



Wilmette Public Library

# MICROSOFT EXCEL 2016 - INTERMEDIATE

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Count IF and Conditional Formatting

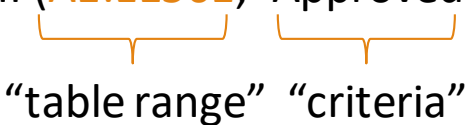
## Count IF() Function

Count IF() is a useful tool to count the number of cells that meet a criterion, for example, to count the number of times a particular item appears in a list.

The syntax has two arguments:

=COUNTIF(***Where*** do you want to look?, ***What*** do you want to look for?)

For example:

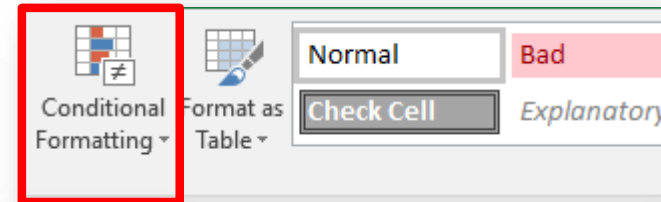
=COUNTIF(A1:E1501, "Approved")  
  
“table range” “criteria”

If you wish to count multiple criteria, use COUNTIFS()

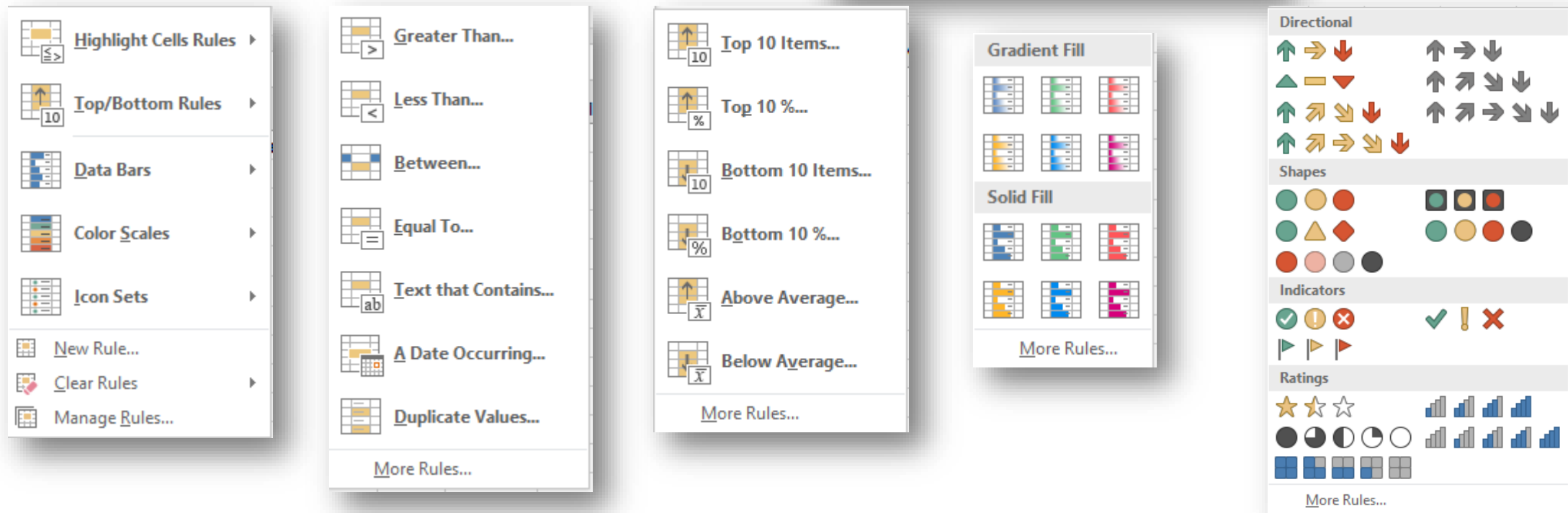
## Conditional Formatting

Conditional formatting is a useful tool to quickly analyze your data, group together values that have the same information, use color scales to differentiate data such as low or high temperatures and many more.

