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Microsoft Excel 2013

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- Finally, the Accounting format is the only built-in format that includes formatting criteria for text. It includes spaces equivalent to the width of a parenthesis on each side of text so that it too lines up evenly with the numbers in a column.

Typically, when creating a GAAP-friendly worksheet of currency values, you would use currency symbols only in the top row and in the totals row at the bottom of each column of numbers. This makes good sense because using dollar signs with every number would make for a much busier table. The middle of the table is then formatted using a compatible format without currency symbols, as shown in Figure 9-37.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	2013 Sales by Product														
3		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	
4	Product 1	$ 731	$ 6,329	$ 2,110	$ 1,710	$ 2,984	$ 1,100	$ 2,467	$ 9,954	$ 2,315	$ 6,177	$ 3,367	$ 9,931	$ 49,175	
5	Product 2	281	2,336	1,234	6,176	1,322	678	3,737	1,781	5,377	8,254	6,906	4,208	42,290	
6	Product 3	287	4,107	5,528	8,599	9,769	5,557	3,456	4,692	1,250	4,833	4,860	9,032	61,970	
7	Product 4	436	2,202	5,607	8,340	5,832	2,350	1,669	5,094	9,658	7,479	775	1,785	51,227	
8	Product 5	945	3,398	3,472	4,585	3,453	8,476	8,118	5,796	2,920	4,840	4,717	2,211	52,931	
9	Product 6	781	6,982	7,018	1,885	4,336	6,394	6,989	2,038	8,336	5,546	9,805	1,250	61,360	
10	Product 7	997	7,267	5,006	6,692	8,388	9,072	8,968	5,923	7,618	1,683	4,311	3,304	69,229	
11	Product 8	253	4,100	6,328	3,807	7,850	1,213	5,253	3,934	4,261	4,933	2,931	3,685	48,548	
12	Product 9	310	2,467	5,349	7,142	2,343	2,712	4,629	3,961	1,250	2,278	7,167	8,470	48,078	
13	Product 10	544	2,783	1,642	1,582	2,456	5,584	1,255	7,915	2,343	1,012	869	5,882	33,867	
14	Product 11	781	8,626	6,938	5,200	8,197	6,542	5,955	1,775	2,211	4,688	2,309	5,472	58,694	
15	Product 12	278	6,720	4,754	3,556	2,535	4,100	4,740	7,047	9,284	4,445	5,633	7,557	60,649	
16	Product 13	736	3,248	7,295	4,344	2,076	8,372	1,846	1,264	3,741	7,764	8,649	2,249	51,584	
17	Product 14	991	5,004	6,873	7,009	8,399	4,204	8,290	2,695	1,417	6,003	9,688	4,852	65,425	
18	Product 15	659	8,499	1,404	1,749	5,999	4,398	2,211	1,167	9,495	4,916	489	5,015	46,001	
19	Product 16	203	5,359	8,656	4,240	2,690	2,211	4,893	1,264	7,469	7,903	4,367	1,210	50,465	
20	Product 17	73	5,814	2,773	4,464	2,067	8,424	1,337	1,404	7,711	5,579	4,398	6,824	50,868	
21	Product 18	183	1,422	1,572	5,771	6,611	9,131	9,121	1,237	9,969	2,604	9,375	1,350	58,346	
22	Product 19	153	2,938	5,923	9,180	7,783	1,542	2,123	5,953	1,336	4,121	1,542	1,153	43,747	
23	Product 20	968	3,310	4,472	3,065	4,700	6,384	9,079	6,995	1,542	965	7,584	5,922	54,986	
24	Total	$10,590	$92,911	$93,954	$99,096	$99,790	$98,444	$96,136	$81,889	$99,503	$96,023	$99,742	$91,362	$1,059,440	
25															

Figure 9-37 It is standard practice to use currency symbols only in the top and bottom rows of a table.

