

## Excel Tips - Comparing Lists without a Formula by Joseph Rubin and Bill Jelen

One of most Frequently Asked Questions at our seminars is how to compare two lists, either to find new items in the new list and to find the items that were deleted from one list. You can Use the Data, Consolidate... function to compare lists quickly and easily without using a formula.

Assume there are two lists with employee names in Sheet1. The first list in column A is the list of employees as of last month. Cell A1 contains a heading of "Employee". Cells A2:A50 contain employee names. The second list in column D is a current list of employees. Again, there is a heading in D1 and employee names in D2:D55.

Our goal is to find which employees are in both lists, which employees are new in the 2nd list and which employees were removed from the first list. Follow these steps:

1. In Cell B1, type "List number".
  2. In Cells B2:B50, enter the number 1.
  3. In Cells E2:E55, enter the number 2.
  4. Copy Cells D2:E55 and paste them into Cell A51.
  5. Select cell A1. Press Ctrl+\*, press Ctrl+F3, and define a name for the list - MyData
  6. Select a blank cell in the sheet, perhaps G1.
  7. From the Data menu, select Consolidate...
  8. In the Reference box, press F3 and paste the Name you defined for the list - MyData
  9. Click Add,
  10. In the "Use Labels In" section, select both "Top Row" and "Left Column", and click OK.
  10. Select cell H2, press Sort Ascending icon from the standard toolbar.
- The result: at column H you'll find few items with the 1, few items with number 2 and few items with number 3.

If the result = 1, the employee name appears in List 1 and does not appear in List 2.

If the result = 2, the employee names appears in List 2 and does not appear in List 1.

If the result = 3, the employee names appears in both lists (1+2=3).

### Comparing Three or More Lists

Using the technique described above, paste these lists of employee names one list below the other.

Note – the list number should be factors of 2 For List 1, use  $2^0$  or the number 1. For List 2, use  $2^1$  or the number 2. For List 3, use  $2^2$  or the number 4.

The consolidation results in a series of numbers from 1 to 7, in which:

1, 2, 4 = an employee name appears in only one list.

3, 5, 6 = an employee name appears in two lists,  $3=2+1$ ,  $5=4+1$ ,  $6=2+4$ .

7 = an employee name appears in all three lists.

If you have more lists, continue using powers of 2 for each list. The 4th list would have a list number of 8, list 5 would use 16, list 6 would use 32, etc.

This tip, as well as hundreds more tips appear in "Mr Excel ON EXCEL" (Holy Macro Books, 480 Pages, ISBN 0-9724258-3-7, \$35.95) by Bill Jelen ([www.MrExcel.com](http://www.MrExcel.com)) and Joseph Rubin ([www.ExcelTip.com](http://www.ExcelTip.com)). Ask for the book at your local bookseller or buy from Amazon.com.