

■ RICK HESSE, Feature Editor, Graziadia Graduate School of Business, Pepperdine University

Excel Tips

Rick Hesse, Feature Editor

I have found that in the last ten years, teaching both in engineering and business schools, at the graduate and undergraduate level, that being able to use Excel in the workplace has been the foremost benefit of the quantitative skills learned by my students. Engineering students in co-op jobs who knew thermodynamics, partial differential equations, and Pascal, were hailed as heroes because they could make up a simple spreadsheet template that cut hours off menial tasks. My current fully-employed MBA students report that many times they receive kudos at work for the spreadsheet techniques they use for analysis and reports. Each year I learn new tricks of the trade from various students or from my own experimentation.

Shown in Figure 1 is a simple spreadsheet that illustrates the daily CASH3 lottery game in Georgia, in which three ping pong balls are selected (A4:C4), each with the possibility of any digit from 0 to 9. The number is built in D4 and under normal formatting would be shown as 68 rather than 068.

D1: 000112222
 A4: = INTEGER(10*RAND()) copy to B4:C4
 D4: = 100*A4+10*B4+C4

Cell Formats

There are four special formats that can make your data more readable, two of which are already supplied by Excel. By selecting Format ... Special and then Social Security, you can enter 000112222 as a format for social security numbers (Figure 2), as shown in cell D1 of Figure 1. This format will show all nine digits of the SSN with the dashes rather than blank out leading zeros, but the SSN is treated as a number rather than being entered as an alphanumeric with dashes. There is also special formatting for phone numbers with area code (see cell D2), and the two formats of Zip codes.

To format cell D4, select Format ... Custom from the menu bar and then enter 000 as the new custom format, as shown in Figure 3. This will allow leading zeros to be printed out. If you also desire to format telephone numbers without the area code, you can enter 000-0000. Using the 0 instead of # (###-###) means that the position should be filled with leading zeros instead of blanks.

A last format is literally invisible and can be useful for hiding sensitive data from



Rick Hesse
 is professor of quantitative methods at Pepperdine University in the Graziadia Graduate School of Business. He received his BS, MS, and DSc at Washington University School of Engineering in applied math and computer

science. Dr. Hesse is the author of *Managerial Spreadsheet Modeling & Analysis* and *Applied Management Science: A Quick & Dirty Approach* (with Gene Woolsey), articles in numerous journals, and software for personal computers. Rick was the first professor to be awarded the Outstanding Civilian Service Medal by the Department of the Army at West Point in 1982, and was the winner of the Decision Sciences Institute's Innovative Instructional Award in 1981.

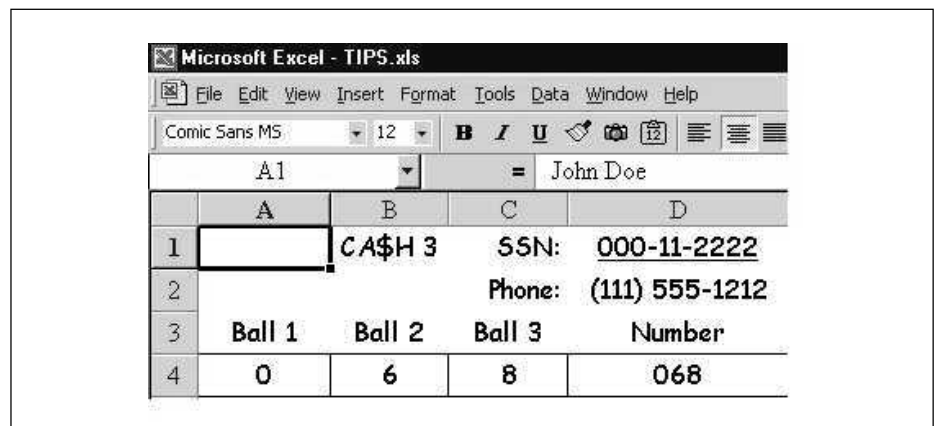


Figure 1: Georgia Lottery CASH3 simulation example.

