

Excel Expert

Session 3 – Advanced Formulas

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IfError –

The IFERROR function in Excel is designed to trap and manage errors in formulas and calculations. More specifically, IFERROR checks a formula, and if it evaluates to an error, returns another value you specify; otherwise, returns the result of the formula.

Use the IfError Function to make sure if there is an division by zero – it doesn't show an error.

```
=IFERROR((((@Retail)-[@Cost])/[@Cost]),"Pure Profit")
```

SUMIFS

SUMIFS is a function to sum cells that meet multiple criteria. SUMIFS can be used to sum values when adjacent cells meet criteria based on dates, numbers, and text. SUMIFS supports logical operators (>,<,<=>=) and wildcards (*,?) for partial matching.

```
=SUMIFS (sum_range, range1, criteria1, [range2], [criteria2], ...)
```

AVERAGEIFS

AVERAGEIFS is a function to sum cells that meet multiple criteria. AVERAGEIFS can be used to sum values when adjacent cells meet criteria based on dates, numbers, and text. AVERAGEIFS supports logical operators (>,<,<=>=) and wildcards (*,?) for partial matching.

```
= AVERAGEIFS (sum_range, range1, criteria1, [range2], [criteria2], ...)
```

COUNTIFS

COUNTIFS is a function to sum cells that meet multiple criteria. COUNTIFS can be used to sum values when adjacent cells meet criteria based on dates, numbers, and text. COUNTIFS supports logical operators (>,<,<=>=) and wildcards (*,?) for partial matching.

```
= COUNTIFS (sum_range, range1, criteria1, [range2], [criteria2], ...)
```

VLOOKUP

VLOOKUP is an Excel function to lookup and retrieve data from a specific column in table. VLOOKUP supports approximate and exact matching, and wildcards (* ?) for partial matches. The "V" stands for "vertical". Lookup values must appear in the first column of the table, with lookup columns to the right.

=VLOOKUP (value, table, col_index, [range_lookup])

AND

The Excel AND function is a logical function used to require more than one condition at the same time. AND returns either TRUE or FALSE. To test if a number in A1 is greater than zero and less than 10, use =AND(A1>0,A1<10). The AND function can be used as the logical test inside the IF function to avoid extra nested IFs, and can be combined with the OR function.

=AND (logical1, [logical2], ...)

OR

The OR function is a logical function to test multiple conditions at the same time. OR returns either TRUE or FALSE. For example, to test A1 for either "x" or "y", use =OR(A1="x",A1="y"). The OR function can be used as the logical test inside the IF function to avoid extra nested IFs, and can be combined with the AND function.

=OR (logical1, [logical2], ...)

NOT

In Excel, you return the opposite of a logical expression by using the NOT function. If logical is TRUE (or any nonzero number), NOT returns FALSE. If logical is FALSE (or 0), NOT returns TRUE.

=NOT (logical)

