a worksheet can look confusing with meaningless data. To highlight important information, you can change the appearance of selected numbers and text by adding dollar signs, commas, and other numerical formats, or by applying attributes such as boldface and italics. You can change font and font size, adjust the alignment of data in cells, and add colors, patterns, borders, and pictures. By using AutoFormats and styles to apply multiple changes, you can speed up the formatting process and ensure a greater degree of consistency among your worksheets.

You can also modify the look of your printouts by adjusting a variety of print settings, including page orientation, margins, headers and footers, and other elements that enhance the readability of your worksheets and workbooks. When you’re ready to print your workbook, you can choose to print all or part of the worksheets.

What You’ll Do

- Format Text and Numbers
- Change Data Alignment
- Change Data Font and Color
- Design Conditional Formatting
- Add Color and Patterns to Cells
- Add Borders to Cells
- Format Data with AutoFormat
- Create and Apply Styles to Cells
- Format Tabs and the Background
- Insert Page Breaks
- Set Up the Page
- Add Headers and Footers
- Customize Worksheet Printing
- Set the Print Area
- Preview a Worksheet
- Print a Worksheet
Sometimes you want to format cells with labels differently from cells with totals. You can change the appearance of data in selected cells without changing its actual label or value. Format text and numbers by using font attributes, such as boldface, italics, or underlines, to enhance data to catch the readers’ eye and focus their attention. You can also apply numeric formats to values to better reflect the type of information they present—dollar amounts, dates, decimals, or percentages.
Apply Numeric, Date, and Time Formats

1. Select a cell or range with the numbers to format.
2. Click the Format menu, and then click Cells.
3. Click the Number tab.
4. Click a numeric, date, or time category.
5. Select the formatting type options you want to apply.
6. Preview the sample.
7. Click OK.

Did You Know?

*Excel has formatting intelligence.* As you type at the end of a column or row, Excel extends the formatting and formulas you are using in that column or row.

*You can use AutoFormat to save time.* An AutoFormat is a combination of ready-to-use, designed formats. Select the cell or range you want to format, click the Format menu, click AutoFormat, click a format style, and then click OK.
Changing Data Alignment

When you enter data in a cell, Excel aligns labels on the left edge of the cell and aligns values and formulas on the right edge of the cell. Horizontal alignment is the way in which Excel aligns the contents of a cell relative to the left or right edge of the cell; vertical alignment is the way in which Excel aligns cell contents relative to the top and bottom of the cell. Excel also provides an option for changing the character flow and rotation of text in a cell. You can select the rotate text in horizontal orientation up or down. The default orientation is 0 degrees—the text is level in a cell.

**Change Alignment Using the Formatting Toolbar**

1. Select a cell or range containing the data to be realigned.
2. Click the Align Left, Center, or Align Right button on the Formatting toolbar.
3. To center cell contents across selected columns, click the Merge And Center button on the Formatting toolbar.

**Change Alignment Using the Format Dialog Box**

1. Select a cell or range containing the data to be realigned.
2. Click the Format menu, and then click Cells.
3. Click the Alignment tab.
4. Click the Horizontal list arrow or the Vertical list arrow, and then select an alignment.
5. Select an orientation. Click a point on the map, or click the Degrees up or down arrow.
6. If you want, select one or more Text Control check boxes.
7. Click OK.
You can change the color of numbers and text on a worksheet. The strategic use of font color can be an effective way of visually uniting similar values. For example, on a sales worksheet you might want to display sales in blue and returns in red. The Font Color button on the Formatting toolbar displays the last font color you used. To apply this color to another selection, simply click the button. To apply a different color, click the Font Color button list arrow, and then select a color.

### Change Font Color Using the Formatting Toolbar

1. Select a cell or range that contains the text you want to change.
2. Click the Font Color list arrow on the Formatting toolbar.
3. Click a color.

### Change Font, Font Style, and Font Size

1. Select a cell or range that contains the font you want to change.
2. Click the Format menu, and then click Cells.
3. Click the Font tab.
4. Select a font.
5. Select a font style.
6. Select a font size.
7. Select any additional formatting effects.
8. Click OK.
You can make your worksheets more powerful by setting up conditional formatting. Conditional formatting lets the value of a cell determine its formatting. For example, you might want this year’s sales total to be displayed in red and italics if it’s less than last year’s total, but in green and bold if it’s more.

