



Basic Counting Formulas

1- Counting the total number of cells

Oddly, Excel doesn't have a function that simply counts the number of cells in a range reference. To get a count of the total number of cells in a range (empty and nonempty cells), use the following formula. This formula returns the number of cells in a range named Data. It simply multiplies the number of rows (returned by the ROWS function) by the number of columns (returned by the COLUMNS function):

`=ROWS(Data)*COLUMNS(Data)`

This formula will not work if the Data range consists of noncontiguous cells. In other words, Data must be a rectangular range of cells.

2- Counting blank cells

the following formula returns the number of blank (empty) cells in a range named Data:

`=COUNTBLANK(Data)`

This function works only with a contiguous range of cells. If Data is defined as a noncontiguous range, the function returns a #VALUE! error.

For example, the following formula returns the number of blank cells in column A:
`=COUNTBLANK (A: A)`

3- Counting nonblank cells

To count nonblank cells, use the COUNTA function. The following formula uses the COUNTA function to return the number of nonblank cells in a range named Data:

`=COUNTA(Data)`

The COUNTA function counts cells that contain values, text, or logical values (TRUE or FALSE).

4- Counting numeric cells



To count only the numeric cells in a range, use the following formula (which assumes the range is named Data):

=COUNT(Data)

Cells that contain a date or a time are considered to be numeric cells. Cells that contain a logical value (TRUE or FALSE) aren't considered to be numeric cells.

5- Counting text cells

To count the number of text cells in a range, you need to use an array formula. The array formula that follows returns the number of text cells in a range named Data:

=COUNTIF(rng,"*")

6- Counting nontext cells

The following array formula uses the Excel. This formula returns the count of the number of cells not containing text (including blank cells):

=COUNTIF(rng,"<>*")

7- Counting cells by using the COUNTIF function

The COUNTIF function, which is useful for single-criterion counting formulas, takes two arguments:

- **range:** The range that contains the values that determine whether to include a particular cell in the count
- **criteria:** The logical criteria that determine whether to include a particular cell in the count. All these formulas work with a range named Data. As you can see, the criteria argument proves quite flexible. You can use constants, expressions, functions, cell references, and even wildcard characters (* and ?).

Note that the COUNTIF functions work only with a contiguous range argument. If Data is defined as a noncontiguous range, the formula returns a #VALUE! error.

Examples:

=COUNTIF(Data,12) Returns the number of cells containing the value 12

=COUNTIF(Data,"<0") Returns the number of cells containing a negative value

=COUNTIF(Data,"<>0") Returns the number of cells not equal to 0

=COUNTIF(Data,">5") Returns the number of cells greater than 5



=COUNTIF (Data, A1) Returns the number of cells equal to the contents of cell A1

8- Using And criteria

An And criterion counts cells if all specified conditions are met. A common example is a formula that counts the number of values that fall within a numerical range. For example, you may want to count cells that contain a value that's greater than 100 *and* less than or equal to 200. For this example, the COUNTIFS function will do the job:

=COUNTIFS(Amount, ">100", Amount, "<=200")

9- Using Or criteria

An Or criterion counts cells if any of the multiple conditions is met. To count cells by using an Or criterion, you can sometimes use multiple COUNTIF functions. The following formula, for example, counts the number of sales made in January *or* February:

=COUNTIF (Month, "January") +COUNTIF (Month, "February")