The tool menu is located in the Home ribbon in “Styles”



Examples:



## EXERCISE ONE : Count IF() or Count IFS() -for multiple criteria

Count the number of “Approved”

Place the cursor in cell H1 and key in =CountIF(“1st argument”, “2<sup>nd</sup> argument”)

1<sup>st</sup> argument = Highlight the area of the table (A1 through E11)

2<sup>nd</sup> argument = The criteria “Approved” (Note: it is not case-sensitive)

	A	B	C	D	E	F	G	H	I	J	K
1	Employee Nr	Leave Start	Leave End	Leave Type	Status		Nr. of Approved			No. of Sick Leave	
2	284	3/20/2017	3/21/2017	Sick	Approved		Nr. of Declined				
3	5614	3/29/2017	3/31/2017	Sick	Declined		Nr. of Pending				
4	4512	4/3/2017	4/4/2017	Sick	Approved		Nr. of Cancelled				
5	6739	4/28/2017	5/1/2017	Sick	Approved		<b>Total</b>				
6	5842	4/3/2017	4/5/2017	Leave w/o pay	Approved		Count approved dates between April 14 and 28				
7	93	4/25/2017	4/26/2017	Sick	Approved						
8	1364	3/8/2017	3/10/2017	Vacation	Approved						
9	3505	4/18/2017	4/20/2017	Vacation	Approved		Approved vacation between April 14 and 28				
10	6372	3/14/2017	3/16/2017	Leave w/o pay	Approved						
11	1747	3/21/2017	3/22/2017	Leave w/o pay	Approved						

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Count approved dates between April 14 and 28; in G7, key in the following formula,

**=COUNTIFS(B1:B1501,">4/13/2017",C1:C1501,"<4/29/2017",E1:E1501,"Approved")**


  
 Multiple items    1<sup>st</sup> range    1<sup>st</sup> criteria    2<sup>nd</sup> range    2<sup>nd</sup> criteria    3<sup>rd</sup> range    3<sup>rd</sup> criteria

**Important: Don't forget the quotation marks to identify strings of text and numbers**

## EXERCISE TWO : Conditional Formatting and =And() Function

The syntax: =And(condition 1, [condition 2,] ...) (**Note: There can be up to 30 conditions**)

Use =And() function to highlight certain criteria or group. It returns TRUE if all conditions are TRUE.

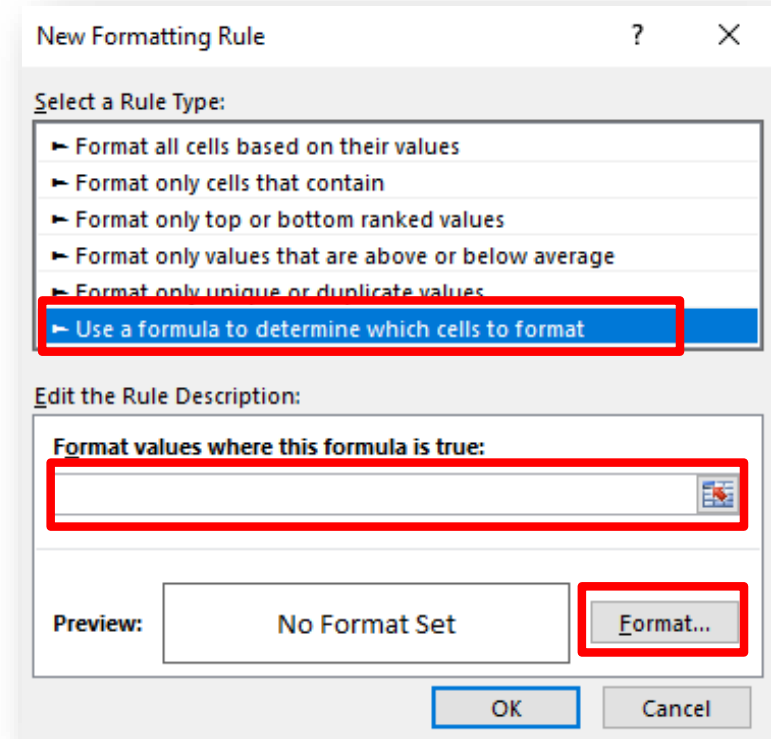
Place your cursor in your data area, apply your range, and in the Home ribbon, go to Conditional Formatting and click “New Rule”. A “New formatting rule” box comes up.

Choose the last rule type **“Use a formula to determine which cells to format”**

Under the “Edit the Rule Description”, key in the following rule in the box: =And(\$D1=“Vacation”, \$E1=“Cancelled”)

Format your rule: Go to “Format”, choose “Fill” and find the color you want to add to the rule and lastly click OK.

**Note: It’s not case-sensitive when use the =And() function, \$ means to lock the reference to a certain column**



## Sort & Filter

If you wish to sort the highlighted rule on the top (or bottom), for example, for “Vacation Cancelled”, in the Home ribbon, under “Editing”, click “Sort & Filter” and choose “Custom Sort”.

In the “Sort” dialogue box,

Sort by **Leave Type**

Sort on **Cell Color**

Order choose **Yellow**

Place it **On Top**

Click OK

