**The Bug**

A "less than" or "greater than" comparison of two times will return true for identical times under certain conditions.

Here it is when the first number is calculated and the second is entered as a number, with a "less than" comparison. The inverted cell ought to have a value of false. In this line, the first time of 8:00 has been directly enterd, and the other times are the sum of the cell to their left and five minutes (time(0,5,0)). Any other cells of interest are in a red font, and their formulas, when given, are also in red right above them.

=P6+TIME(0,5,0)

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 8:00 | 8:05 | 8:10 | 8:15 | 8:20 | 8:25 | 8:30 | 8:35 | 8:40 | 8:45 | 8:50 | 8:55 | 9:00 | 9:05 | 9:10 | 9:15 | 9:20 |
| 9:15 | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | FALSE |

Directly entering each time solves the problem. (In this case only the 9:15 time has been directly entered.)

9:15:00

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 8:00 | 8:05 | 8:10 | 8:15 | 8:20 | 8:25 | 8:30 | 8:35 | 8:40 | 8:45 | 8:50 | 8:55 | 9:00 | 9:05 | 9:10 | 9:15 | 9:20 |
| 9:15 | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | FALSE | FALSE |

As does changing the formula so that the calculated time is the base time (8:00) plus a multiple of the interval time, instead of depending on the time in the cell to the left

=$B16+TIME(0,5,0)*(COLUMN(Q31)-2)

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 8:00 | 8:05 | 8:10 | 8:15 | 8:20 | 8:25 | 8:30 | 8:35 | 8:40 | 8:45 | 8:50 | 8:55 | 9:00 | 9:05 | 9:10 | 9:15 | 9:20 |
| 9:15 | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | FALSE | FALSE |

Moving the cell in question by one or more cells to the left also solves the problem:

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 8:05 | 8:10 | 8:15 | 8:20 | 8:25 | 8:30 | 8:35 | 8:40 | 8:45 | 8:50 | 8:55 | 9:00 | 9:05 | 9:10 | 9:15 | 9:20 | 9:25 |
| 9:15 | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | FALSE | FALSE | FALSE |

Making the base time a calculation can sometimes solve the problem, as here:

=A27-TIME(1,15,0)

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 8:00 | 8:05 | 8:10 | 8:15 | 8:20 | 8:25 | 8:30 | 8:35 | 8:40 | 8:45 | 8:50 | 8:55 | 9:00 | 9:05 | 9:10 | 9:15 | 9:20 |
| 9:15 | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | FALSE | FALSE |

But not here:

=TIME(4,0,0)+TIME(4,0,0)

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 8:00 | 8:05 | 8:10 | 8:15 | 8:20 | 8:25 | 8:30 | 8:35 | 8:40 | 8:45 | 8:50 | 8:55 | 9:00 | 9:05 | 9:10 | 9:15 | 9:20 |
| 9:15 | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | FALSE |

Changing the comparison time also works, and a check of several times suggests that it's only the :15 that matters. Even one second more or less will give the correct result:

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 8:00:01 | 8:05:01 | 8:10:01 | 8:15:01 | 8:20:01 | 8:25:01 | 8:30:01 | 8:35:01 | 8:40:01 | 8:45:01 | 8:50:01 | 8:55:01 | 9:00:01 | 9:05:01 | 9:10:01 | 9:15:01 | 9:20:01 |
| 9:15:01 | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | FALSE | FALSE |