## Addendum to Chapter 5

## The IFNA function

In Chapter 5 we examined the use of IFERROR. A new function named IFNA was introduced with Excel 2013; the author mistakenly omitted this from the text. It performs in a similar manner to IFERROR except that it is specify to the #N/A error.

Referring to Figure 1, a user has named the range as *Mydata* and had intended to sue this name in a VLOOKUP formula. He is surprised that his formula (in column B) returns *not found* for values that are clearly in the table. The formula =IFNA(VLOOKUP(A2, mydate,2, FALSE),"not found") in column C shows him that his VLOOKUP is not returning an #N/A error. The #NAME? error alerts the user to the true problem – the misspelling.

| B2 $\rightarrow$ : $\times$ $\checkmark$ $f_x$ =IFERROR(VLOOKUP(A2,mydate,2,FALSE),"not found") |   |           |        |   |        |   |   |   |   |
|---|---|-----------|--------|---|--------|---|---|---|---|
|   | Α | В         | С      | D | Е      | F | G | Н | 1 |
| 1   |   | IFERROR   | IFNA   |   | Mydata |   |   |   |   |
| 2   | b | not found | #NAME? |   | a      | 3 |   |   |   |
| 3   | С | not found | #NAME? |   | b      | 4 |   |   |   |
| 4   | Z | not found | #NAME? |   | С      | 5 |   |   |   |
| 5   |   |           |        |   | d      | 6 |   |   |   |

Figure 1

## The IFS function

The IFS function introduced in Excel 2016 provides a way of avoiding multiple nested IF in many circumstances. To quote a Microsoft site: With this function, conditions are tested in the order that you specify. If passed, the result is returned. You can also specify an else "catch all" if none of the conditions are met.

The syntax is IFS(logical\_test1, value\_if\_true1, [logical\_test2, value\_if\_true2], [logical\_test3, value\_if\_true3],...). Because functions are limited to 254 parameters, you can use up to 127 pairs of condition and result arguments.

A simple example is shown in Figure 2 where numeric grades are convert to letter grades. It should be obvious how the formula works in B2, B4:B6. But what about the results in B3 and B7?. The number values in A3a and A7 fail the first four test but the fifth test is always true so the formula returns the letter "F".