



Using Advanced Formatting Techniques

So far we've shown you how to organize the layout of your data. This section expands on this concept by teaching you how to use formatting to control the display of your data even more. In Chapter 2, you learned most of the formatting techniques, but the MOS Expert Objectives include two more: custom data formats and conditional formatting. *Custom formats* give you almost total control over how data is shown in a cell, and *conditional formatting* changes the format of a cell, based on criteria you supply. Remember, in Excel, formatting not only includes font attributes and color, but also the way the text in a cell is interpreted and displayed.

Sometimes the formats provided on the Number tab in the Format Cells dialog box don't give you the display you want, so you use custom formats to tweak the settings. A good example might be part numbers on an inventory sheet, which often begin with one or more zeroes. By default, Excel does not display leading zeroes, so a custom format fixes this shortcoming. Or, maybe you want certain text automatically added to whatever is typed in a cell, and a custom format can do this for you.

Overdue bills or inventory amounts that have gone below a certain level can often be overlooked in a large array of data. If you have a large worksheet that includes various types of data, conditional formatting can make certain data more obvious.

Both of these features are often used in the world of Excel, so let's examine them fully, beginning with custom data formats.

Controlling Data Display with Custom Formats

As you learned in Chapter 2, the Number tab in the Format Cells dialog box gives you many options for different data formats (percentages, currency, fractions, zip codes, etc.). However, every once in a while, none of the standard formats fits your specific need.

Figure 7.6 shows some of the format type choices you have when you select Custom in the Format Cells dialog box. The list on the right of the dialog box displays various symbols that produce custom formats: # represents a numerical character; @ represents text; and * and ? are wildcards. You can use these symbols in combinations with actual text or numbers you want displayed to produce all kinds of cool stuff. Selecting any format type in the list displays the value you have in the active cell, with the chosen format applied in the Sample box above the list.

Open the Format Cells dialog box and scroll through the list of custom formats. As with any formats, you can apply a custom format to cells that already contain data. Or you can apply the format to empty cells, and the data will reflect the format when you type it in later.



S

SAMPLE

E

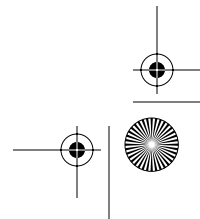
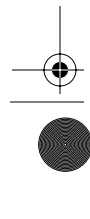
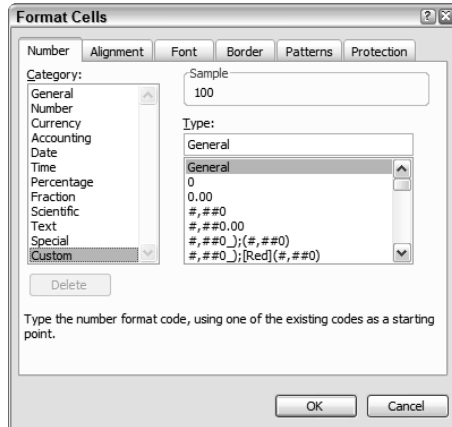


FIGURE 7.6 Custom data formats use symbols and characters to alter the display of the data in a cell.



The Type list also contains custom date and time formats, which are shown using placeholders like h, m, s, and so forth. We'll learn how to create some of these as well.

Try applying some of the formats listed in the dialog box. Next I'll show you how to create your own, starting with custom text and number formats.

Controlling Text and Number Display

As I explained earlier, a # sign signifies a number in a custom format and an @ symbol means text. If you apply a custom format that is simply one @ symbol, it's the same as choosing Text from the Category list in the Format Cells dialog box. You create a custom format by simply entering it in the Type box above the list in the dialog box (see Figure 7.6). You can also include specific text characters in a format by enclosing them in quotation marks. For example, a custom format of "Sales Amount" # would add the words *Sales Amount* before any number you type in that cell. Certain text characters are automatically recognized by Excel and don't require the quotation marks, but if you type any string of text characters in a custom format, you must use the quotation marks. Table 7.2 shows a list of the characters that Excel will recognize as text without the quotation marks.