Designing Conditional Formatting

Establish a Conditional Format

1. Select a cell or range you want to conditionally format.
2. Click the Format menu, and then click Conditional Formatting.
3. Select the operator and values you want for condition 1.
4. Click the Format button, select the attributes you want applied, and then click OK.
5. Click Add to include additional conditions, and then repeat steps 3 and 4.
6. Click OK.

Delete a Conditional Format

1. Click the Format menu, and then click Conditional Formatting.
2. Click Delete.
3. Select the check box for the condition(s) you want to delete.
4. Click OK.
Colors and patterns added to the worksheet’s light gray grid help identify data and streamline entering and reading data. If your data spans many columns and rows, color every other row light yellow to help readers follow the data. Or add a red dot pattern to cells with totals. Color adds background shading to a cell. Patterns add dots or lines to a cell in any color you choose. You can use the Format Cells dialog box to add color and patterns to a worksheet. However, if you want to add color to cells quickly, you can use the Fill Color button on the Formatting toolbar.

Apply Color and Patterns

1. Select a cell or range to which you want to apply colors and patterns.
2. Click the Format menu, and then click Cells.
3. Click the Patterns tab.
4. To add shading to the cell, click a color in the palette.
5. To add a pattern to the cell, click the Pattern list arrow, and then click a pattern and color in the palette.
6. Click OK.

Apply Color Using the Formatting Toolbar

1. Select a cell or range.
2. Click the Fill Color list arrow on the Formatting toolbar.
3. If necessary, click the Toolbar Options list arrow to display the button.
4. Click a color.

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Adding Borders to Cells

Apply a Border

1. Select a cell or range to which you want to apply borders.
2. Click the Format menu, and then click Cells.
3. Click the Border tab.
4. Select a line style.
5. Click the Color list arrow, and then click a color for the border.
6. If you want a border on the outside of a cell or range, click Outline. If you want a border between cells, click Inside. If you want to remove a border, click None.
7. To set a custom border, click a Border button, or click the Preview Border box where you want to add a border.
8. Click OK.

Did You Know?

You can apply a border using the Formatting toolbar. Select a cell or range to which you want to apply a border, Click the Borders button list arrow on the Formatting toolbar to select a border. The most recently selected style displays on the Borders button.

The light gray grid that appears on the worksheet helps your eyes move from cell to cell. Although you can print these gridlines, sometimes a different grid pattern better emphasizes your data. For example, you might put a decorative line border around the title, a double-line bottom border below cells with totals, or a thick border between sections of a complicated worksheet. You can add borders of varying colors and widths to any or all sides of a single cell or range.
Formatting worksheet data can be a lot of fun but also very intensive. To make formatting data more efficient, Excel includes 18 AutoFormats. An AutoFormat includes a combination of fill colors and patterns, numeric formats, font attributes, borders, and font colors that are professionally designed to enhance your worksheets. If you don’t select any cells before choosing the AutoFormat command, Excel will “guess” which data should it should format.

Apply an AutoFormat

1. Select a cell or range to which you want to apply an AutoFormat, or skip this step if you want Excel to “guess” which cells to format.
2. Click the Format menu, and then click AutoFormat.
3. Click an AutoFormat in the list.
4. Click Options.
5. Select one or more Formats To Apply check boxes to turn a feature on or off.
6. Click OK.

Did You Know?

You can copy cell formats with Format Painter. Select the cell or range whose formatting you want to copy, double-click the Format Painter button on the Standard toolbar, select the cells you want to format, and then click the Format Painter button.
A style is a defined collection of formats—font, font size, attributes, numeric formats, and so on—that you can store as a set and later apply to other cells. For example, if you always want subtotals to display in blue 14-point Times New Roman, bold, italic, with two decimal places and commas, you can create a style that includes all these formats. If you plan to enter repetitive information, such as a list of dollar amounts in a row or column, it's often easier to apply the desired style to the range before you enter the data. That way you can simply enter each number, and Excel formats it as soon as you press Enter. You can also copy styles from one workbook to another. Once you create a style, it is available to you in every workbook.

