

## IF Statements

You use IF statements in spreadsheets to get a particular response to something in the spreadsheet.

So, say I want the sheet to tell me if I've worked enough hours this week. I can look at the cell with the number of hours in and get the spreadsheet to tell me whether I've worked the number of hours I should have by popping up a message.

Sounds complex? Yes, it can be.

The first trick is to figure out that you need to get the spreadsheet to do this sort of thing automatically. It should respond to what the user does rather than the user needing to type in. This gets you on the road to mastering the skill!

Then you need to work out the **logical test** you're going to apply.

This is the heart of the IF statement – a test that can either be true or false.

For example:

- "today is Wednesday"
- "number of hours worked is less than 25"
- "price is greater than £10"

All of these things can either be true or false. There's no middle ground. They all make good logical tests for IF statements.

Then we can code the IF statement:

**First section:**

**`=IF(G13<25,`**

This sets up the logical test that whatever's in G13 is less than 25. The comma at the end is really important – it stands for THEN.

**Second section – the True bit:**

**`"Keep working!",`**

This is my message if I haven't worked my 25 hours in a week. It comes up if the logical test is true.

I could also use a number (say 13) or a cell reference (say H7). These would put either the number in the cell the IF statement is in or whatever's in cell H7 in the cell.

**Third section – the False bit:**

**`"You can stop working now – party on dude!")`**

This is what comes up if the logical test is false. I could use numbers or cells again.

**Put it together:**

**`=IF(G13<25,"Keep working","You can stop working now – party on dude")`**