being printed or shown, unless the cell itself is highlighted. This is also perfect for professors who make up templates to print on a test and want to blank out a few intermediate or final calculation cells. Rather than having to “freeze” the cells (copy over themselves with Paste Special Value) and then delete the ones you want students to calculate, you can keep the spreadsheet live and use the custom format ;;; (3 semicolons) which will not show or print cells with that format. This format is used in cell A1, where the name of the person is John Doe, but

John’s SSN and Phone are shown in D1 and D2. If you look carefully at Figure 1, you will see that the cursor has selected cell A1 and it shows John Doe in the edit field at the top right of the figure, but does not show on the screen (or when printed). Figure 4 shows a simple statistics problem with eight values of testing the MPG for a car that claims to get more than 35 MPG using the hidden format. Students would have to fill in the missing values in cells F6, A9, B9, C9, K10, K11 and B15.

Customizing Formats

An added feature for Excel 2000 is that you can redefine the buttons for Currency (\$), Comma (,) and Percent (%) to customize your own version of Excel. It is easiest to define a standard sheet with the formatting the way you desire (MyFormat.xls), open it up, and then modify your settings by selecting Format, Style and Modify from the menu bar for each of the styles. Figure 5 shows how to change the default style

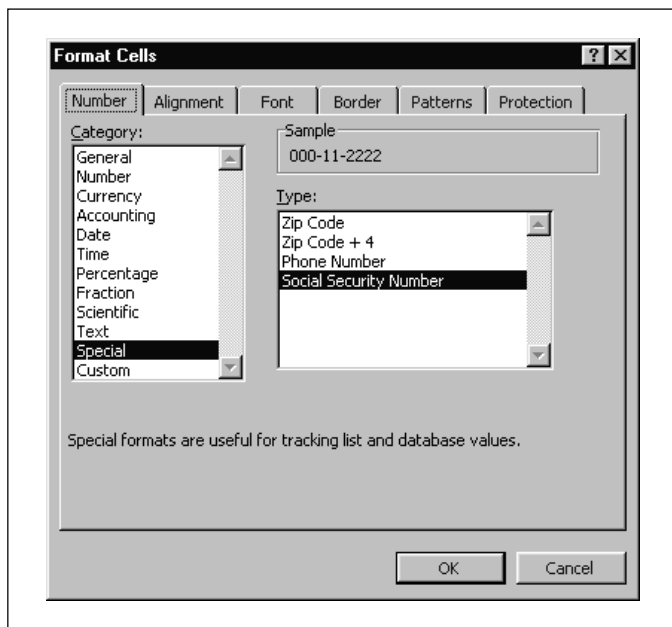


Figure 2: Special Excel formats.

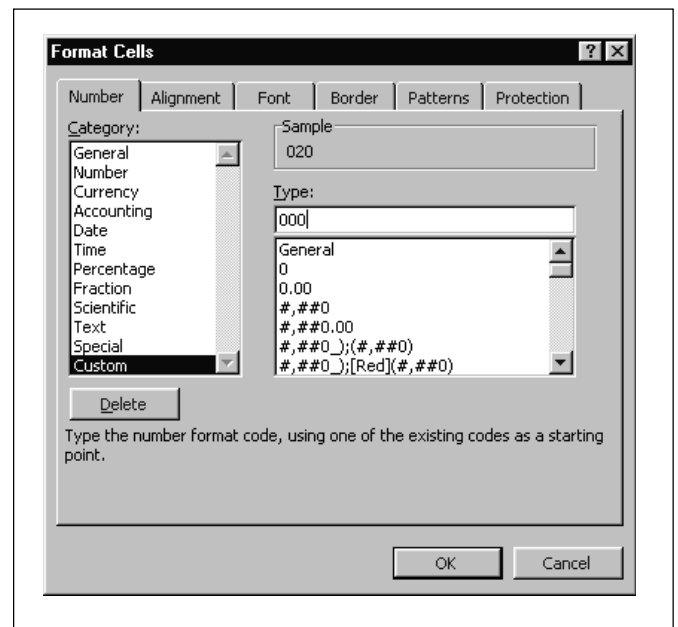


Figure 3: Custom format to show leading zeros.