### Creating and Applying Styles to Cells

#### Create a New Style

1. Select a cell or range that you want to create a style.
2. Click the Format menu, and then click Style.
3. Type the name of the new style.
4. Clear the check boxes with the options you do not want.
5. Click Modify.
6. Click any of the formatting tabs, and make additional formatting changes to the style.
7. Click OK.
8. Click OK.

#### Did You Know?

You can merge a style from another workbook. Click the Format menu, click Style, click Merge, click the workbook that contains the style you want, click OK, and then click OK.
Apply a Style
1. Select a cell or range to which you want to apply a style.
2. Click the Format menu, and then click Style.
3. Click the Style Name list arrow, and then select the style you want to apply.
4. Click OK.

Delete a Style
1. Click the Format menu, and then click Style.
2. Click the Style Name list arrow, and then click the style you want to delete.
3. Click Delete.
4. Click OK.
Formatting Tabs and the Background

Add Color to Worksheet Tabs
1. Click the sheet tab you want to color.
2. Click the Format menu, point to Sheet, and then click Tab Color.
3. Click a tab color.
4. Click OK.

Add or Remove a Background
1. Click the sheet tab you want to add a background to.
2. Click the Format menu, point to Sheet, and then click Background.
3. Select the folder with the graphic file you want to use.
4. Select the graphic you want.
5. Click Insert.
6. To remove the background, click the Format menu, point to Sheet, and then click Remove Background.

Depending on your screen size, the sheet tabs at the bottom of your workbook can be hard to view. You can add color to the sheet tabs to make them more distinguishable. If you want to add artistic style to your workbook or you are creating a Web page from your workbook, you can add a background picture. When you add a background to a worksheet, the background does not print, and it’s not included when you save an individual worksheet as a Web page. You need to publish the entire workbook as a Web page to include the background.
If you want to print a worksheet that is larger than one page, Excel divides it into pages by inserting automatic page breaks. These page breaks are based on paper size, margin settings, and scaling options you set. You can change which rows or columns are printed on the page by inserting horizontal or vertical page breaks. In page break preview, you can view the page breaks and move them by dragging them to a different location on the worksheet.

Inserting Page Breaks

Insert a Page Break

1. To insert a horizontal page break, click the row where you want to insert a page break.
2. To insert a vertical page break, click the column where you want to insert a page break.
3. Click the Insert menu, and then click Page Break.

Preview and Move a Page Break

1. Click the View menu, and then click Page Break Preview.
2. Drag a page break (a thick blue line) to a new location.
3. When you’re done, click the View menu, and then click Normal.
You can set up the worksheet page to print just the way you want. With the Page Setup dialog box, you can choose the page orientation, which determines whether Excel prints the worksheet data portrait (vertically) or landscape (horizontally). You can also adjust the print scaling (to reduce or enlarge the size of printed characters), change the paper size (to match the size of paper in your printer), and resize or realign the left, right, top, and bottom margins (the blank areas along each edge of the paper). Changes made in the Page Setup dialog box are not reflected in the worksheet window. You can see them only when you preview or print the worksheet.

**Change Page Orientation**

1. Click the File menu, and then click Page Setup.
2. Click the Page tab.
3. Click the Portrait (8.5 x 11 inches) option (the default) or click the Landscape (11 x 8.5 inches) option to select page orientation.
4. Click OK.

**Change the Margin Settings**

1. Click the File menu, and then click Page Setup.
2. Click the Margins tab.
3. Click the Top, Bottom, Left, and Right up or down arrows to adjust the margins.
4. Select the Center On Page check boxes to automatically center your data.
5. Click OK.
Adding Headers and Footers

Change a Header or Footer

1. Click the File menu, and then click Page Setup.
2. Click the Header/Footer tab.
3. If the Header box doesn’t contain the information you want, click Custom Header.
4. Type the information in the Left, Center, or Right Section text boxes, or click a button to insert built-in header information. If you don’t want a header to appear at all, delete the text and codes in the text boxes.
5. Select the text you want to format, click the Font button, make font changes, and then click OK. Excel will use the default font, Arial, unless you change it.
6. Click OK.
7. If the Footer box doesn’t contain the information that you want, click Custom Footer.
8. Type information in the Left, Center, or Right Section text boxes, or click a button to insert the built-in footer information.
9. Click OK.
10. Click OK.

