

Excel Functions & Formulas – Quick Tips

Text & Date Functions

Text Functions:

Function	What it Does	Uses	What it Looks Like
LEFT	Extracts a # of characters starting from the left	Pull the first 2 characters from a string:	=LEFT(A2,2)
MID	Extracts a # of characters starting at the designated character.	Pull the 4 characters from a string starting with the 3 rd character:	=MID(A2,3,4)
RIGHT	Extracts a # of characters starting from the Right	Pull the last 2 characters from a string:	=RIGHT(A2, 2)
CONCATENATE	Combines multiple strings into one.	Add the text from multiple cells into one string.	=CONCATENATE(LEFT(A2,2),2007)

Calculating days of the week - To identify what day of the week a specific date falls on:

TEXT(Value, Format_Text) ie: =TEXT(C15,"dddd")

Calculating # of workdays between 2 dates:

=NETWORKDAYS(date,date) ie: =NETWORKDAYS(C8,C9)

Calculating # of months, days or years between 2 dates:

DATEDIF(Value, Value, Format) ie: =DATEDIF(C8,C9,"m")

Identifying weekdays in a formula:

WEEKDAY(serial_number, return_type) ie: WEEKDAY(C5+30)=7

Find – such as to find a space in a cell of text:

FIND(Find_text, within_text, [start_num])
ie: =LEFT(A3,FIND(" ",A3)-1).

Logical & Information Functions

IF Statements (Functions):

IF(Logic Test, Value if True, Value if False)

ie: =IF(B5<B4,1+B5-B4,B5-B4)

Nesting IF Statements:

Nesting IF formula logically looks something like this: **“IF Condition then, Else IF Condition then, Else IF Condition then, False then”**.

IF(Logic Test, Value if True, IF (Logic Test, Value if True, Value if False))

ie: =IF(C5+C4=7,C5+32,IF(C5+C4=1,C5+31,0))

AND Functions:

AND(logical1, logical2, . . .) ie: =IF(AND(E5>0,E5<=30),F5,"")

BLANK Functions – ISBLANK and COUNTBLANK:

COUNTBLANK(range) or ISBLANK(range)

ie: =COUNTBLANK(A4:C23)

Lookup Functions

VLOOKUP & HLOOKUP:

Both of these functions work the same except one looks up data based vertically (by column), the other Horizontally (across rows).
=VLookup(lookup_value, table_array, column or row index_number, Range_lookup)

Examples of lookup formulas:

=VLOOKUP(C11,\$G\$6:\$H\$9,2)
=HLOOKUP(C13,\$J\$14:\$M\$15,2)

- **Lookup value** – which cell you want the lookup to compare against the table
- **Table array** – range of cells that have the table of data
- **Column or row** – the column/row number of the selected columns/rows that has the value to return/calculate against.
- **Range** – “False” - will only search for an **exact match** and “True” - will search for the largest value less than the lookup_value.

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Math & Statistical Functions

Round up a number in a cell:

ROUNDUP(number, number_digits)

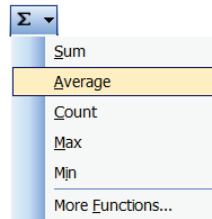
ie: =ROUNDUP(C4,1)

Price	Sales Price
\$ 8.91	\$ 9.00

SumIf – only add cells if they meet a certain criteria:

SUMIF(range, criteria, sum_range)

ie: =SUMIF(C4:C28,"=Local",D4:D28)



Sum, Average, Count, Min, Max:

SUM(range), **AVERAGE**(range), etc. . . .

ie: =AVERAGE(E3:E8)

Mode – to find the highest frequency item in a range:

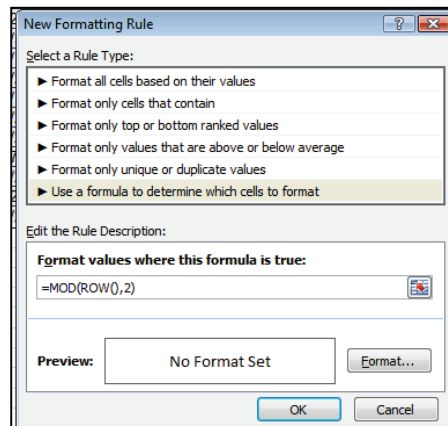
MODE(range) ie: =MODE(L5:L17)

Additional Tools

Applying Grey Ledger Shading - Conditional Formatting:

MOD(number, divisor) ie: =MOD(ROW(),2)

1. Select desired cells/rows in a table
2. On the **Home** tab, in the **Styles** group, click on the **Conditional Formatting** button, then select **New Rule**
3. In the **Select a Rule Type** list, select: **Use a formula to determine which cells to format**
4. In the text box, type the following formula:
=MOD(ROW(),2)
5. Click on the **Format** button then on the **Fill** tab, select the **light grey** color, then click **OK**
6. Click **OK** again and view the table



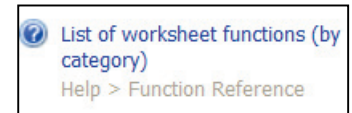
Formula Tricks:

1. **Static cell reference (\$A\$3)** - press **F4** on your keyboard
2. To indicate **blank** in a formula
 - a. To request to leave a cell blank in a formula result - you use two quotation marks side by side ("")
 - b. To look for a blank space in a cell – use two quotation marks side by side with a space between them (" ")
3. Press **Ctrl + `** to reveal or hide formulas

Today's Date	39459	
Annual Sale Date	39753	
# of Days until Sale	=C9-C8	
# of Weekdays until Sale	=NETWORKDA	
# of Months until Sale	=DATEDIF(C8,	
2008 Holidays	Date	Day of Week
New Years Day	39448	=TEXT(C15,"dddd")
Memorial Day	39594	=TEXT(C16,"dddd")
4th of July	39633	=TEXT(C17,"dddd")
Labor Day	39692	=TEXT(C18,"dddd")
Thanksgiving	39779	=TEXT(C19,"dddd")
Christmas	39807	=TEXT(C20,"dddd")

Viewing Available Excel Functions

1. Click the **Help** button
2. In **Search For** field, type: **List of Functions**, press **Enter**
3. Select **List of worksheet functions (by category)** from results
4. Scroll through the list of available functions
5. Click on the link to view the details of one of the functions
6. Close the help window when done



Tip: If there are certain items that you want calculated first, in your formula, use parentheses around those items.