Goal Seek

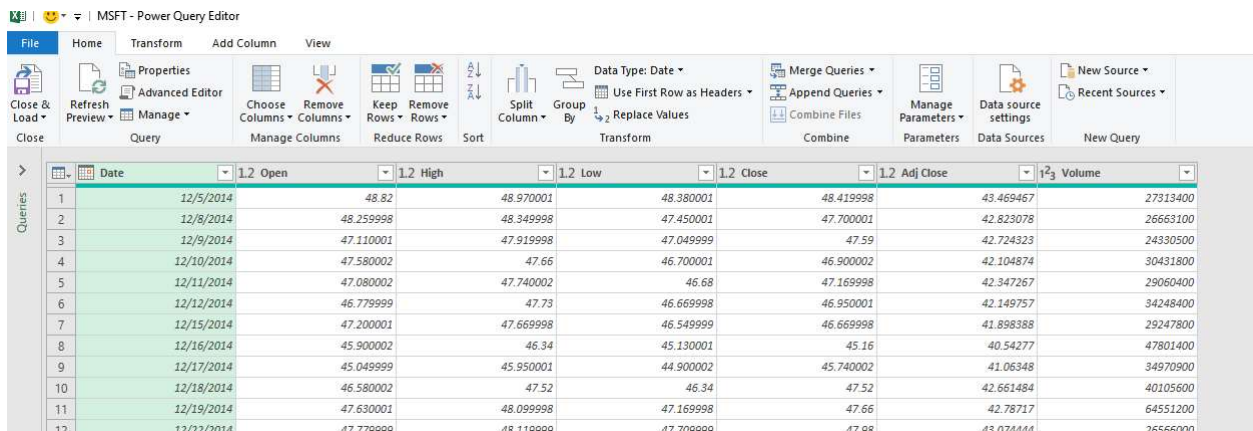
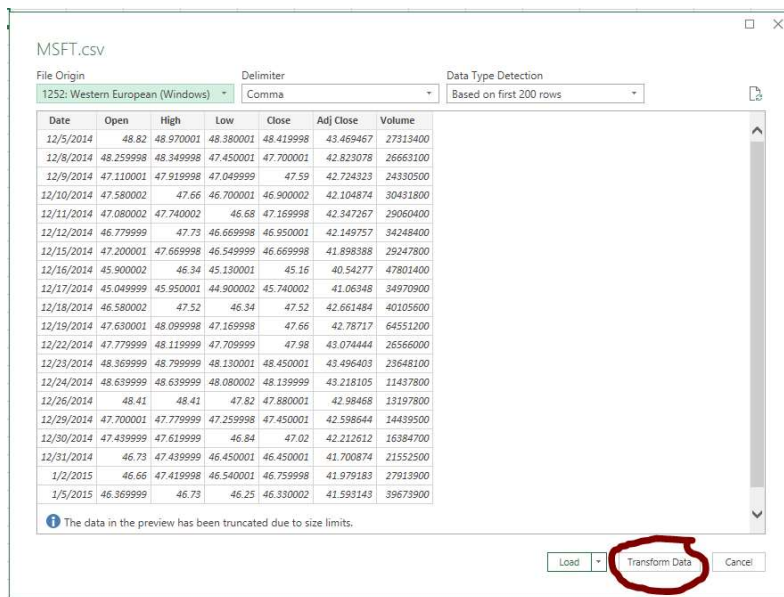
Technically, Goal Seek is a process of calculating a value by performing what-if analysis on a given set of values. For our purposes, Excel's Goal Seek feature lets you adjust a value used in a formula to achieve a specific goal. Or, put another way, Goal Seek determines input values needed to achieve a specific goal. Use Goal Seek when you don't have an exact value to use.

Importing Data

Go to finance.yahoo.com and download 5 years' worth of stock information from Microsoft (MSFT). When downloaded, you can double-click on the file and it automatically gets loaded into Excel.

Great.

But, we can use open it via the Data tab-> in the Get & Transform group, click New Query, point to the type of data you want to import, and then in the submenu, click the data source type. This now allows us to make transformations on the data before bringing it into our spreadsheet.



You can also split columns by using the column splitter. So, you can split the date by the /.

MSFT - Power Query Editor

	1 ² Date.1	1 ² Date.2	1 ² Date.3	1.2 Open	1.2 High	1.2 Low
1	12		5	2014	48.82	48.970001
2	12		8	2014	48.259998	48.349998
3	12		9	2014	47.110001	47.919998
4	12		10	2014	47.580002	47.66
5	12		11	2014	47.080002	47.740002
6	12		12	2014	46.779999	47.73
7	12		15	2014	47.200001	47.669998

You can also rename the columns before importing them.

	1 ² Month	1 ² Day	1 ² Year	1.2 Open
1		12	5	2014
2		12	8	2014
3		12	9	2014
4		12	10	2014

If you did something you don't want to do – you can remove it from the Applied Steps