Luckily, Excel makes it easy for you to format this way by using buttons in the Number group on the Home tab. Despite seemingly incompatible button names, both the Accounting Number Format button and the Comma Style button apply Accounting formats adhering to the rules described earlier. So, to format the numeric entries in the table shown in Figure 9-37, select the first and last rows of numbers, click the Accounting Number Format button, then select all the cells containing numbers in between, and click the Comma Style button. (We then selected all the numeric cells in the table and clicked the Decrease Decimal button twice to hide all the decimal values. We also hid worksheet gridlines, by clearing the Gridlines option on the View tab, to simplify the appearance.)

Using accounting underlines

Generally accepted accounting principles specify the proper usage of single and double underlines in tables. The Underline button on the Home tab includes a menu letting you select single or double underlines, but unfortunately these do not rise to the accepted standard. But fear not—Excel provides two accounting-specific underline formats in a drop-down list of the same name on the Font tab in the Format Cells dialog box. These differ from their regular counterparts in two ways. First, accounting underlines are applied to the entire width of the cell (minus a parenthesis-sized space on each side), whereas regular underlines are applied only under the actual characters in a cell. If the cell contains a text entry that extends beyond the cell border, the accounting underlines stop at the cell border. Second, the accounting underline formats appear near the bottom of cells, unlike regular underlines, which are applied much closer to the numbers or text in the cell, resulting in annoying lines through commas and the descenders of letters like *g* and *p*. Of course, you can also apply single-line and double-line cell borders instead of underline formats, which is the approach used when you add a totals row to a table using the Totals Row option on the Table Tools Design tab.

For information about font formats, see "Using fonts" later in this chapter. For information about tables, see "Formatting tables" earlier in this chapter.

Formatting percentages

Not surprisingly, using the Percentage format displays numbers as percentages. The decimal point of the formatted number, in effect, moves two places to the right, and a percent sign appears at the end of the number. For example, if you choose a percentage format without decimal places, the entry **0.1234** is displayed as 12%; if you select two decimal places, the entry **0.1234** is displayed as 12.34%. Remember that you can always adjust the number of displayed decimal places using the Increase Decimal and Decrease Decimal buttons.

An interesting (and helpful) quirk about percentage formats is that they behave differently depending on whether you type a number and then apply the format or type a number in a previously formatted cell. For example, Figure 9-38 shows two cells formatted as percentages. We typed the same number—**22.33**—in each cell, but only cell A1 was previously formatted with the Percentage format; we clicked the Percent Style button *after* typing the value in cell A2.

As you can see, it makes a world of difference which way you do this. So, why is this behavior helpful? For example, if a worksheet contains a displayed value of 12% and you need to change it to 13%, typing **13** in the cell would seem to make sense, even though this is

technically wrong. It is not particularly intuitive to type **.13** (including the leading decimal point). Usability studies show that most people would type **13** in this situation, which would logically result in a displayed value of 1300% (if not for the quirky behavior), so Excel assumes that you want to display 13%. If you apply the Percentage format to a range of cells that already contain values (or formulas that result in values), check all the cells afterward to make sure you get the intended results.

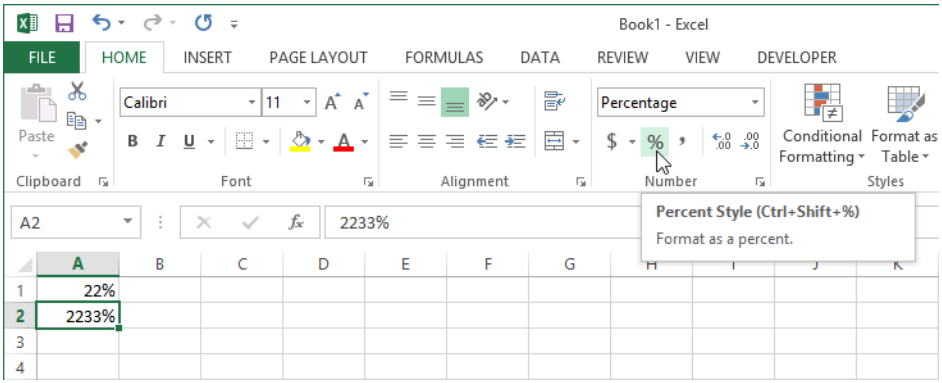

Figure 9-38 When using percentages, it makes a difference whether you format before or after typing values.