Adding a header or footer to a workbook is a convenient way to make your printout easier for readers to follow. Using the Page Setup command, you can add information such as page numbers, the worksheet title, or the current date at the top and bottom of each page or section of a worksheet or workbook. Using the Custom Header and Custom Footer buttons, you can include information such as your computer system’s date and time, the name of the workbook and sheet, a graphic, or other custom information.
Customizing Worksheet Printing

Print Part of a Worksheet

1. Click the File menu, and then click Page Setup.
2. Click the Sheet tab.
3. Click in the Print Area box, and then type the range you want to print. Or click the Collapse Dialog button, select the cells you want to print, and then click the Expand Dialog button to restore the dialog box.
4. Click OK.

Print Row and Column Titles on Each Page

1. Click the File menu, and then click Page Setup.
2. Click the Sheet tab.
3. Enter the number of the row or the letter of the column that contains the titles. Or click the Collapse Dialog button, select the row or column with the mouse, and then click the Expand Dialog button to restore the dialog box.
4. Click OK.

At some point you’ll want to print your worksheet so you can distribute it to others or use it for other purposes. You can print all or part of any worksheet, and you can control the appearance of many features, such as whether gridlines are displayed, whether column letters and row numbers are displayed, or whether to include print titles, columns and rows that are repeated on each page. If you have already set a print area, it will appear in the Print Area box on the Sheet tab of the Page Setup dialog box. You don’t need to re-select it.
Print Gridlines, Column Letters, and Row Numbers

1. Click the File menu, and then click Page Setup.
2. Click the Sheet tab.
3. Select the Gridlines check box.
4. Select the Row And Column Headings check box.
5. Click OK.

Fit Your Worksheet on a Specific Number of Pages

1. Click the File menu, and then click Page Setup.
2. Click the Page tab.
3. Select a scaling option.
   - Click the Adjust To option to scale the worksheet using a percentage.
   - Click the Fit To option to force a worksheet to be printed on a specific number of pages.
4. Click OK.
When you’re ready to print your worksheet, you can choose several printing options. The print area is the section of your worksheet that Excel prints. You can set the print area when you customize worksheet printing or any time when you are working on a worksheet. For example, you might want to print a different range in a worksheet for different people. In order to use headers and footers, you must first establish, or set, the print area. You can design a specific single cells or a contiguous or non-contiguous range.

### Setting the Print Area

1. Select the range of cells you want to print.
2. Click the File menu, and then point to Print Area.
3. Click Set Print Area.

### Clearing the Print Area

1. Click the File menu, and then point to Print Area.
2. Click Clear Print Area.
Before printing, you should verify that the page looks the way you want. You save time, money, and paper by avoiding duplicate printing. Print Preview shows you the exact placement of your data on each printed page. You can view all or part of your worksheet as it will appear when you print it. The Print Preview toolbar makes it easy to zoom in and out to view data more comfortably, set margins and other page options, preview page breaks, and print.

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Did You Know?
You can preview your work from the Print dialog box. In the Print dialog box, click Preview. After previewing you can click the Print button on the Print Preview toolbar to print the worksheet or click the Close button to return to your worksheet.
Printing a Worksheet

Print a Worksheet Quickly

1. Click the Print button on the Standard toolbar.

Excel prints the selected worksheet with the current Print dialog box settings.

Specify Print Options

1. Click the File menu, and then click Print.
2. If necessary, click the Name list arrow, and then click the printer you want to use.
3. Select whether you want to print the entire worksheet or only the pages you specify.
4. Select whether you want to print the selected range, the active worksheet(s), or all the worksheets in the workbook with data.
5. Select the number of copies you want.
6. Click OK.

Printing a paper copy is a common way to review and share a document. You can print a copy of your worksheet by clicking the Print button on the Standard toolbar or on the Print Preview toolbar. When you use the Print button, Excel prints the selected worksheet with the current Print dialog box settings. You can open the Print dialog box to specify several print options, such as choosing a new printer, selecting the number of pages in the worksheet you want printed, and specifying the number of copies.