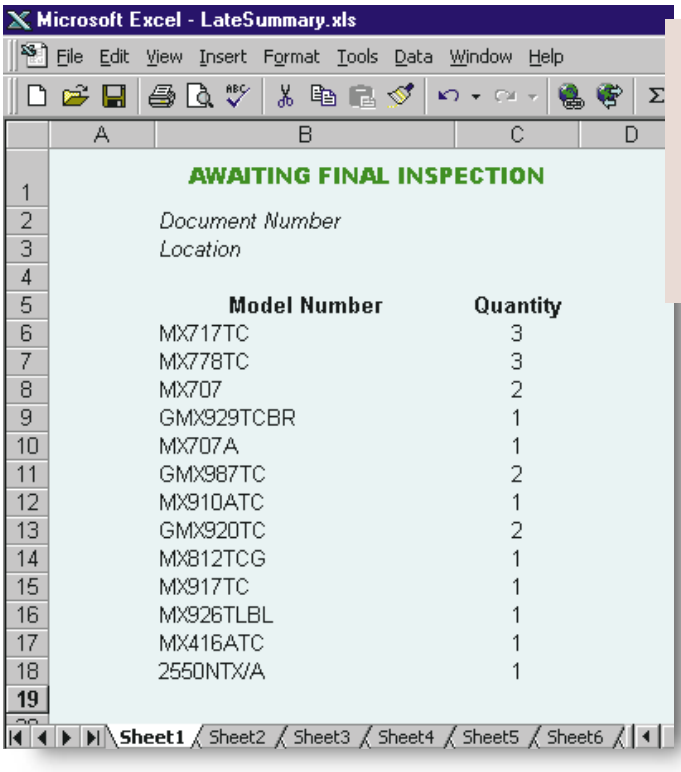
Totally excellent

Name, rank and serial number — Stephen Wells solves a problem using the Summary sheet.

Reader Vic Knight posed the following problem: 'On an Excel worksheet, in column B, is a list of model numbers. In column C is the number of those items needed. A model number may be repeated several times in column A. On another worksheet I want a list of the models and the total number of each, in the next column — all this to be automatically produced from the first sheet.' Vic sent a shortened version of the file, which actually had seven identical worksheets laid out on it, much as shown in Fig 1.



◂Fig 1 A reader's workbook has seven similar forms on which parts and their quantities are listed

Creating a Summary sheet in Excel is easy using the macro provided under Tools, Wizard, Conditional Sum. If it isn't there, look under Add-ins, and add it. If it's not there either, load it from your original Excel CD-ROM.

Actually, all the Wizard does is guide you to write a formula such as

```
=SUM(IF(Sheet1!$B$6:$B$27=$B5,
Sheet1!$C$6:$C$27,0))
```

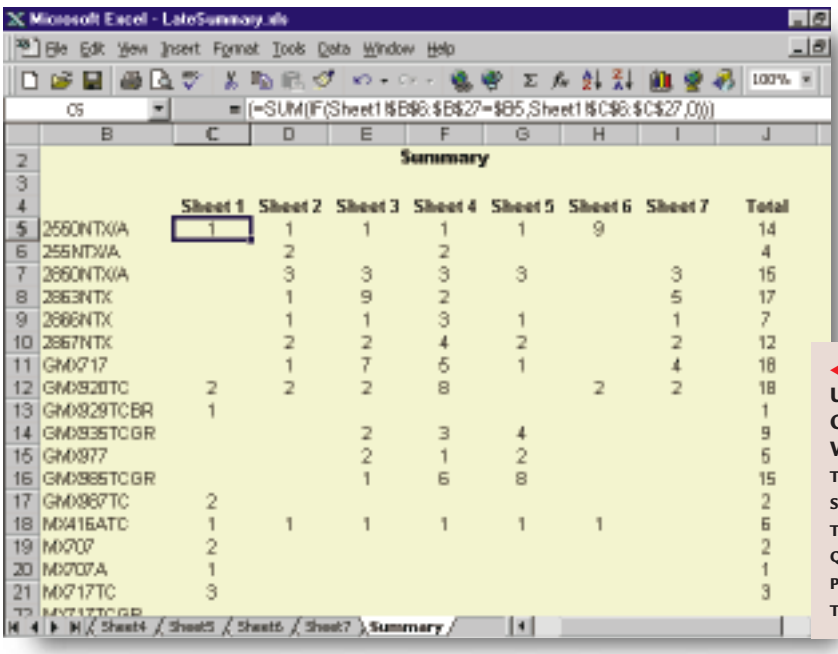
You can just enter it yourself.

Regarding cell C5 on this Summary sheet [Fig 2] what it means is, if any of the model numbers in the range B6:B27 on Sheet1 match the model number in the adjacent cell B5, then total the adjacent quantities from the range C6:C27 on Sheet 1.

You can have as many model numbers as you like listed once on the Summary sheet in column B, and in any order. Users can enter model numbers in the forms on Sheet numbers 1 through to 7 in any order they like and as many times as they want, as long as they are within the range B6 to B27 in this instance. You can always extend the range if you want to.

It is an array formula, which means to enter it you press Ctrl+Shift +Enter. Excel will add curly brackets to show that it understands what you want. Arrays run down a column and look at each entry to see how it compares with the specified value. They also save a lot of memory.