Formatting fractions

The formats in the Fraction category in the Format Cells dialog box, shown in Figure 9-39, display fractional numbers as actual fractions rather than as decimal values. As with all number formats, the underlying value does not change despite the displayed value of the fraction.

You can generate some wild, nonstandard fractions unless you apply constraints using options in the Format Cells dialog box. Here is how Excel applies different fraction formats:

- The Up To One Digit (single-digit) fraction format displays 123.456 as 123 1/2, rounding the display to the nearest value that can be represented as a single-digit fraction.
- The Up To Two Digits (double-digit) fraction format uses the additional precision allowed by the format and displays 123.456 as 123 26/57.
- The Up To Three Digits (triple-digit) fraction format displays 123.456 as the even more precise 123 57/125.
- The remaining six fraction formats specify the exact denominator you want by rounding to the nearest equivalent—for example, displaying 123.456 using the As Sixteenths format, or 123 7/16.

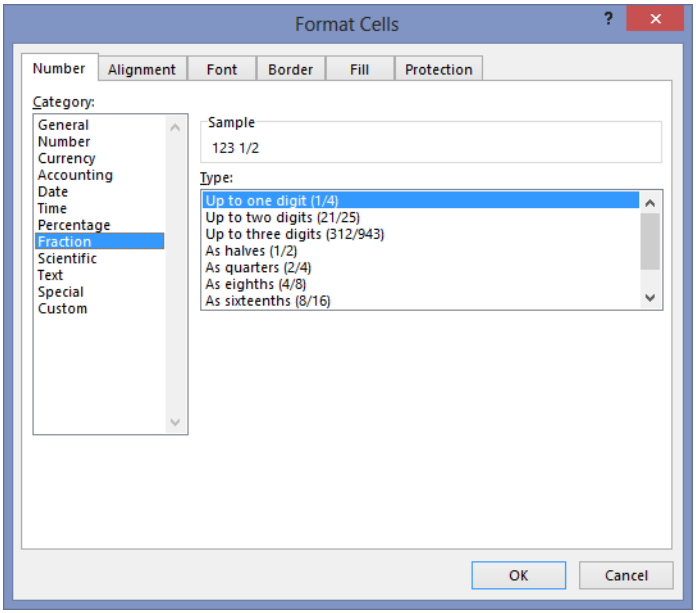

Figure 9-39 Excel provides many fraction-formatting options.

You can also apply fraction formatting on the fly by typing fractional values in a specific way. Type a number (or a zero), type a space, and then type the fraction, as in 123 1/2. For more details, see "Formatting as you type" earlier in this chapter.

Formatting Scientific (exponential) values

The Scientific format displays numbers in exponential notation. For example, a two-decimal Scientific format (the default) displays the number 98765432198 as 9.88E+10 in a standard-width cell. The number 9.88E+10 is 9.88 times 10 to the 10th power. The symbol E stands for *exponent*, a synonym here for 10 to the *n*th power. The expression *"10 to the 10th power"* means 10 times itself 10 times, or 10,000,000,000. Multiplying this value by 9.88 gives you 98,800,000,000, an approximation of 98,765,432,198. Increasing the number of decimal places (the only option available for this format) increases the precision and will likely require a wider cell to accommodate the displayed value.

You can also use the Scientific format to display very small numbers. For example, in a standard-width cell this format displays 0.000000009 as 9.00E–09, which equates to 9 times 10 to the negative 9th power. The expression *"10 to the negative 9th power"* means 1 divided by 10 to the 9th power, 1 divided by 10 nine times, or 0.000000001. Multiplying this number by nine results in our original number, 0.000000009.

