Week 4: Toolbox

Keyboard Shortcuts

F2 Displays the formula in editing mode and shows the color-coded precedents for all argument in a formula.

F9 Recalculates formulas in all open workbooks.

Shift+F9 Recalculates formulas in the active worksheet only.

Ctrl+[This will take you to the active cell's precedent cells.

Ctrl+] This will take you to the active cell's dependent cells.

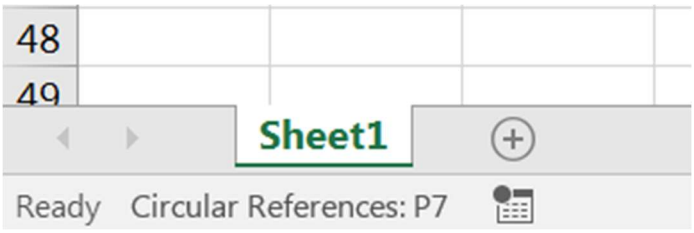
Windows Shortcuts: Microsoft Office Support pages **| Mac Shortcuts:** Microsoft Office Support pages

Excel Terminology

Circular References

This is an Excel formula error which occurs when a formula refers to the cell that contains the formula. For example, if you enter the formula **=A1+A2** in the cell **A1**, then you have created a circular reference.

Excel will let you know if a circular reference exists when you first open a workbook that contains one or more circular reference, Excel will also shows this on the Formulas tab, under the Error Checking tool as well as in the status bar.



Watch Window

An Excel toolbar which allows you to keep watch of cells and their formulae as you navigate around your Excel workbook.

Iteration

A repetition of a calculation by Excel. Understanding iterations is important for resolving circular references.

Displayed Value

The value in an Excel cell that is visible to the user.

Stored Value

The actual value which Excel recognises as being assigned to a particular cell.

Precision

The level of accuracy of an Excel calculation. The stored value is of maximum precision. The precision of the displayed value can be changed to a desired level.

Formula Auditing

A group on the Formulas tab which contains tools to help you identify and correct formula errors.

Protection

This is a useful privacy and security feature which allows you to restrict modification or access to your Excel file or a particular worksheet.

Active Cell

The cell that is currently selected. Text will appear in this cell when you begin typing. There can only be one active cell at a time and it is surrounded by a heavy border to help you distinguish it from all other cells.

Precedent Cell

This is a cell that the formula in the active cell refers to. For example, if the formula in cell **D5** is **=A1** and cell **D5** has been selected, then **A1** is a precedent cell to the active cell **D5**.

Dependent Cell

This is a cell that has a formula which refers to the active cell. For example, if the formula in cell **D5** is **=A1** and cell **A1** has been selected, then **D5** is a dependent cell of the active cell **A1**.

Cell Errors

Error code	Meaning
#DIV/0!	An Excel error which occurs when you have divided by 0 (zero) or an empty cell.
#NAME?	An Excel error which occurs when your formula contains unrecognisable text.
#VALUE!	An Excel error which occurs when a value in your formula is of the wrong data type.
#####	This is not actually an error. This is Excel's way of telling you that the column is not wide enough to show the numeric value of the cell. You can still use the cell in calculations, but you will need to widen the column to s value of the cell.

Ninja Tips of the Week

Quick tips re tracing precedents/dependents:

- Double-click any arrow in order to select the cell at the other end of an arrow.
- Once you make any change (e.g., alter your formula or insert cells, etc.), the tracer arrows disappear. Consider making a copy of your workbook/worksheet if you prefer to keep the original tracing.

Don't forget to check your spelling

While the Error Checking feature will keep you focused on correcting formula errors, in some situations it is just as important to keep an eye on spelling errors (which can be corrected using the spell-checker under the Review tab).

Consider whether a password for Protection is necessary. If you use one, make sure you note it down and store it in a safe place; Excel cannot recover the password for you if you forget it.

Limitations of the Evaluate Formula tool

The MS Excel Support Pages caution that "the following functions are recalculated each time the worksheet changes, and can cause the Evaluate Formula to give results different from what appears in the cell: RAND, AREAS, INDEX, OFFSET, CELL, INDIRECT, ROWS, COLUMNS, NOW, TODAY, RANDBETWEEN".