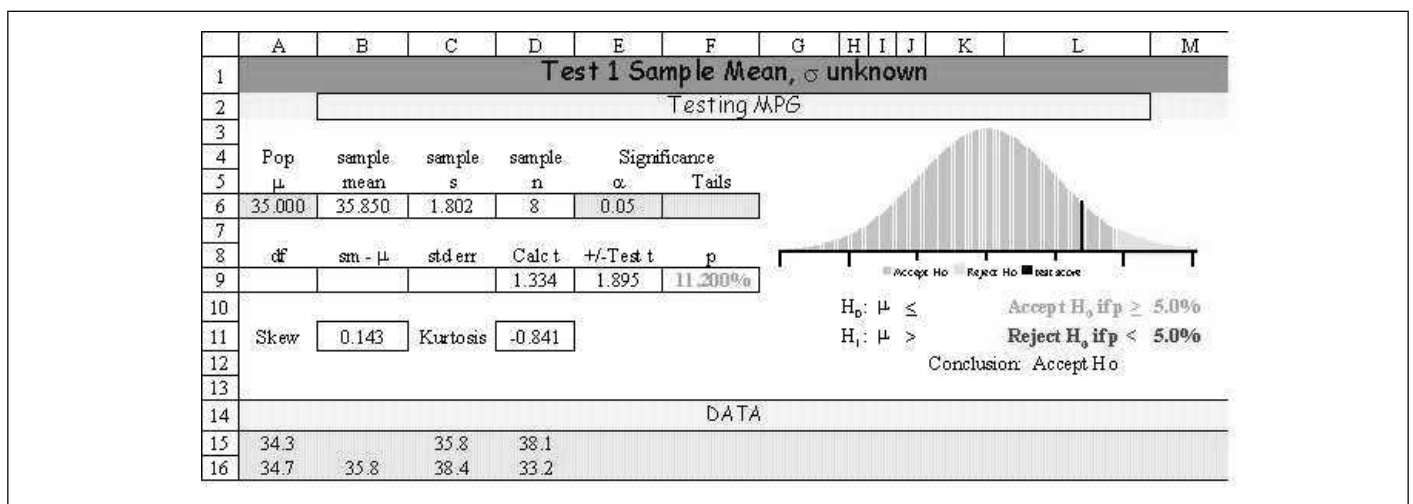


Figure 4: MPG statistics problem illustrating the hidden format.

on (\$) currency, which is usually an accounting style with the \$-sign far to the left and a blank space to the right. I want to have a true currency style with the \$-sign close to the farthest left digit, no blank to the right for positive values, and () for negative values.

Then you can again select Format and Style from the menu bar. You should get a menu like Figure 6, then click Merge . . . select the open file you are merging from,

and then click Yes when notified that you will merge styles with the same name.

CONCLUSION

The formats shown above can be helpful in designing templates for use in both the classroom and business. They will work in Excel 97 and 2000 and can make your work more productive. ■

Dr. Rick Hesse
Graziadia Graduate School of Business
Pepperdine University
Malibu, CA 90265
email: rickhesse@aol.com