Understanding the Text format

Applying the Text format to a cell indicates that the entry in the cell is to be treated as text, even if it's a number. For example, a numeric value is ordinarily right-aligned in its cell. If you apply the Text format to the cell, however, the value is left-aligned as if it were a text entry. For all practical purposes, a numeric constant formatted as text is still considered a number because Excel is capable of recognizing its numeric value anyway.

Using the Special formats

The four Special formats shown in Figure 9-40 are a result of many requests from users. These generally noncalculated numbers include two ZIP code formats, a phone number format (complete with the area code in parentheses), and a Social Security number format. Using each of these Special formats, you can quickly type numbers without having to type the punctuation characters.

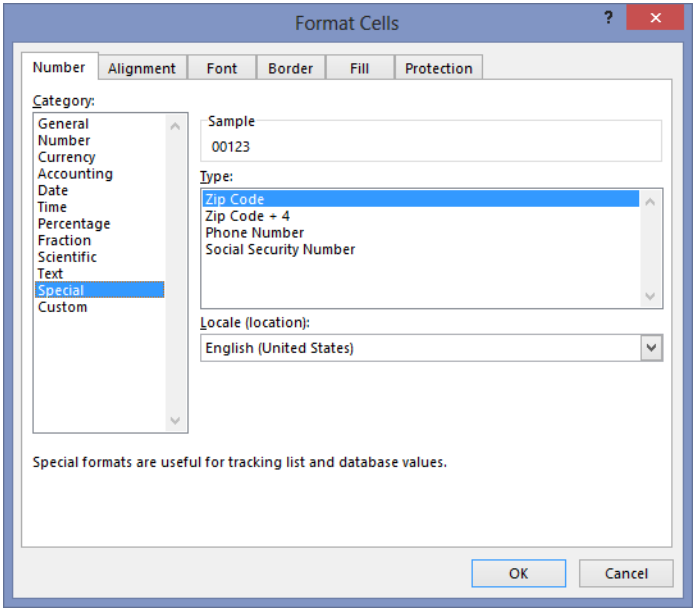

Figure 9-40 Excel provides several frequently requested formats in the Special category.

The following are guidelines for using the Special formats:

- **Zip Code and Zip Code +4** Leading zeros are retained to correctly display the code, as in 04321. In most other number formats, if you type **04321**, Excel drops the zero and displays 4321.
- **Phone Number** Excel applies parentheses around the area code and dashes between the digits, making it much easier to type many numbers at the same time because you don't have to move your hand from the keypad. Furthermore, the numbers you type remain numbers instead of becoming text entries, which they would be if you typed parentheses or dashes in the cell.
- **Social Security Number** Excel places dashes after the third and fifth numbers. For example, if you type **123456789**, Excel displays 123-45-6789.
- **Locale** This drop-down list lets you select from more than 120 locations with unique formats. For example, if you select Vietnamese, only two Special formats are available: Metro Phone Number and Suburb Phone Number.

Creating Custom number formats

Most of the number formats you need are available through commands and buttons on the ribbon, but you can use the Format Cells dialog box to accomplish minor feats of formatting that might surprise you. We'll use the Custom category on the Number tab in the Format Cells dialog box, shown in Figure 9-41, to create custom number formats using special formatting codes. (To quickly display the Format Cells dialog box, press Ctrl+1.) Excel adds new formats to the bottom of the list of formatting codes in the Type list, which also includes built-in formats. To delete a custom format, select the format in the Format Cells dialog box, and click Delete. You cannot delete built-in formats.

Creating new number formats The quickest way to start creating a custom format is to use one of the built-in formats as a starting point. Here's an easy way to build on an existing format, as well as to see what the codes in the Type list mean:

1. Type a number (or, in the case of our example, a date), and apply the built-in format that most closely resembles the custom format you want to create. Leave this cell selected.
2. On the Number tab in the Format Cells dialog box, select the Custom category. The format you selected is highlighted in the Type list, representing the code equivalent of the format you want to modify, as shown in Figure 9-41.