TABLE 7.2 Characters That Are Recognized as Text Without Quotation Marks

Character	Description	Character	Description
\$	Dollar sign	-	Minus sign
+	Plus sign	/	Slash mark
(Left parenthesis)	Right parenthesis

TABLE 7.2 Characters That Are Recognized as Text Without Quotation Marks (continued)

Character	Description	Character	Description
:	Colon	!	Exclamation point
^	Caret	&	Ampersand
'	Apostrophe	~	Tilde
{	Left curly bracket	}	Right curly bracket
<	Less Than sign	>	Greater Than sign
=	Equal sign		Space character

You can create formats to add color by enclosing the name of the color in brackets. Also, you can create special formats for negative numbers by preceding the format with a semicolon. Let's try creating some of our own text and number formats in Exercise 7.12.



In the following exercises, I use the Format Painter quite a bit, so if you don't remember how to use that feature, refresh your memory by rereading the Format Painter instructions in Chapter 2.

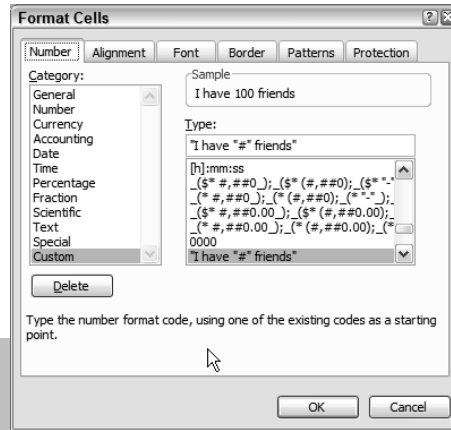
EXERCISE 7.12

Applying Text and Number Custom Formats

1. Open a new blank workbook and type **100** in cell A1. Then fill that down the column to cell A3 so that you have 100 in all three cells.
2. Select cell A1 and choose Format > Cells. On the Number tab, select Custom from the Category list on the left.
3. In the Type box on the right, highlight the word *General* and delete it.
4. Now, in that box, type **0000** (four zeroes). Notice that the Sample box shows a leading zero has been added before the 100.
5. Click OK and 0100 appears in cell A1. Use the Format Painter to copy the format from A1 to B1. Then, type **25** in cell B1 and press Enter. The 25 adjusts to show 0025 because the 0000 custom format tells Excel to fill in zeroes when any number less than four digits is typed in the cell.

EXERCISE 7.12 (continued)

6. Select cell A2 and return to the Format Cells dialog box by pressing Ctrl+1. Give this cell a custom format of "I have "# friends" (be sure to include spaces between *have* and " and " and *friends*). Look at the Sample box; as you can see, the text surrounds the number, as shown here:



7. Click OK and "I have 100 friends" is displayed in cell A2.
8. Use the Format Painter to copy the format from A2 to B2. Type **6000000** in cell B2 and press Enter. Note that the # includes all numbers typed into the cell, as opposed to the 0, which specifies a single numerical character.
9. Select cell A3. Return to the Format Cells dialog box and type **[red]#;[blue]# " too low"** (don't miss the space between the first quotation mark and the word *too*). The Sample box doesn't show any change because color formats are not displayed. Click OK.
10. Excel now displays 100 in red in cell A3. Use the Format Painter to copy the formatting from A3 to B3. Type **-900** in B3 and press Enter. Excel changes that entry to "900 too low," in blue.
11. Select cell B3 and return to the Format Cells dialog box. See the custom format in the Type box. Delete the # sign after the word [blue] and click OK.
- Now B3 shows just the text "too low," with no number.
12. Save the file in your Chapter Seven folder and name it **Exercise 7-13.xls**. Leave it open for the next exercise.