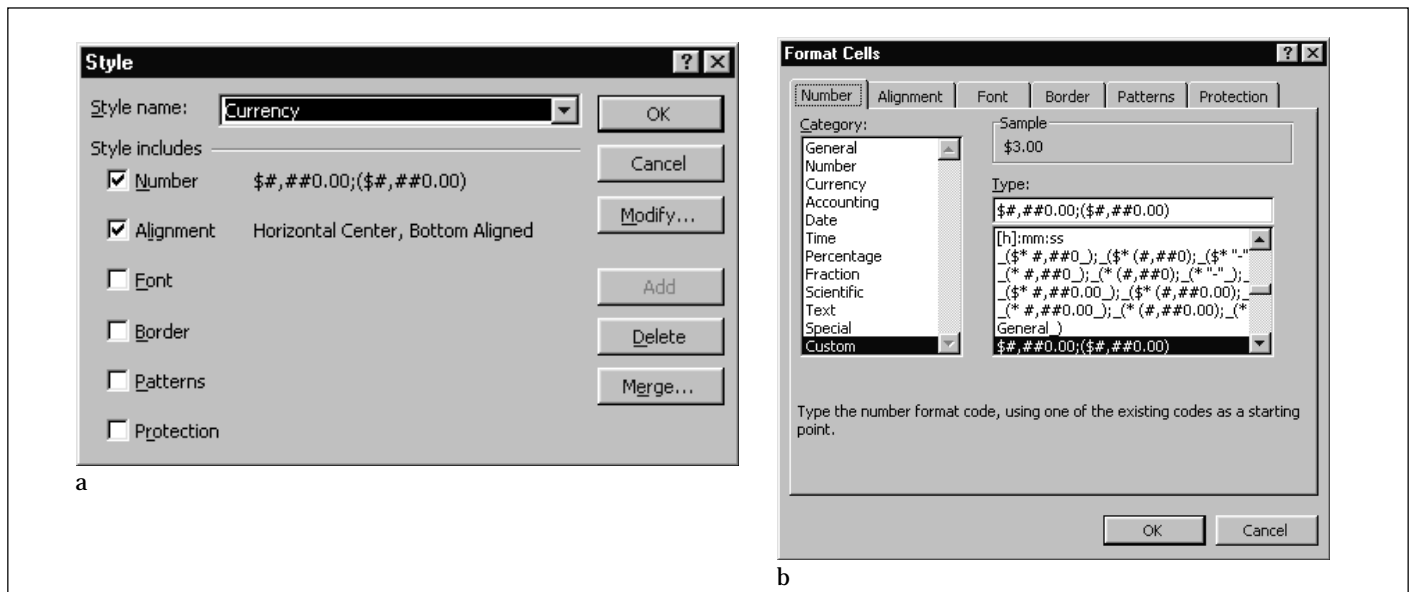


Figure 5: Style selection.

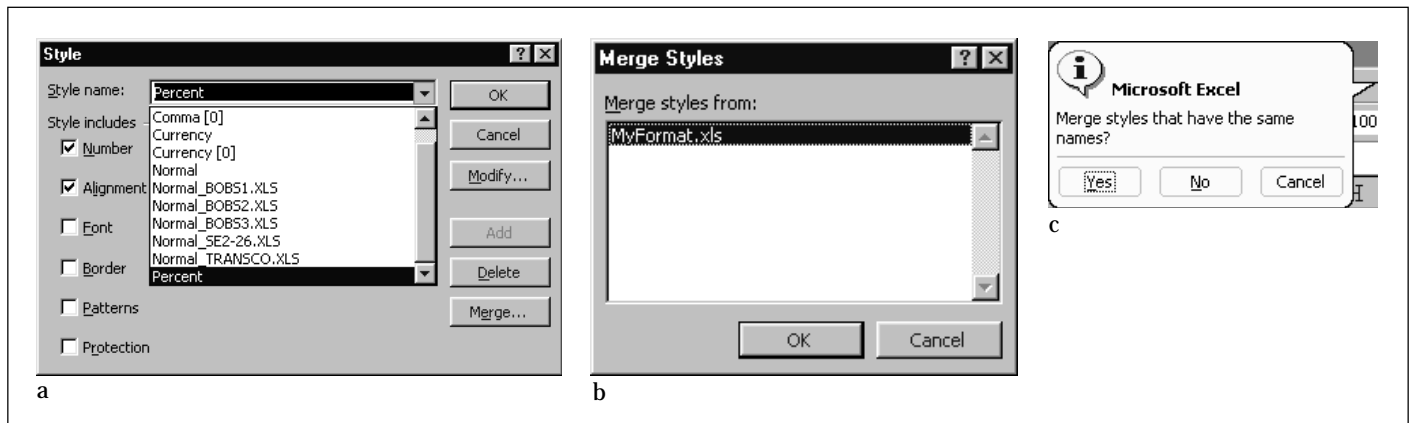


Figure 6: Menu for setting style of numerical format buttons.