Once you have entered the formula in the first cell, you can drag it down the column. $B5 will automatically change to $B6, and so on. And, you can copy the same formula across the rows just by changing the sheet name from Sheet1 to Sheet2, and so on.



◂Fig 2 Using the Excel Conditional Sum Wizard, it's easy to build a summary sheet totalling the quantities of parts listed on the seven forms

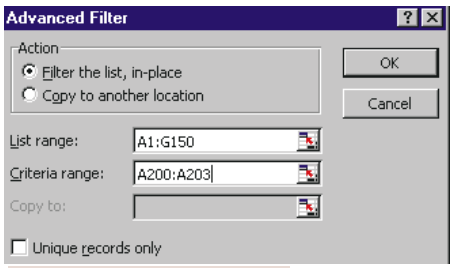
Easter mystery

You can always display the day of the week on which Christmas Day will fall. Just

Questions & answers

Q How can I quickly filter an Excel list and find all the orders received from three different firms?

a *Press Ctrl+End to get to the end of your list. Paste the appropriate field name in any cell which is outside your list, and at least one blank row away from it. In the cell beneath, paste the first company name. Under that, paste the second company name, then the third. So, in cell A200 you might have Company; in A201, The Smith Co.; in A202, Brown Ltd; in A203, White Motors. Now click a cell within your list and choose Data, Filter, and Advanced Filter. Excel will show as a default your list range [Fig 3]. Under that, click the arrow to the right of the Criteria Range box. Then highlight cells A200:A203. Click the arrow again and then OK. Your list will be temporarily reduced to display only those orders received from those three companies. To return to the full list, simply choose Data, Filter, Show All.*



▲ FIG 3 YOU CAN FIND SPECIFIC ORDERS IN AN EXCEL LIST USING THE ADVANCED FILTER DIALOG BOX

Q What's all this I hear about problems with the Excel CALL function?

a *Don't worry about it. Microsoft has continually recommended that most people should not use this function on a worksheet or in a macro, anyway. It is solely for the use of very experienced users. What the function does is call a procedure from a dynamic link library (DLL) or code resource. The current hoo-ha is based around the suggestion that the function might call a DLL external to the worksheet and therefore be used for malicious purposes. But if you never use the function, you will not have a problem. If you do, and you are running Excel 97 with SR-2 (Service Release 2), you can download a patch (xl8p4pkg.exe) from the officeupdate.microsoft.com/ web site. You can also download Service Release 2 from this site. As the patch only disables the function in worksheets, and not in macros, your best bet is simply not to use the function.*

Q How can I generate a random real number between 50 and 100 using Excel?

a *The formula which is generally used is* `RAND()*(b-a)+a` *If you don't want any decimals, and using your parameters, the formula would be* `=INT(RAND()*(100-50)+50)`.

Q Why can't I persuade Excel 95 to accept more than 15 significant figures in long numbers?

a *Regardless of the number of digits displayed, Excel stores numbers with up to 15 digits of precision. If a number contains more than 15 significant digits the extra digits are converted to zeros.*

Q I have created a form in Excel 97. Only part of the form can fit on the screen and I can only print part of it. Could you advise me how to display and print the entire form?

a *In order to view it on the screen, use the drop-down Zoom box at the far right of the Standard Toolbar, or choose View, Zoom. To print it all, highlight the entire form and choose File, Set Print Area. To shrink it automatically to fit, choose File, Page Setup, Print Preview, Pagebreak Preview. Then drag the corners in to fit your page.*

Q I have created a small application using Excel 97 and am using VBA code to print to a specific printer. I have been able to use the code to do everything I need except point to a specific paper tray. I am trying to print page one from the upper tray and all others from the lower tray but have been unable to find a method of doing this, can you help?

a *You use the SEND.KEYS() macro function or SendKeys command — so you should look them up in VBA Help. Also, look in the Microsoft Knowledge Base for articles Q69614 and Q105878.*

give a cell the custom format dddd and enter

`25/12/****`

with the year you need. But I'm hoping that one of the vicars, weathermen, astronomers or sailors who have written in to this column in the past can help me with this question from Tony Askew: 'I want to calculate the Easter dates from the year 2000 onwards because my information only goes up to 1999. Is it possible to calculate this in Excel?' Actually, the Christian churches celebrate the Easter season over 50 days but I assume Tony means the Easter Sundays.

In the file, Easter.txt, on this month's *PCW* CD-ROM, I've listed 30 years' worth of Easter Sundays from 10th April, 1977 to 16th April, 2006. This is a starting point for anyone who believes it is possible to project future dates of this movable feast from the past.

Since the Council of Nicaea in 325 AD, the Easter festival has been celebrated on the first Sunday after the full moon following the vernal (Spring) equinox. That means it never falls before 22nd March nor after 25th April.

To arrive at the dates by calculation, rather than projection, you first have to establish the dates of the full moon. The moon goes through a cycle of phases called a lunation and this takes 29 days, 12 hours, 44 minutes and 2.8 seconds.

• **If any reader** can find a formula, either for projecting or calculating Easter Sunday for any year, I would be glad to hear from you.

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